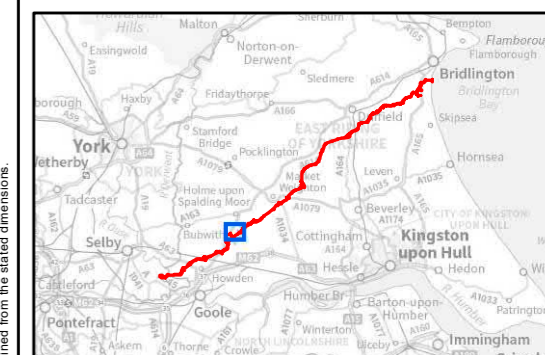


PROJECT  
**Scotland England Green Link 2**

- KEY
- Planning Application Boundary
  - 500m Study Area
  - Listed Building
  - Non Designated Archaeology - Point
  - Non Designated Archaeology - Line
  - Non Designated Archaeology - Polygon
  - Geophysical Survey Area

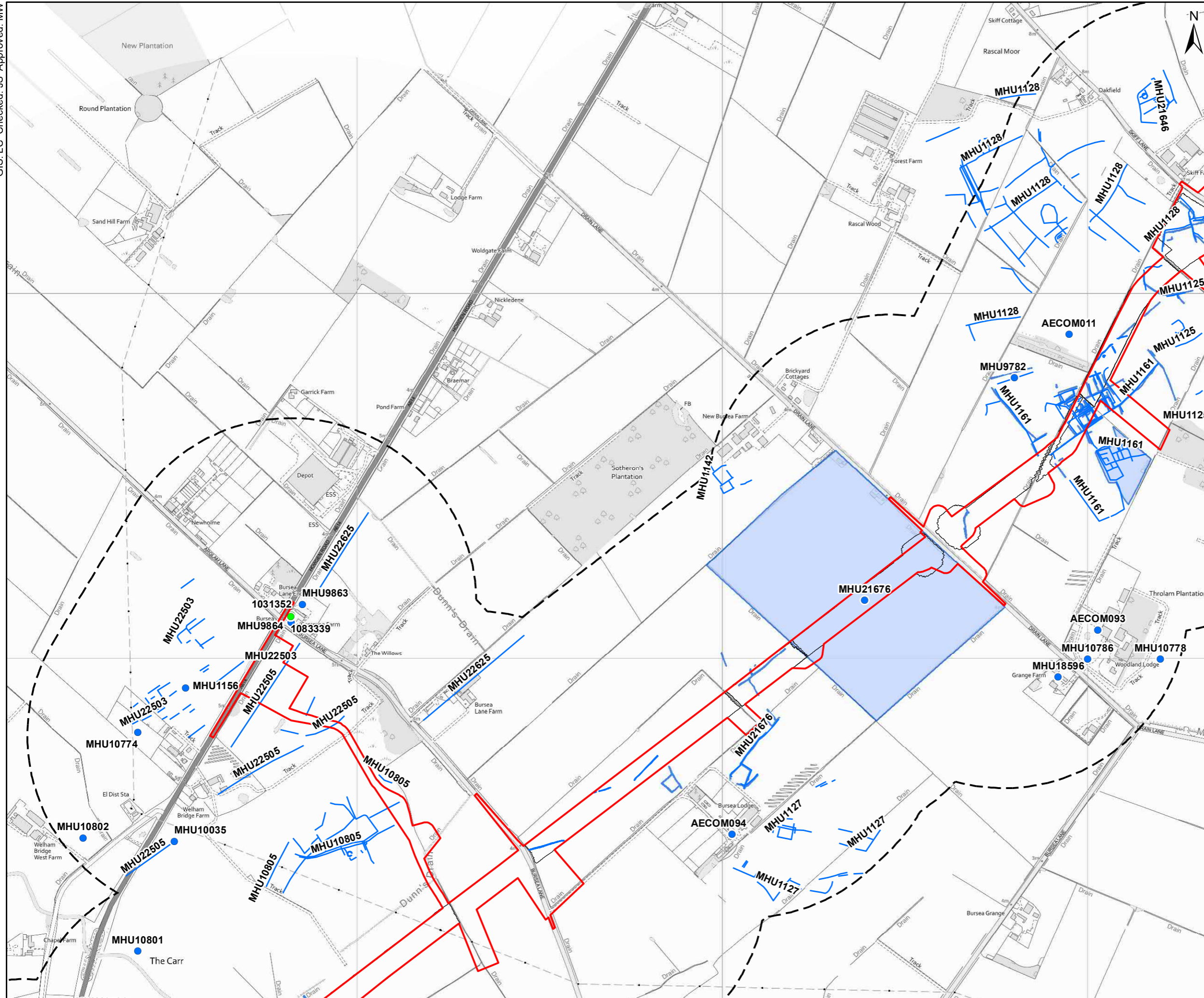


TITLE  
**Figure 9-1  
Study Area and Known Archaeology**

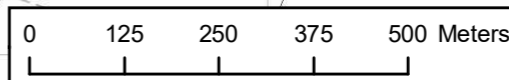
REFERENCE  
SEGL2\_T\_ES\_9-1\_v3\_20220531

SHEET NUMBER 17 of 23  
DATE 31/05/2022

GIS: LC Checked: JS Approved: MW



Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.  
© Historic England 2022. Contains Ordnance Survey data © Crown copyright and database right 2020 The Historic England GIS Data contained in this material was obtained on 05/04/2022.  
The most publicly available up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.



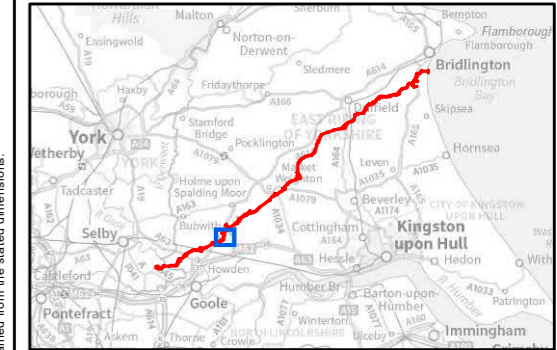
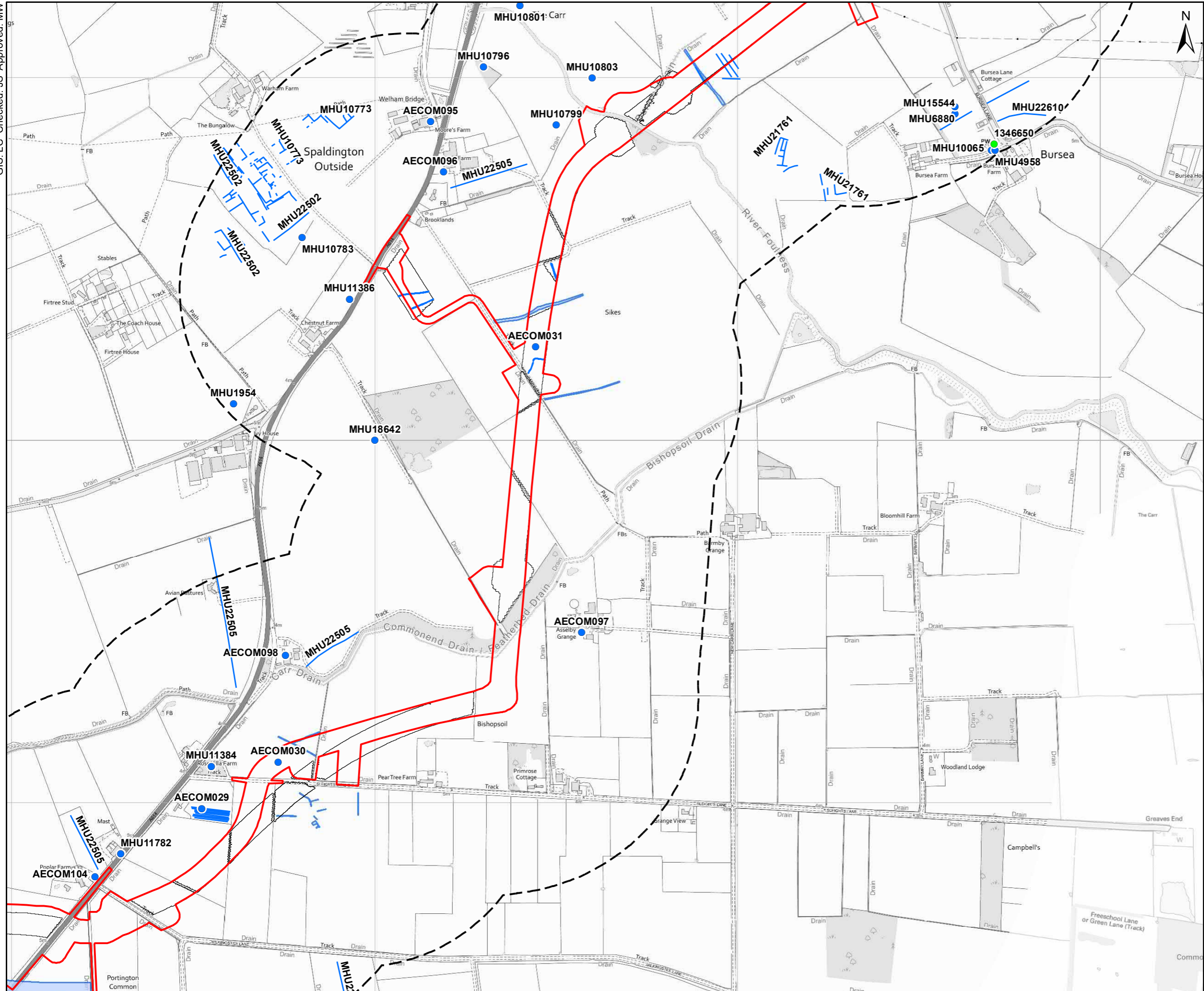
Scale @ A3 1:10,000

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

GIS: LC Checked: JS Approved: MW

PROJECT  
**Scotland England Green Link 2**

- KEY
- Planning Application Boundary
  - 500m Study Area
  - Listed Building
  - Non Designated Archaeology - Point
  - Non Designated Archaeology - Line
  - Non Designated Archaeology - Polygon
  - Geophysical Survey Area



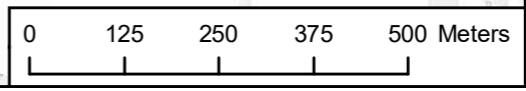
TITLE  
**Figure 9-1  
Study Area and Known Archaeology**

REFERENCE  
SEGL2\_T\_ES\_9-1\_v3\_20220531

SHEET NUMBER  
18 of 23

DATE  
31/05/2022

Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.  
© Historic England 2022. Contains Ordnance Survey data © Crown copyright and database right 2020 The Historic England GIS Data contained in this material was obtained on 05/04/2022.  
The most publicly available up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.



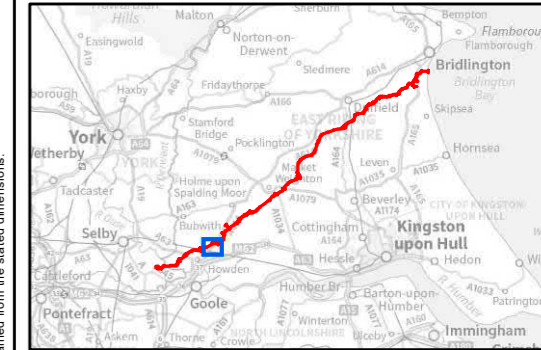
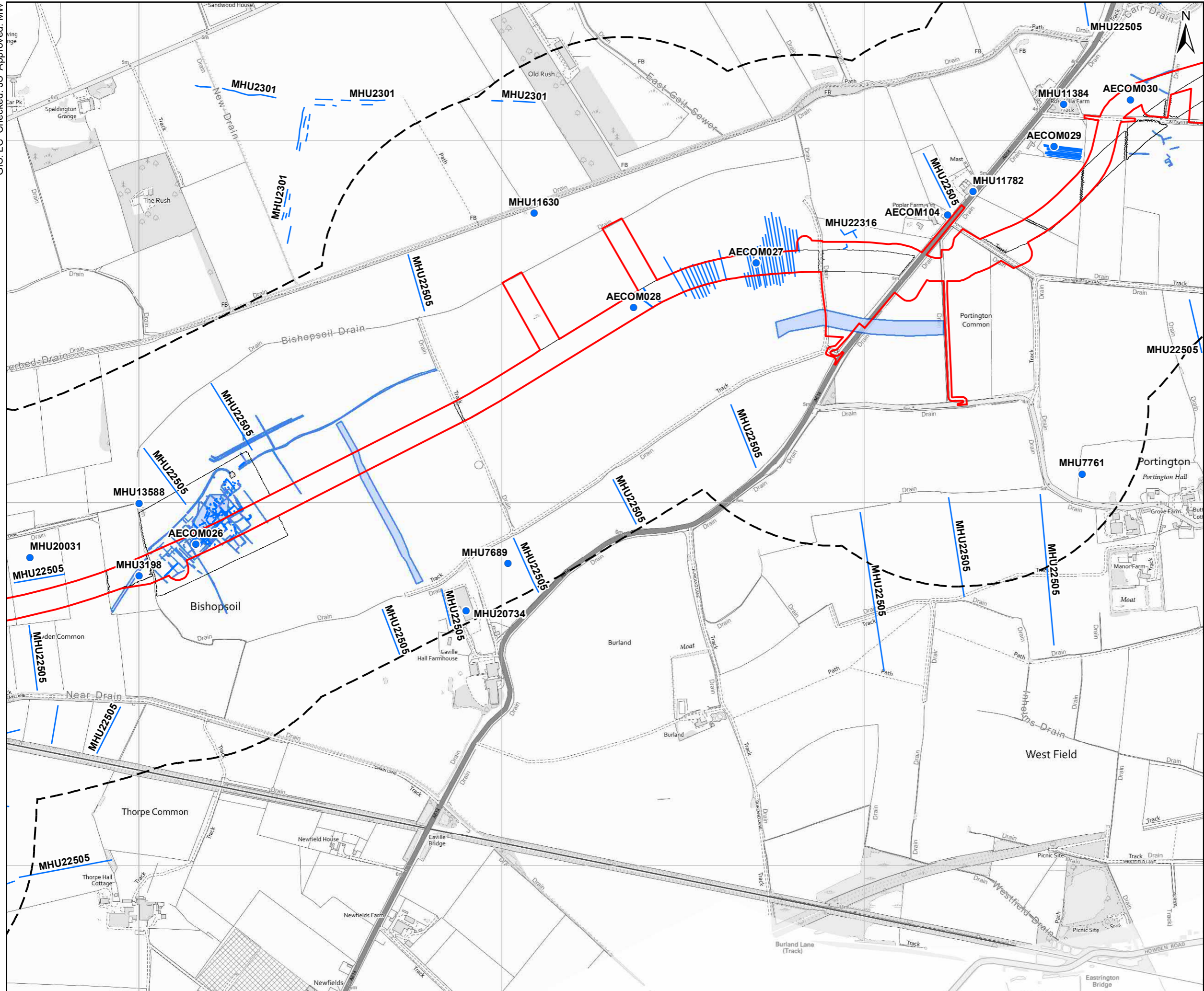
Scale @ A3 1:10,000

Coordinate System: British National Grid

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

**PROJECT**  
**Scotland England Green Link 2**

- KEY**
- Planning Application Boundary
  - 500m Study Area
  - Non Designated Archaeology - Point
  - Non Designated Archaeology - Line
  - Non Designated Archaeology - Polygon
  - Geophysical Survey Area

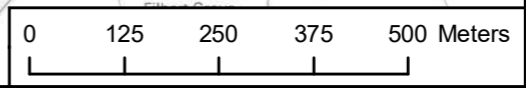


**TITLE**  
**Figure 9-1**  
**Study Area and Known Archaeology**

**REFERENCE**  
SEGL2\_T\_ES\_9-1\_v3\_20220531

**SHEET NUMBER** 19 of 23 **DATE** 31/05/2022

Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.  
© Historic England 2022. Contains Ordnance Survey data © Crown copyright and database right 2020 The Historic England GIS Data contained in this material was obtained on 05/04/2022.  
The most publicly available up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.



Coordinate System: British National Grid

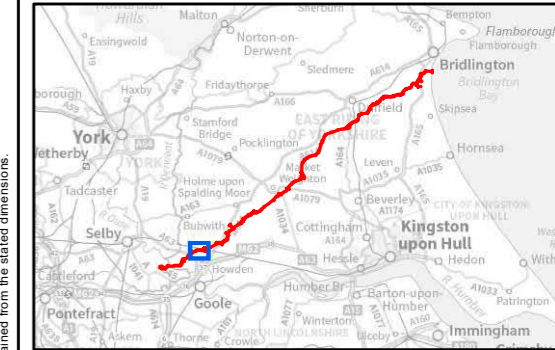
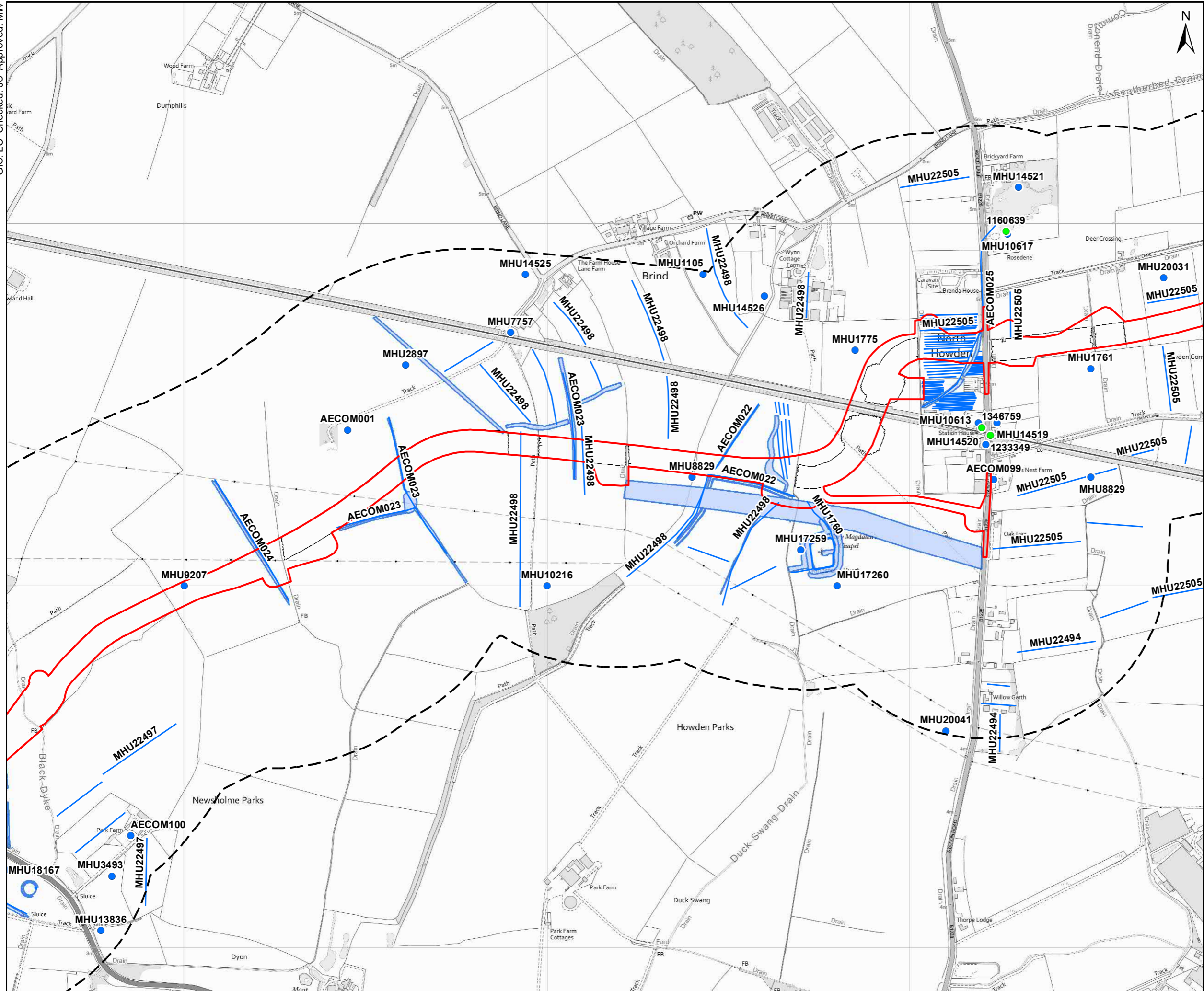
Scale @ A3 1:10,000

GIS: LC Checked: JS Approved: MW

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

PROJECT  
**Scotland England Green Link 2**

- KEY**
- Planning Application Boundary
  - 500m Study Area
  - Listed Building
  - Non Designated Archaeology - Point
  - Non Designated Archaeology - Line
  - Non Designated Archaeology - Polygon
  - Geophysical Survey Area

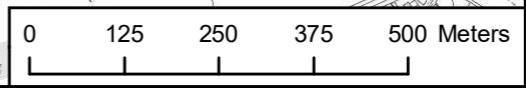


**TITLE**  
**Figure 9-1**  
**Study Area and Known Archaeology**

**REFERENCE**  
SEGL2\_T\_ES\_9-1\_v3\_20220531

**SHEET NUMBER**  
20 of 23

**DATE**  
31/05/2022



Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.  
© Historic England 2022. Contains Ordnance Survey data © Crown copyright and database right 2020 The Historic England GIS Data contained in this material was obtained on 05/04/2022.  
The most publicly available up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.

Coordinate System: British National Grid

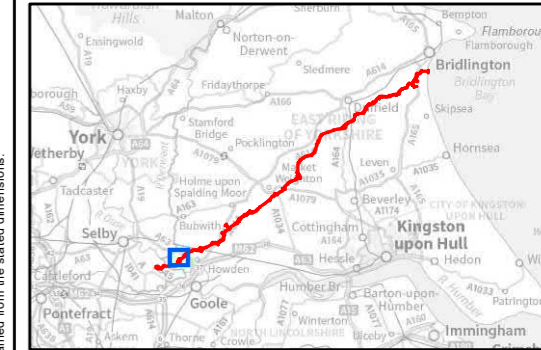
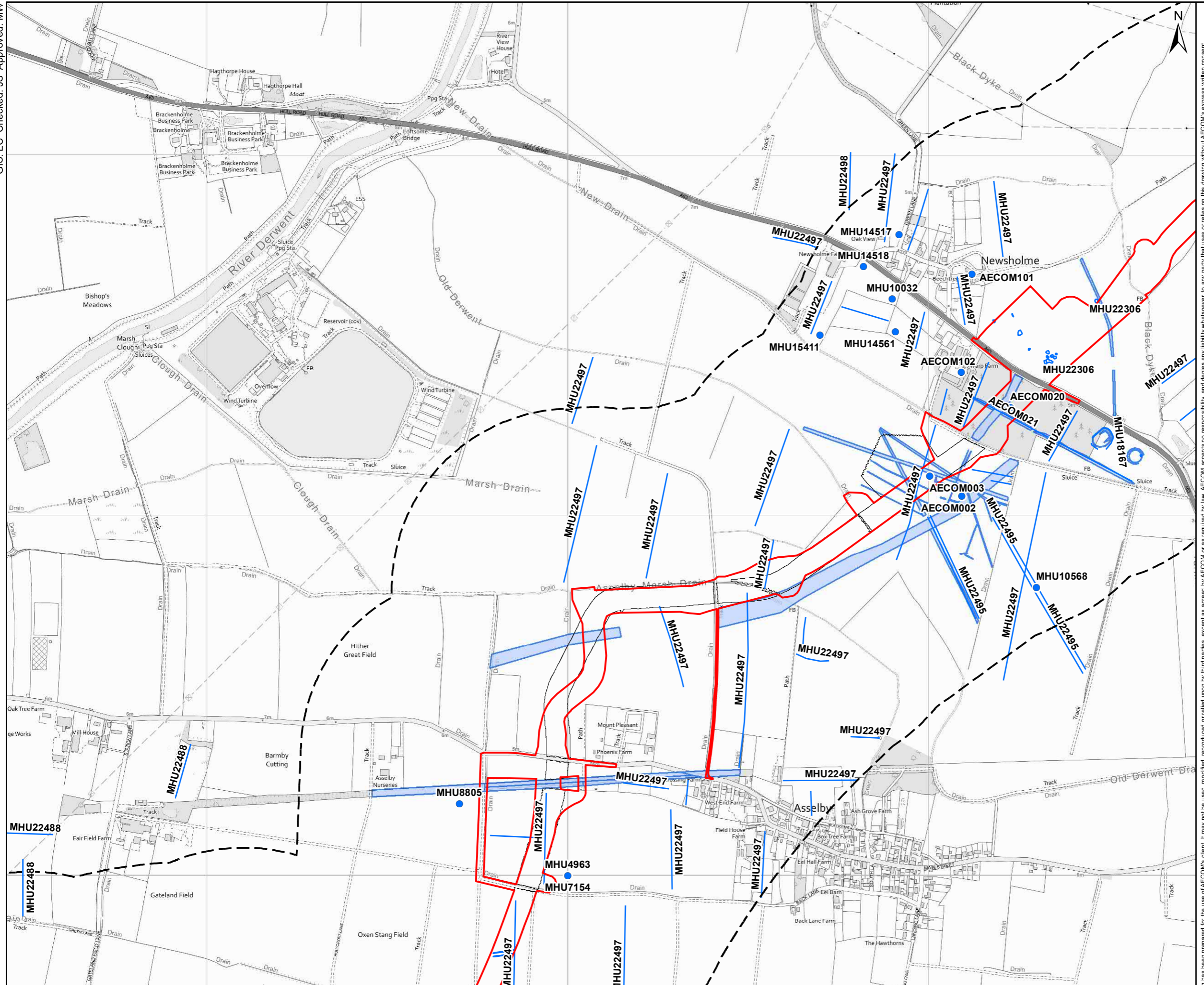
Scale @ A3 1:10,000

GIS: LC Checked: JS Approved: MW

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

**PROJECT**  
Scotland England Green Link 2

- KEY**
- Planning Application Boundary
  - 500m Study Area
  - Non Designated Archaeology - Point
  - Non Designated Archaeology - Line
  - Non Designated Archaeology - Polygon
  - Geophysical Survey Area

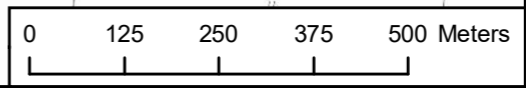


**TITLE**  
Figure 9-1  
Study Area and Known Archaeology

**REFERENCE**  
SEGL2\_T\_ES\_9-1\_v3\_20220531

**SHEET NUMBER** 21 of 23  
**DATE** 31/05/2022

Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.  
© Historic England 2022. Contains Ordnance Survey data © Crown copyright and database right 2020 The Historic England GIS Data contained in this material was obtained on 05/04/2022.  
The most publicly available up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.



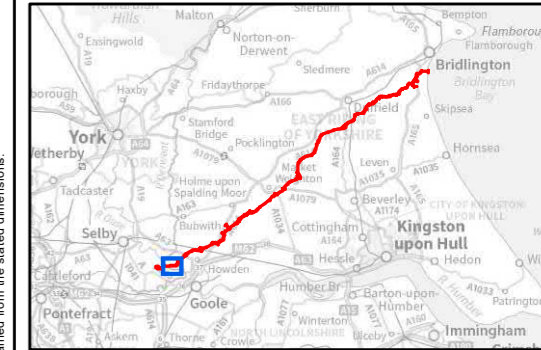
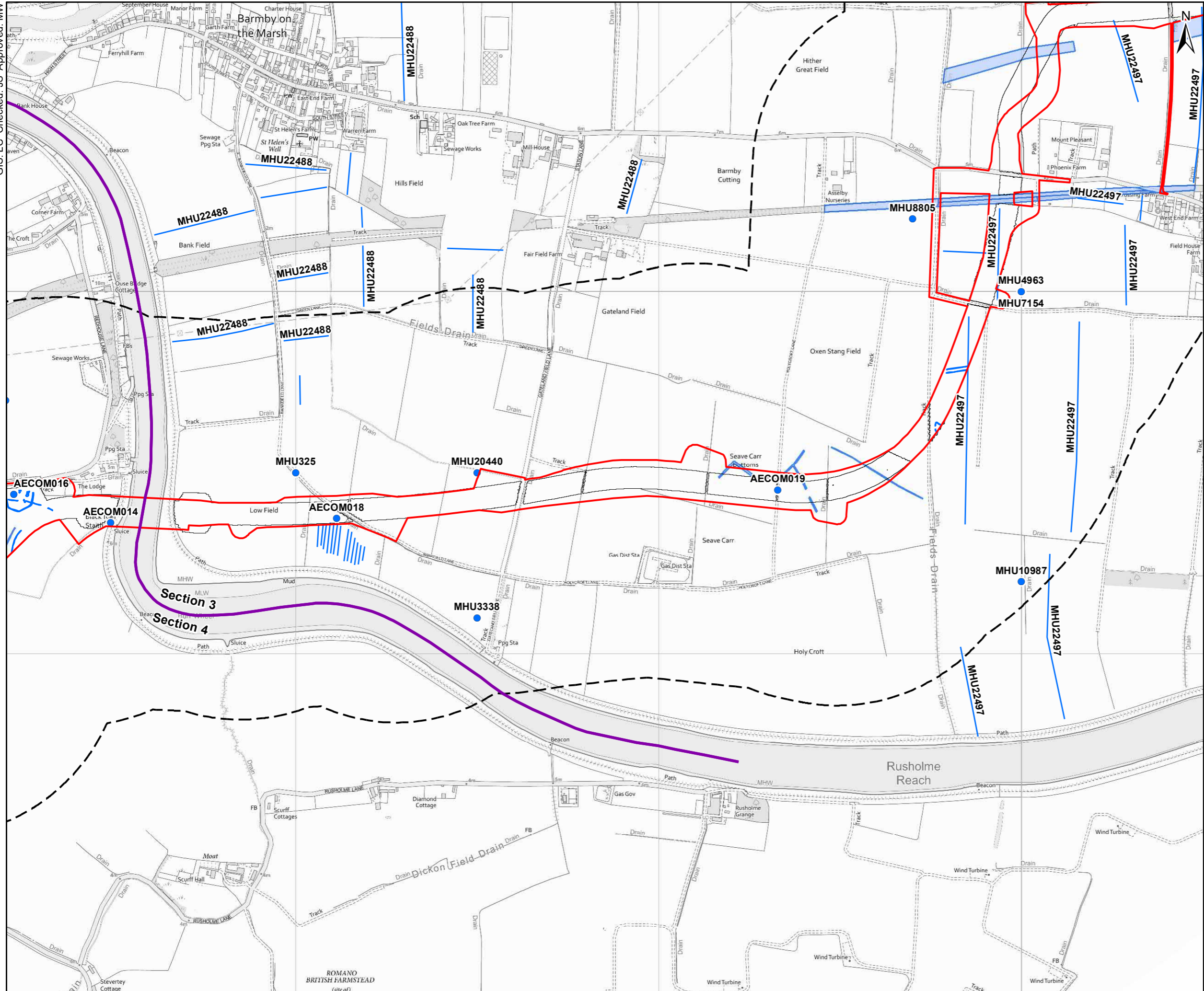
Scale @ A3 1:10,000

Coordinate System: British National Grid

GIS\_LC Checked: JS Approved: MW

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

- KEY
- Planning Application Boundary
  - Route Section Break
  - 500m Study Area
  - Non Designated Archaeology - Point
  - Non Designated Archaeology - Line
  - Non Designated Archaeology - Polygon
  - Geophysical Survey Area



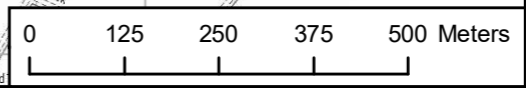
TITLE  
**Figure 9-1  
Study Area and Known Archaeology**

REFERENCE  
SEGL2\_T\_ES\_9-1\_v3\_20220531

SHEET NUMBER  
22 of 23

DATE  
31/05/2022

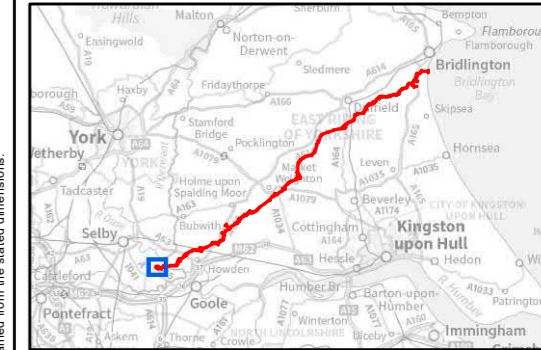
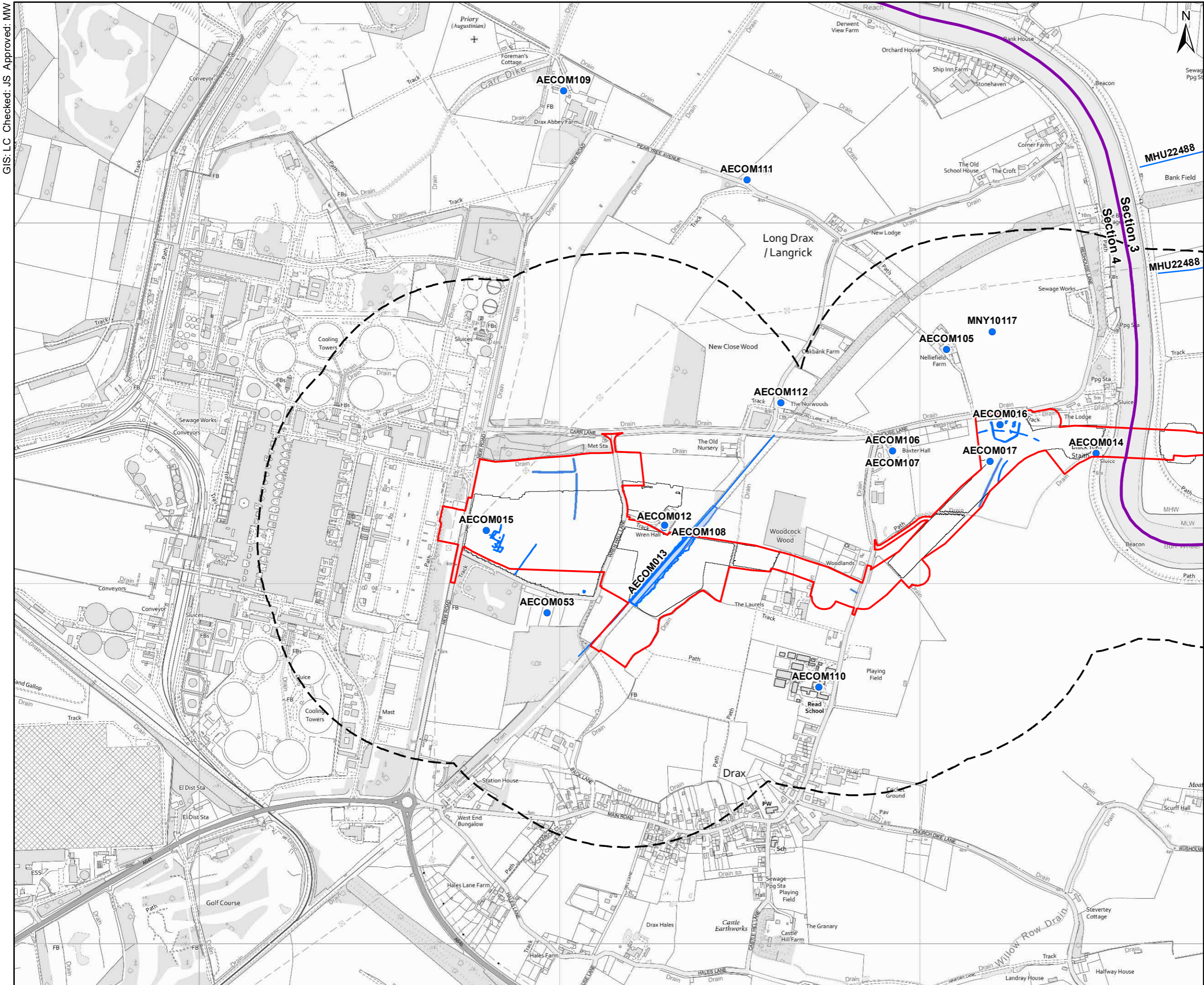
Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.  
© Historic England 2022. Contains Ordnance Survey data © Crown copyright and database right 2020 The Historic England GIS Data contained in this material was obtained on 05/04/2022.  
The most publicly available up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. All measurements must be obtained from the stated dimensions.

PROJECT  
**Scotland England Green Link 2**

- KEY
- Planning Application Boundary
  - Route Section Break
  - 500m Study Area
  - Non Designated Archaeology - Point
  - Non Designated Archaeology - Line
  - Non Designated Archaeology - Polygon
  - Geophysical Survey Area



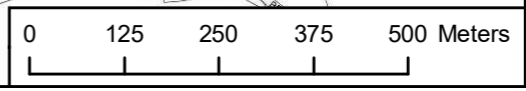
TITLE  
**Figure 9-1  
Study Area and Known Archaeology**

REFERENCE  
SEGL2\_T\_ES\_9-1\_v3\_20220531

SHEET NUMBER DATE  
23 of 23 31/05/2022

GIS: LC Checked: JS Approved: MW

Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.  
© Historic England 2022. Contains Ordnance Survey data © Crown copyright and database right 2020 The Historic England GIS Data contained in this material was obtained on 05/04/2022.  
The most publicly available up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.



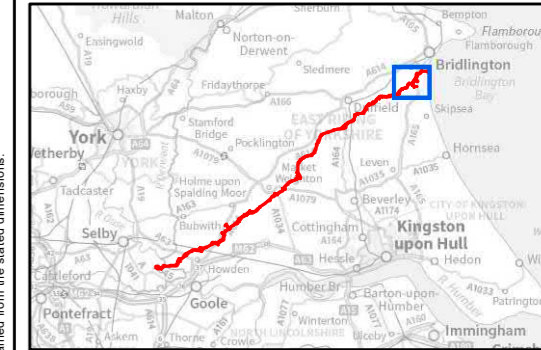
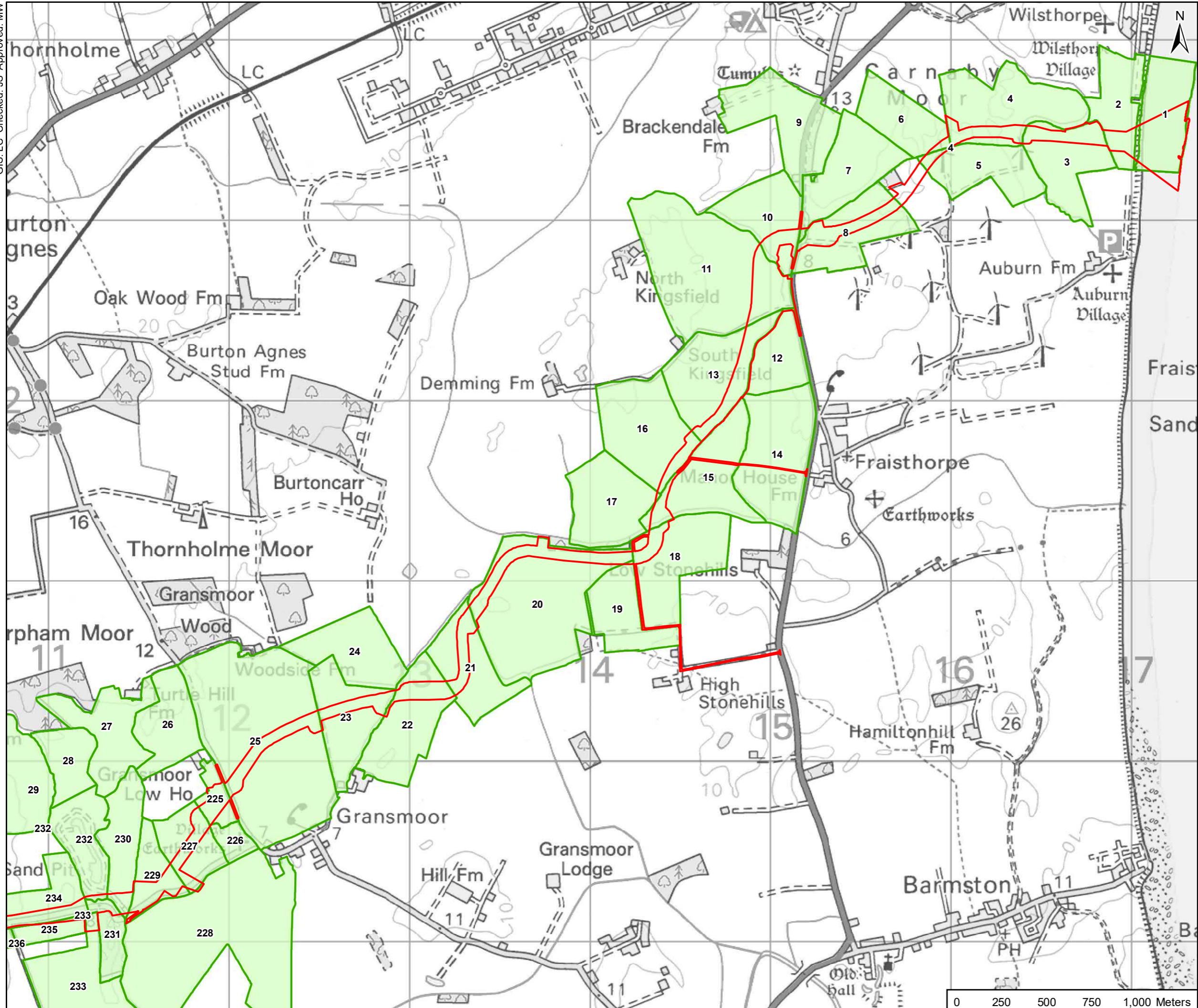
Scale @ A3 1:10,000

Coordinate System: British National Grid

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

PROJECT  
**Scotland England Green Link 2**

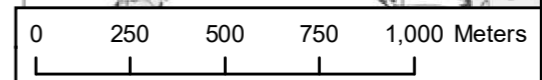
- KEY
- Planning Application Boundary
  - Cultural Heritage Field Number



TITLE  
**Figure 9-2  
Cultural Heritage Field Numbers**

REFERENCE  
SEGL2\_T\_ES\_9-2\_v1\_20220527

SHEET NUMBER DATE  
1 of 9 27/05/2022



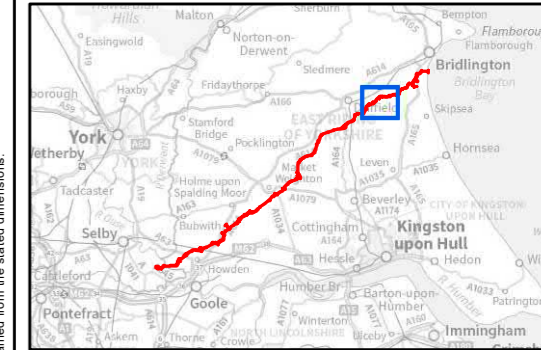
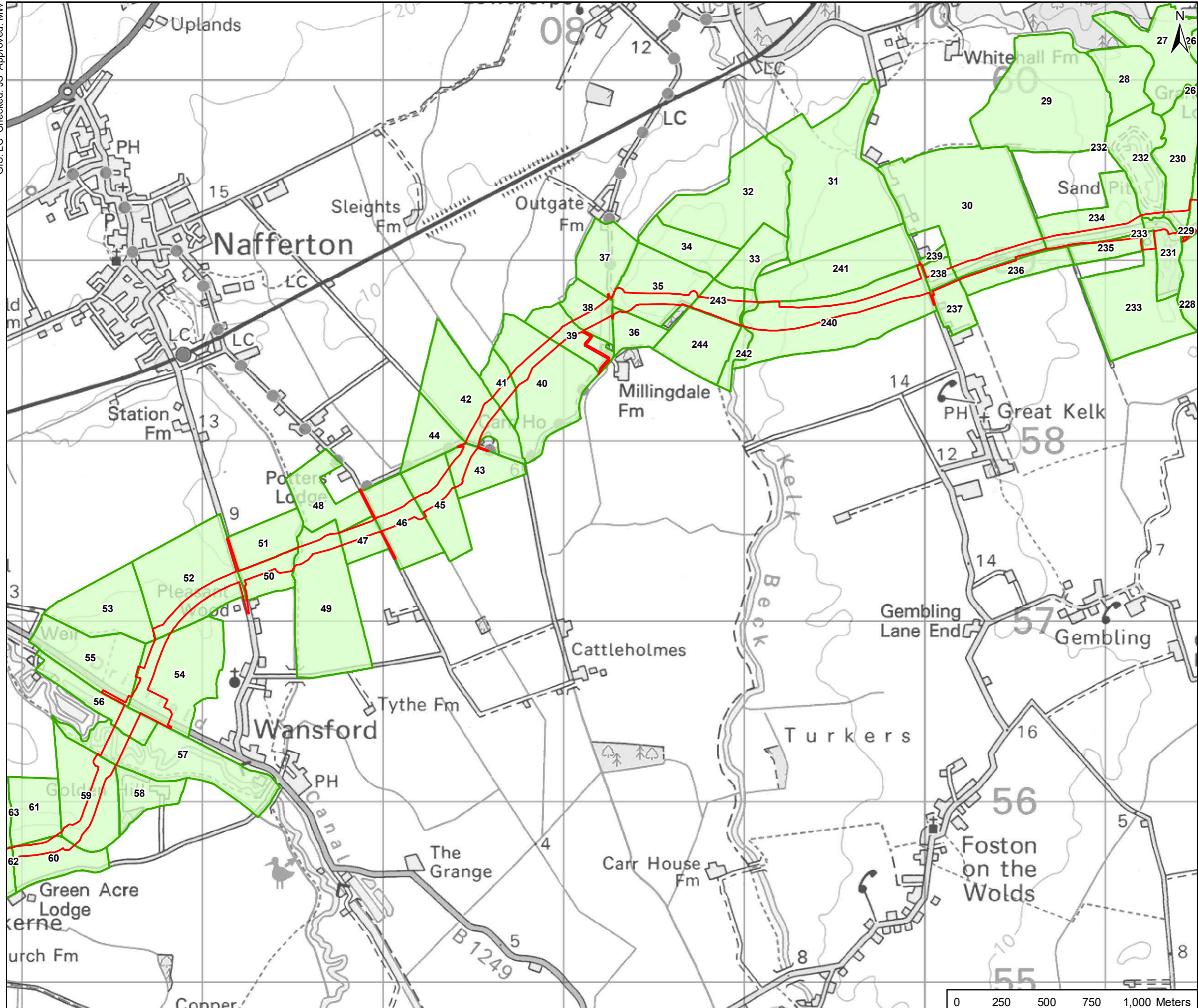
GIS: LC Checked: JS Approved: MW

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



PROJECT  
**Scotland England Green Link 2**

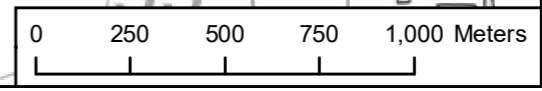
- KEY
- Planning Application Boundary
  - Cultural Heritage Field Number



TITLE  
**Figure 9-2  
Cultural Heritage Field Numbers**

REFERENCE  
SEGL2\_T\_ES\_9-2\_v1\_20220527

SHEET NUMBER DATE  
2 of 9 27/05/2022

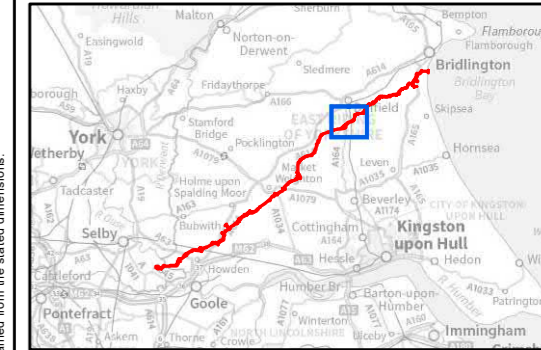
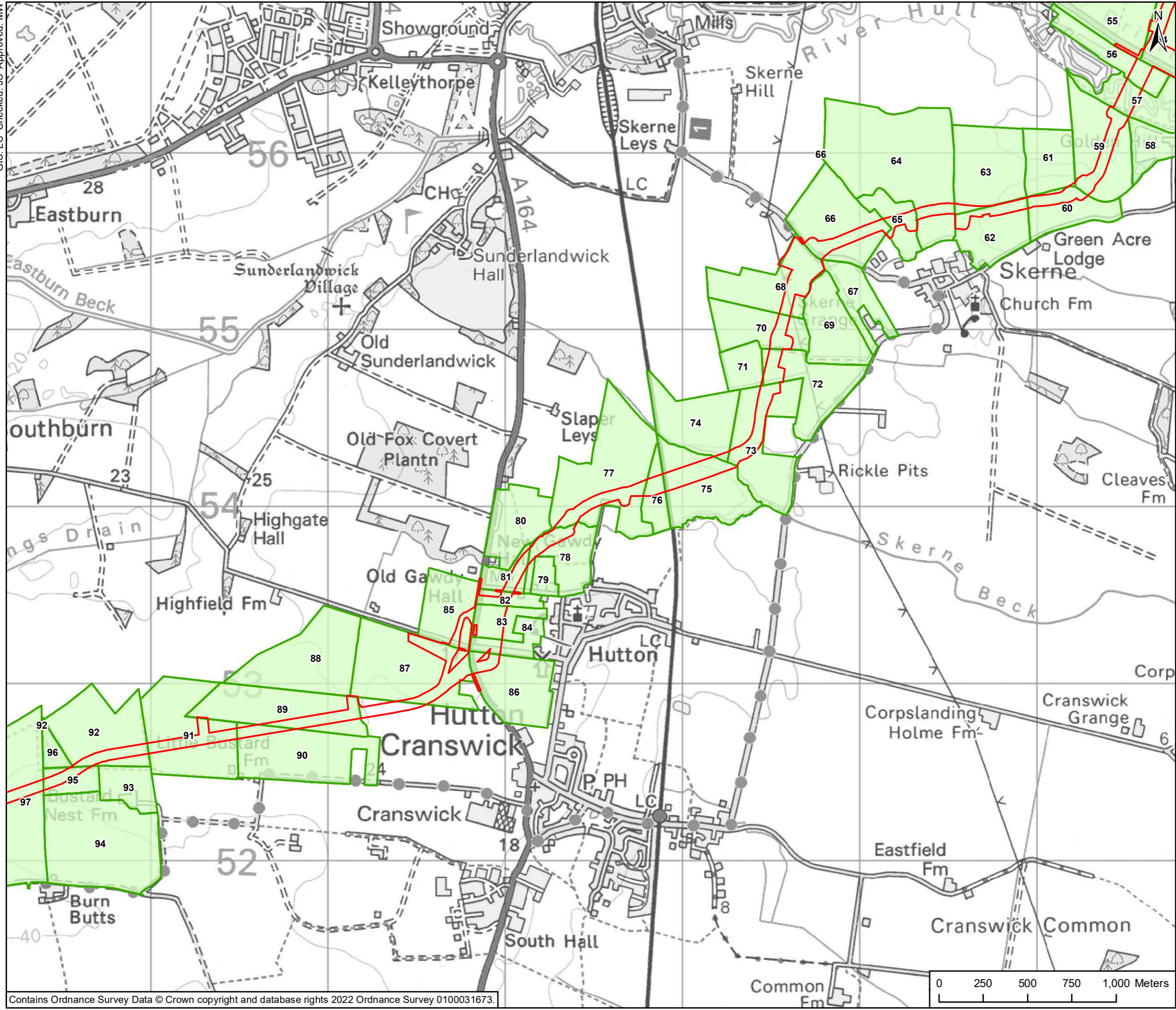


This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

GIS: LC Checked: JS Approved: MW

PROJECT  
**Scotland England Green Link 2**

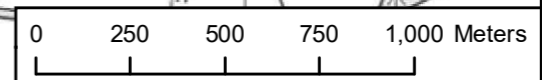
- KEY
- Planning Application Boundary
  - Cultural Heritage Field Number



TITLE  
**Figure 9-2  
Cultural Heritage Field Numbers**

REFERENCE  
SEGL2\_T\_ES\_9-2\_v1\_20220527

SHEET NUMBER 3 of 9 DATE 27/05/2022

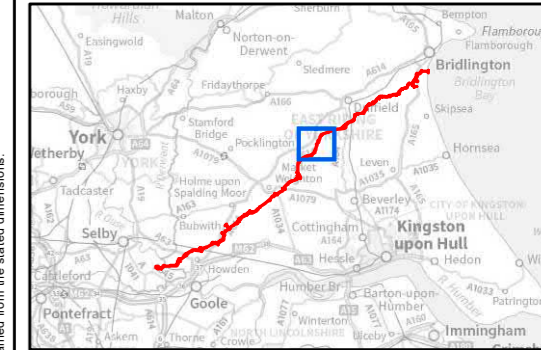
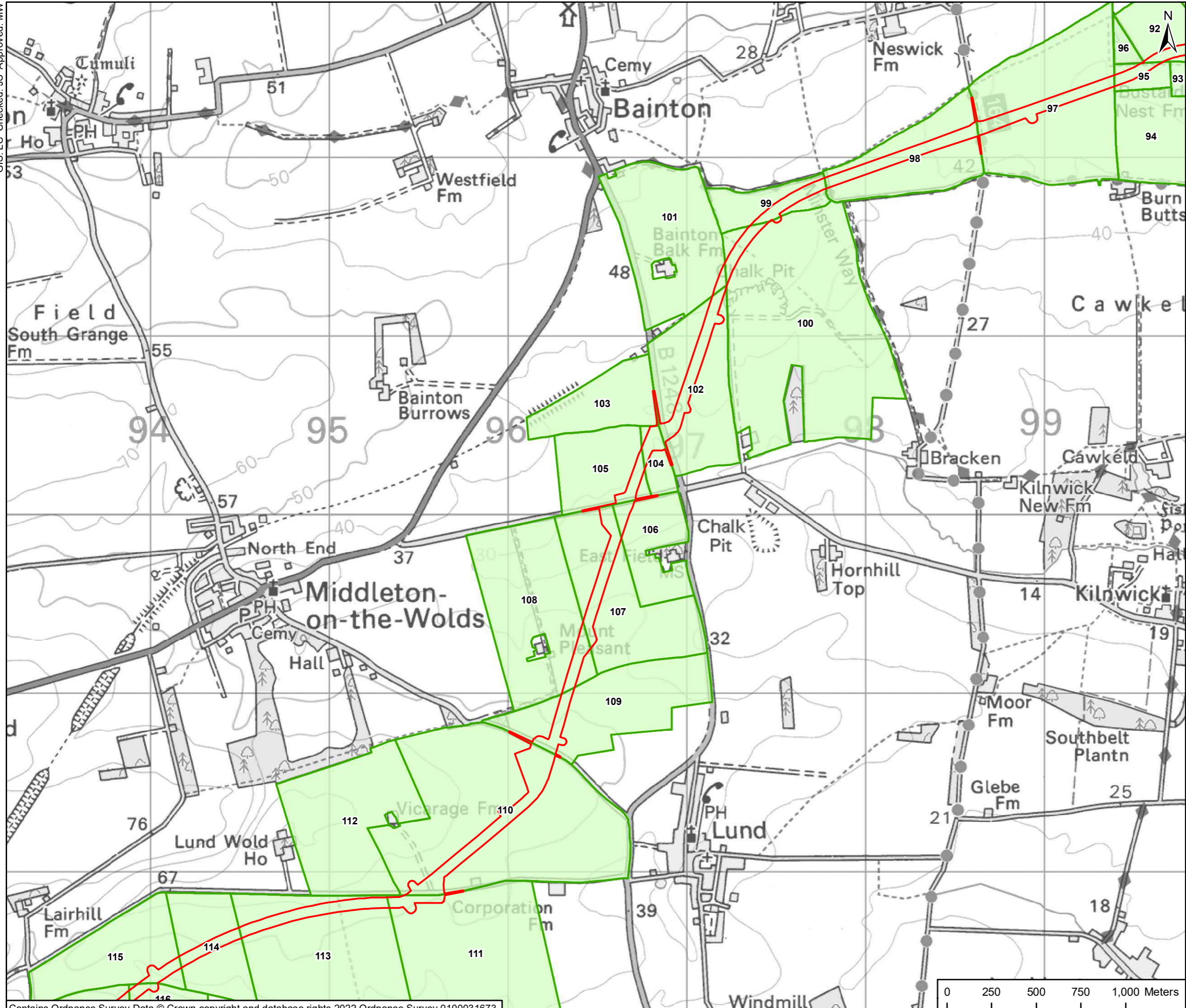


GIS: LC Checked: JS Approved: MW

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

PROJECT  
**Scotland England Green Link 2**

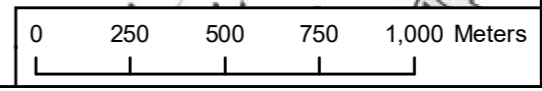
- KEY
- Planning Application Boundary
  - Cultural Heritage Field Number



TITLE  
**Figure 9-2  
Cultural Heritage Field Numbers**

REFERENCE  
SEGL2\_T\_ES\_9-2\_v1\_20220527

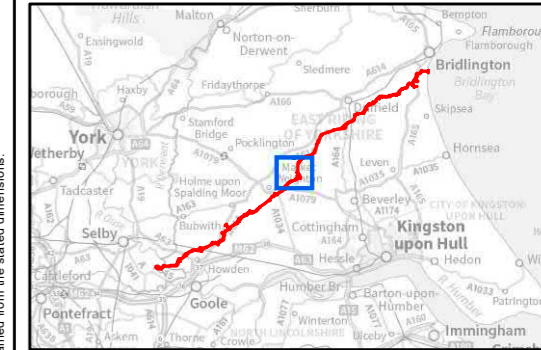
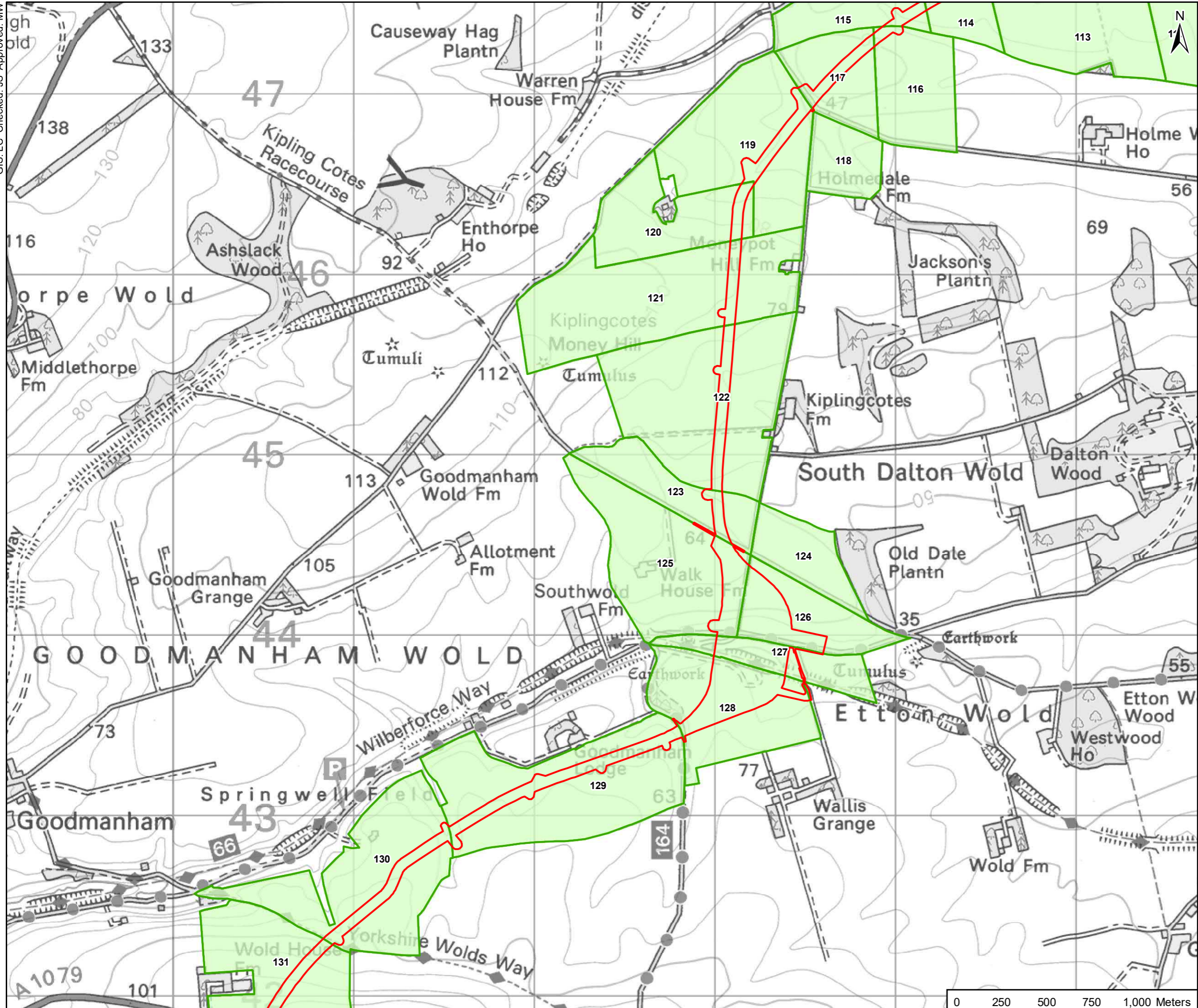
SHEET NUMBER DATE  
4 of 9 27/05/2022



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

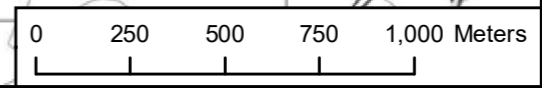
GIS: LC Checked: JS Approved: MW

- KEY
- Planning Application Boundary
  - Cultural Heritage Field Number



TITLE  
**Figure 9-2  
Cultural Heritage Field Numbers**

REFERENCE  
SEGL2\_T\_ES\_9-2\_v1\_20220527

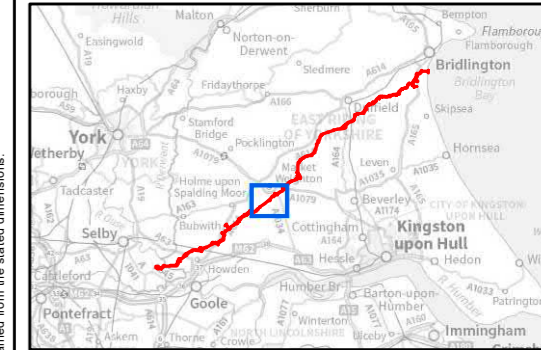
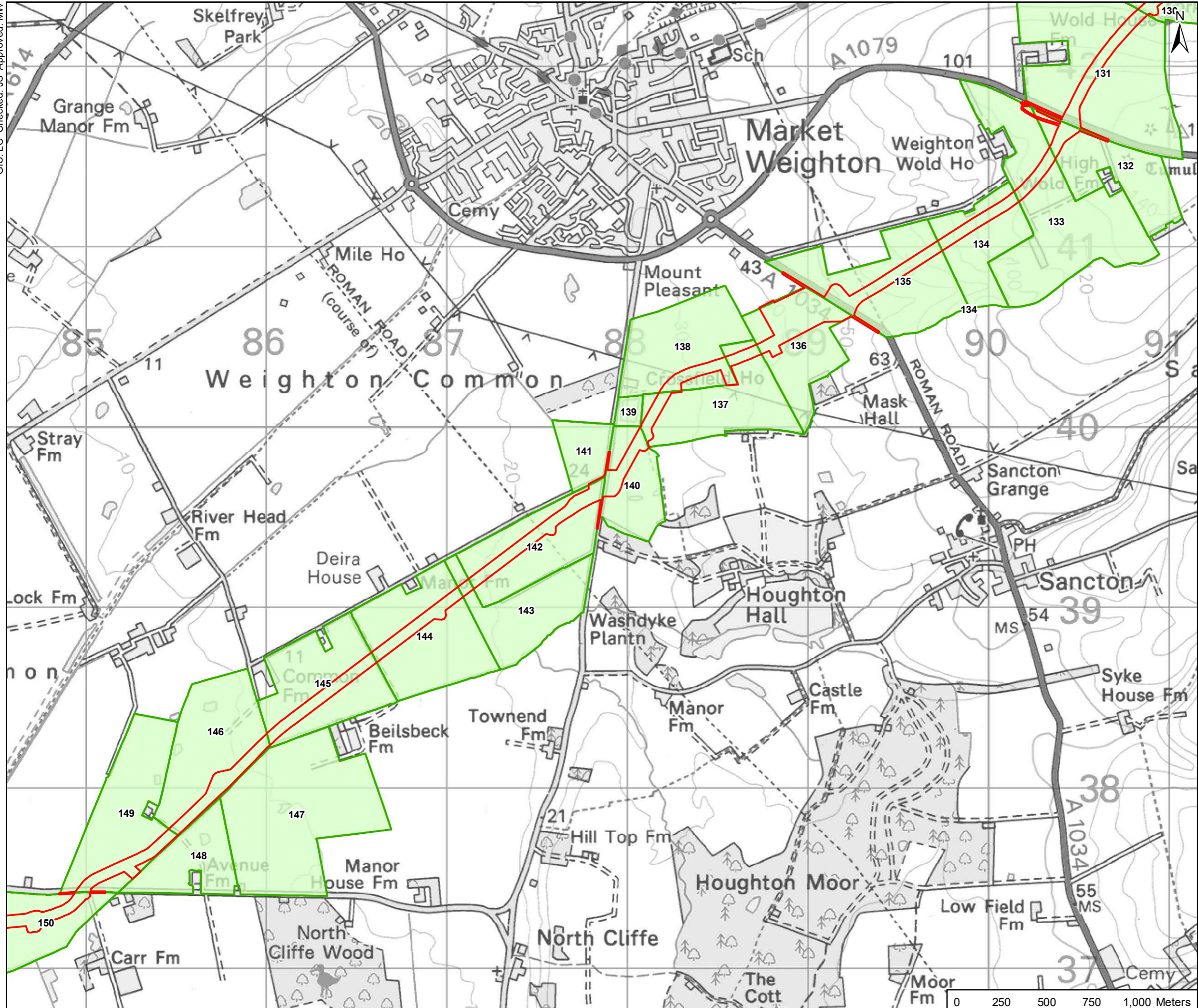


This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

GIS: LC Checked: JS Approved: MW

PROJECT  
**Scotland England Green Link 2**

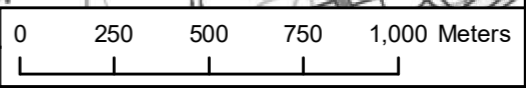
- KEY
- Planning Application Boundary
  - Cultural Heritage Field Number



TITLE  
**Figure 9-2  
Cultural Heritage Field Numbers**

REFERENCE  
SEGL2\_T\_ES\_9-2\_v1\_20220527



SHEET NUMBER 6 of 9 DATE 27/05/2022

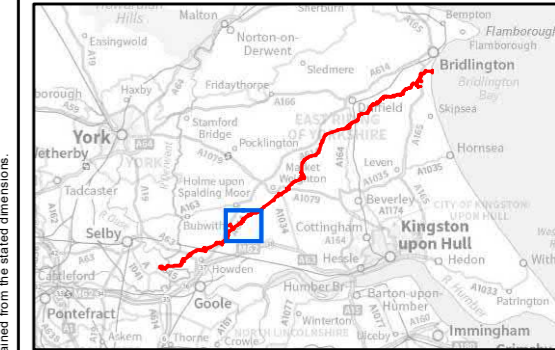
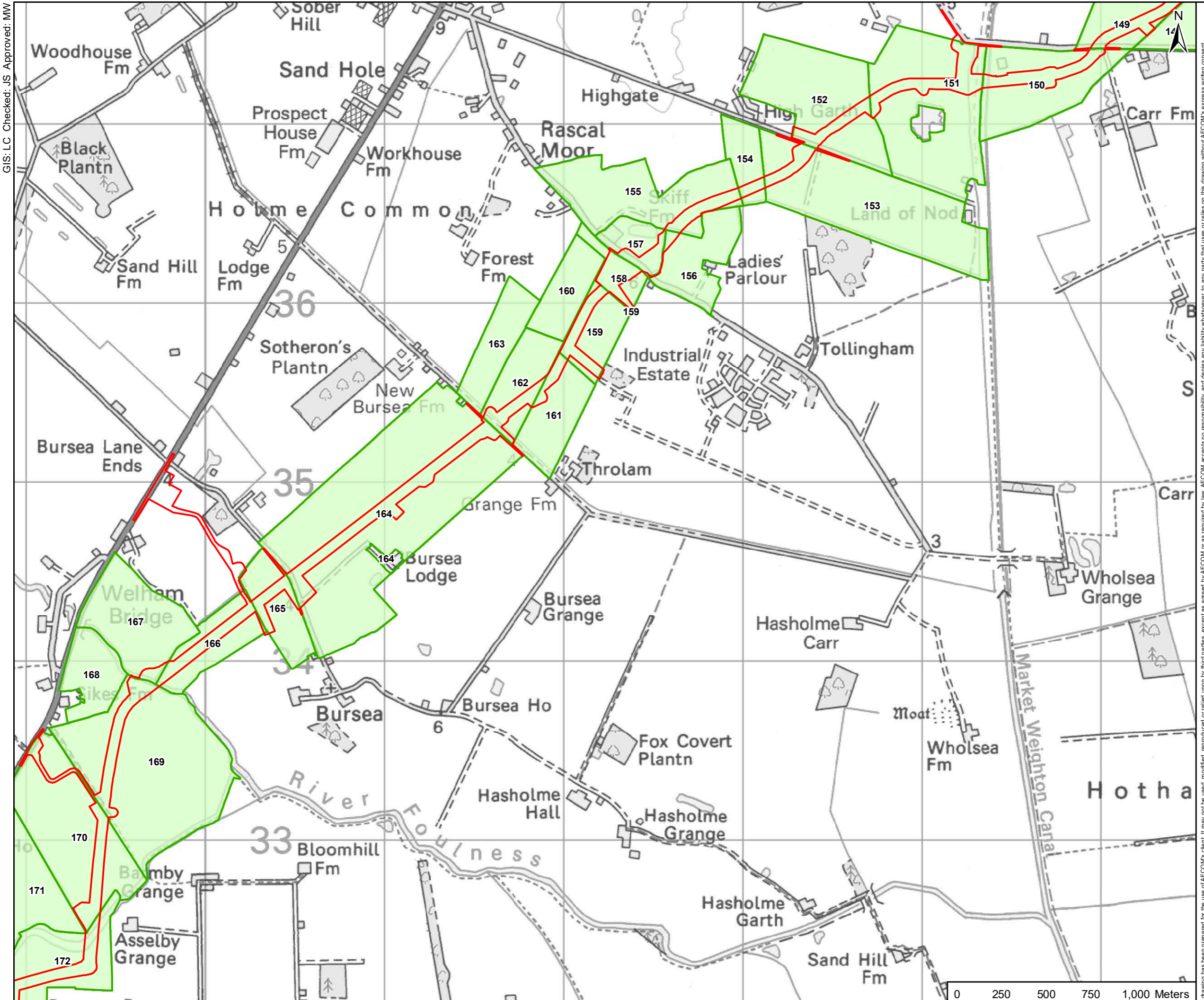


This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

GIS: LC Checked: JS Approved: MW

**KEY**

	Planning Application Boundary
	Cultural Heritage Field Number





**TITLE**  
**Figure 9-2**  
**Cultural Heritage Field Numbers**

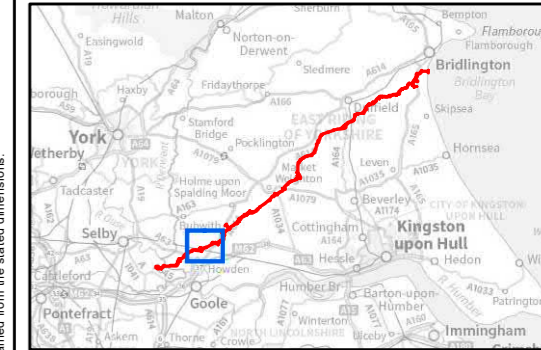
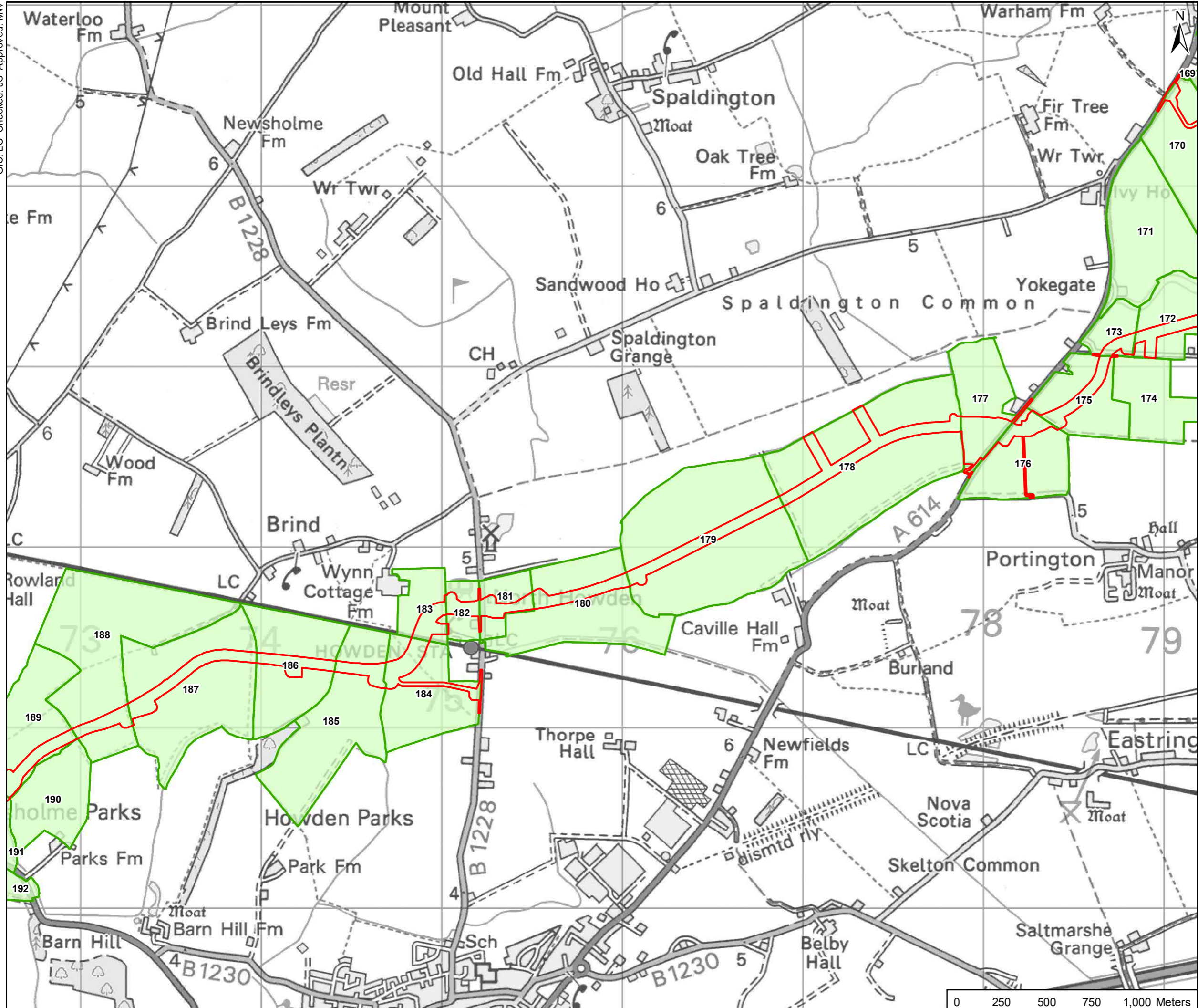
**REFERENCE**  
SEGL2\_T\_ES\_9-2\_v1\_20220527

**SHEET NUMBER** 7 of 9  
**DATE** 27/05/2022

GIS: LC Checked: JS Approved: MW

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

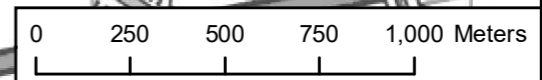
- KEY
-  Planning Application Boundary
  -  Cultural Heritage Field Number



TITLE  
**Figure 9-2  
Cultural Heritage Field Numbers**

REFERENCE  
SEGL2\_T\_ES\_9-2\_v1\_20220527

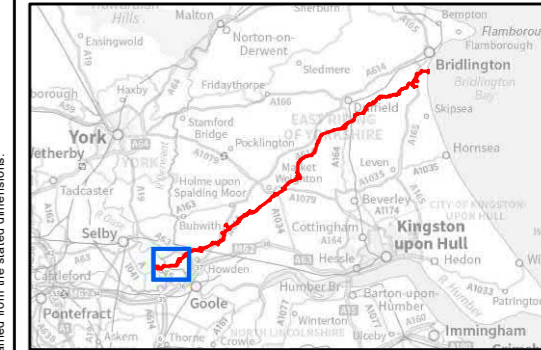
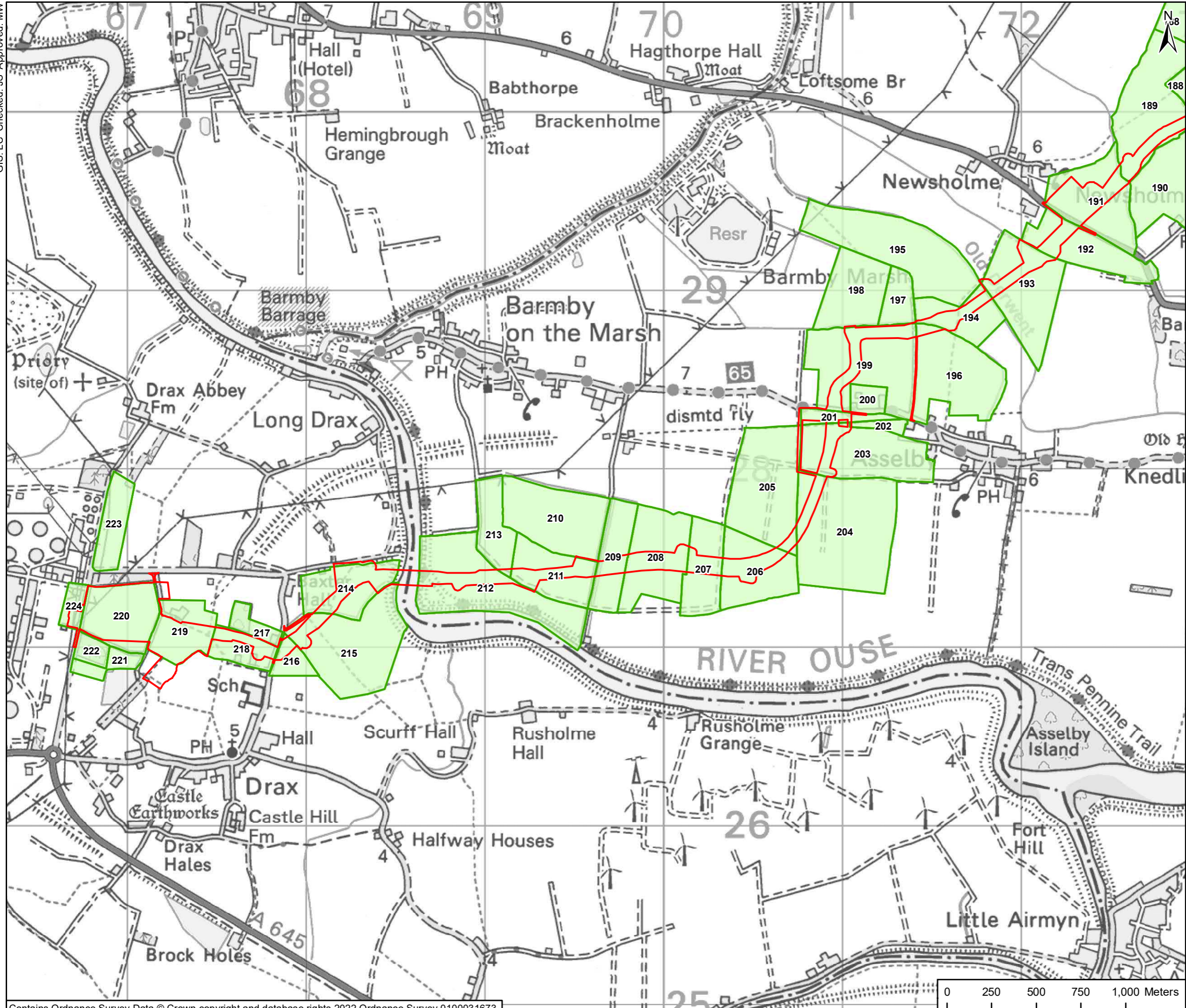
SHEET NUMBER DATE  
8 of 9 27/05/2022



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

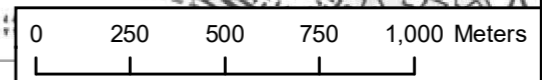
GLS: LC Checked: JS Approved: MW

- KEY**
- Planning Application Boundary
  - Cultural Heritage Field Number



**TITLE**  
**Figure 9-2**  
**Cultural Heritage Field Numbers**

**REFERENCE**  
SEGL2\_T\_ES\_9-2\_v1\_20220527



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

GIS: LC Checked: JS Approved: MW



## 9.5 Baseline Environment

The following section presents the baseline environment for heritage receptors that have the potential to experience effects from the Scheme. It is broken into the four sections that form the scheme, and examines the assets in each section period by period, as well as reviewing the results of the desk-based research, aerial photo and LiDAR assessment, geophysical survey, and the metal detector survey.

In general, the landscape through which the planning application boundary passes is divided into three main topographic areas. The low-lying coastal plain of Holderness occupies the eastern end of the landscape from the landfall near to Fraisthrope to the Hutton Cranswick area in the west. At this point the flat lowlands give way to the undulating chalklands of the Wolds which are the dominant landform of the central area, before the planning application boundary drops into the low-lying landscape of the Vale of York near Market Weighton. This flat landscape, dominated by water courses and associated drainage, remains prevalent until the planning application boundary terminates near Drax in the West. These three distinct landscapes form the basis for the three main sections (Sections 1-3) of the planning application boundary in the East Riding, with Section 4 being the Vale of York area within North Yorkshire.

The three varied landscapes have contributed to settlement pattern within the study area, as well as the wider landscape, and therefore the archaeological record. Periods of climate change over the last 20,000 years has resulted in the lower-lying landscapes at the eastern and western ends of the planning application boundary being too wet for permanent settlement or agriculture, although they were exploited seasonally by hunter-gatherers, with evidence for some of the earliest human activity from the Holderness area. Evidence for human activity before the Iron Age within the study area is, however, relatively limited, with Mesolithic (9,000-4,000 BC) and Neolithic (4,000-2,300 BC) material largely limited to find spots of lithics/stone tools, although some Neolithic funerary monuments have been recorded within the Wolds area. The presence of flint tools, as well as monuments such as burial mounds, does point to human settlement from at least the Neolithic. However, the ephemeral nature of structures dating to this period, and the Mesolithic, mean they are difficult to identify through non-intrusive surveys, and many have also suffered from later ploughing and disturbance.

Bronze Age (2,300-800 BC) activity is also relatively limited within the study area, with most remains from this period also limited to the characteristic burial mounds that are well documented in the Wolds. However, this lack of settlement activity could also be a result of a lack of excavation. The majority of prehistoric sites recorded within the study area, as well as the wider East Riding landscape, have been identified as cropmarks through aerial photography or geophysical survey. Dating has been through the form and character of the monuments, and it is possible that some of the enclosures dated to the Iron Age may be Bronze Age. The presence of burials mounds, as well as the 'background noise' of lithics dating to the Bronze Age, certainly suggest a population in the study area during the period, with their settlements still to be identified.

The Iron Age (800 BC – AD 50) period represents the first clear evidence for widespread settlement within the study area, as well as the wider East Riding landscape, with cropmark and geophysical data recording extensive activity. Remains include round houses, many of which are associated with enclosures, trackways, and field systems, ladder settlements, and possible burials in the form of square barrows. As noted above, at least some of the unexcavated sites may date to the Bronze Age, although their form, as well as occasional surface scatters of pottery, would suggest an Iron Age or possibly a Roman date. However, the general picture of the East Riding landscape during the Iron Age and Roman period is one of a landscape that was well managed with extensive field systems associated with settlements of varying sizes.

The visibility of the Iron Age and Roman periods within the study area, as well as the wider landscape, is followed by dramatic change with the transition into early medieval period, where archaeological evidence of both settlement and other activity once again becomes difficult to detect. Documentary and place-name evidence suggests that many of the settlements that survive today may have their origins in the early medieval, although it seems likely that smaller dispersed settlements also existed throughout the landscape and these have not been detected through non-intrusive investigations. This may be partially down to some Iron Age/Roman cropmark sites being incorrectly dated, or because

some of the Iron Age/Roman sites continued in use into the early medieval period. However, what is apparent is that the visibility of sites dating to the Iron Age/Roman period does not continue into the early medieval.

Medieval activity within the planning application boundary, as well as the study area, is dominated by agricultural land use, with many of the settlements that the field systems supported surviving as modern hamlets, villages, and towns. While it is clear that some large-scale abandonment of settlement took place during the medieval period in the wider landscape, there is limited evidence for deserted medieval villages within the study area, and instead shrinkage of settlements is recorded, rather than wholesale abandonment.

As noted, the landscape of the planning application boundary, as well as the study area, is one dominated by agriculture during the medieval period. Historic aerial photography has demonstrated that earthwork remains of ridge and furrow cultivation was common throughout the East Riding into the middle of the 20<sup>th</sup> century, although the intensive agriculture of the second half of the 20<sup>th</sup> century has removed many of these remains. Pockets of earthworks do survive in areas not used for arable cultivation, while geophysical survey has demonstrated that traces of ridge and furrow cultivation still survive as buried remains throughout much of the landscape. However, it is worth noting that at least some of these cultivation remains date to the post-medieval period, with ridge and furrow common throughout this period.

There is little change in settlement pattern in the post-medieval period, with the settlement pattern recorded in the medieval period continuing to be evident. The landscape is, however, more 'formalised' through the process of Inclosure that took place from the 18<sup>th</sup> century onwards, with many of the field systems carved out as part of this process surviving well into the mid-20<sup>th</sup> century and beyond. The process was also coupled with the formalisation of farmsteads, and many of the farms that survive within the study area date to the 19<sup>th</sup> century, albeit some are on the site of earlier farms or hamlets.

The landscape of the planning application boundary, and the study area, remained largely agricultural into the modern period, with the main change in this period being the industrialisation of arable agricultural in the second half of the 20<sup>th</sup> century. Larger machinery, as well as new planting regimes and crops, has resulted in the loss of many field boundaries dating to the post-medieval period or earlier, as well as the ridge and furrow earthworks that characterised arable cultivation. The general settlement pattern has remained largely unchanged throughout the modern period, although many of the principal settlements have expanded, such as Market Weighton. The biggest impact on the landscape linked to the two World Wars of the 20<sup>th</sup> century. Both of these conflicts resulted in the construction of defensive structures in key areas such as the coastline, although it was the Second World War that had the biggest impact on the landscape. Remains linked to the Second World War include extensive lines of pill boxes and anti-tank traps along the coastline, as well as inland in strategic locations and 'stop-lines', while anti-aircraft sites were also established to defend industrial targets such as Hull and the Humber. The flat areas of Holderness and the Vale of York also became home to a number of airfields, with their level open landscape representing something of a continuation of the landscape of East Anglia and Lincolnshire which was dominated by the airfields of Bomber Command.

The following provides a more detailed overview of the planning application on a section-by-section basis.

## 9.5.1 Section 1 – Landfall to Bainton

### 9.5.1.1 Physical Site Conditions

#### 9.5.1.1.1 Topography

Section 1 measures approximately 23 km from the coastline to the south of Bridlington in the north-east to Bainton in the south-west. In broad terms, the study area extends from an area to the south of Wilsthorpe at Bridlington Bay and heads south-west passing through Gransmoor, Wansford (south-east of Driffield), around the north-western edge of Hutton Cranswick to an area to the south-east of Bainton. Land from the coast to Gransmoor is relatively flat comprising of agricultural fields recorded at 5 m above Ordnance Datum (aOD) in the east by the coast, rising steadily to 8-10 m aOD around the Gransmoor area. The study area crosses both the Kelk Beck, the Driffield Canal and the River Hull to the south-east of Driffield. Land levels rise slightly north of Great Kelk (15 m aOD) but drop back down

again towards the riverine areas. Thereafter, the study area traverses more agricultural land, rising steady from around Hutton Cranswick (20 m aOD) upwards to Bainton and the end of Section 1/beginning of Section 2 (44 m aOD).

### 9.5.1.1.2 Geology

Underling bedrock is chalk and this is overlaid by a series of varying superficial deposits (Ref 9-22). In broad terms, superficial deposits are formed from Diamicton Till (Ref 9-23). However, river deposits following the course of the River Hull to the south-east of Driffield as well as the Kelk Beck consist of alluvial silts, clays and gravels along with surrounding swathes of gravel. Closer to the coast, superficial deposits are glaciofluvial deposits of sand and gravel, particularly near Wilsthorpe and Fraisthorpe.

The soils of the study area are dominated by slowly permeable and seasonally wet loamy and clayey soils, although areas with a high ground water content are noted around watercourses/in flood plains, while lighter free draining acidic loamy soils are noted by the coast (Ref 9-24).

A detailed review of the geology can be found in **Chapter 10: Geology and Hydrology**.

### 9.5.1.2 Historic Landscape Characterisation

A review of the Historic Landscape Characterisation (HLC) data for the Section 1 area demonstrates that the majority of the study area falls within the landscape of Holderness, with only the very western limits falling within the eastern limits of the Wolds. As with the majority of the study area, the landscape is dominated by arable agricultural land, with a small number of dispersed settlements and farmsteads scattered throughout the study area. The planning application boundary avoids all of the settlements and farmsteads and instead passes through the agricultural land. While arable agriculture is dominant throughout the scheme, the most characteristic feature of the arable fields of the Holderness landscape, through which Section 1, passes is the extensive drainage systems which were constructed in the post-medieval period to help improve the land and make more areas suitable for arable farming. A brief overview of the HLC data is provided in **Table 9-6**, and the full details of the HLC data for the area can be found in the report (Ref 9-25 and Ref 9-26).

Although all fifteen 'broad types' of landscape character defined as part of the HLC assessments are represented within Section 1, the area is dominated by 'Fields and Enclosures', with the remaining types making up a relatively small percentage of the landscape under investigation. Full information on the various HLC subcategories have not been included due to the large number encountered throughout the scheme<sup>1</sup>.

**Table 9-6: HLC types within Section 1. Only the dominant 'Broad Types' of landscape have been listed due to the large number of landscape types covered by the Section.**

HLC ID	Name	Broad Type (Dominant Types Only)
CA12	Holderness Coastal Strip	'Fields and Enclosures' (62.3%); 'Coastal' (18.6%); 'Recreational and Leisure' (7.7%); 'Settlement' (5.7%).
CA11	Central Holderness	'Fields and Enclosures' (88.9%); 'Settlement' (2.9%); 'Coastal' (2.7%); and 'Horticulture and Agriculture' (1.5%)
CA10	The River Hull Valley	'Fields and Enclosures' (84.9%); 'Settlement' (4.2%); 'Recreational and Leisure' (2.1%); and 'Woodland' (1.8%)
CA09	Eastern Wolds Dip Escarpment	'Fields and Enclosures' (76.9%); 'Settlement' (4.7%); 'Coastal' (4.7%); and

<sup>1</sup> Full details of the HLC process can be found in Ref 9-25. Landscapes could be categorised as one of fifteen 'Broad Types' of landscape, and were further divided into one of 137 'Historic Landscape Character' types. Full details of the HLC for the East Riding can be found in Ref 9-25 and Ref 9-26.

HLC ID	Name	Broad Type (Dominant Types Only)
		'Woodland' (3.5%).

### 9.5.1.3 Designated Heritage Assets

There are no designated heritage assets within the planning application boundary. The study area is defined as 500m from the planning application boundary.

Within the study area of Section 1 there is one scheduled monument, one conservation area, and 12 listed buildings. There are no World Heritage Sites, registered parks and gardens or registered battlefields.

The second scheduled monument is Wharram Hill embankment cross (NHLE 1005199), located approximately 100 m north-west of the planning application boundary to the south-east of Burton Agnes, which was found on a site that dates to the Roman period.

The conservation area is the village of Hutton located 165m east of the planning application boundary. The village has medieval origins and contains the Grade II\* listed Church of St Peter (NHLE: 1161006) and two Grade II listed buildings, comprising the late-18<sup>th</sup> century to 19<sup>th</sup> century Pit Top Farmhouse and walls (NHLE: 1346482) and its associated windmill (NHLE: 1161022). The heart of the village is the area adjacent to the Church, with the non-designated former Vicarage and Manor House nearby and grass verges creating a small green. The green is enclosed by several smaller houses and farm buildings. The conservation area is restricted to the mainly historic parts of the village with large areas of modern development excluded.

The listed buildings within the study area comprise one Grade I, two Grade II\* and nine Grade II listed buildings.

The Grade I listed building is the medieval Church of St Leonard (NHLE 1084138) in Skerne, approximately 465 m south of the planning application boundary. The church is of 12<sup>th</sup> century origin, with a 15<sup>th</sup> century west tower, built of ashlar, rendered to nave and chancel with flagstone dressings.

The Grade II\* listed buildings also consist of churches. The first is the Church of St Peter (NHLE 1161006) in Hutton, mentioned above, approximately 400 m east of the planning application boundary. The church has 12<sup>th</sup> and 13<sup>th</sup> fabric surviving but it has 15<sup>th</sup> century rebuilding and 19<sup>th</sup> century restoration. The second Grade II\* listed building is the Church of St Mary the Virgin (NHLE 1162211) located in Wansford, approximately 471 m east of the planning application boundary. The church was constructed in 1868, of ashlar with flat clay roofing tiles in the Gothic Revival style.

There are nine Grade II listed buildings located within the study area, all of which are of post-medieval date. Four of these are located in Wansford, to the east of the Scheme. The first of these is a lychgate and wall (NHLE 1346307) to the Church of St Mary the Virgin. The other listed buildings in the village include the 18<sup>th</sup> century Pleasant Wood Farmhouse (NHLE 1084140), on the outskirts of the village, and the 19<sup>th</sup> century Old Vicarage (NHLE 1084139), and 'Fishing Post' old school and master's house (NHLE 1309733).

Further Grade II listed buildings include the late 17<sup>th</sup> – early 18<sup>th</sup> century Manor Farmhouse in Fraisthorpe (NHLE 1083850), 18<sup>th</sup> century Outgates Farmhouse in Nafferton (NHLE 1161973), the 18<sup>th</sup> century Pit Top Farmhouse (NHLE 1346482) and windmill (NHLE 1161022) in Hutton and the 19<sup>th</sup> century Eagle public house in Skerne (NHLE 1391423). The construction of the listed buildings in the study area predominantly of red and pinkish brick with pantile roofs.

### 9.5.1.4 Archaeological and Historic Background

#### 9.5.1.4.1 Prehistoric (up to AD43)

Evidence of the early prehistoric is often less visible than that of later periods. Remains of the early prehistoric periods are often confined to finds of stone tools and geoarchaeological remains. The earliest recorded evidence from the study area comprised an Upper Palaeolithic occupation site at Gransmoor Quarry, where a barbed antler dating to 11,500-9,000 Before Present (BP) was recovered during a watching brief (MHU7660). Other early prehistoric remains are also fairly limited in comparison

to later periods and include finds of Neolithic flint assemblage (MHU21025) and stone tools (MHU4103), and a similar situation has been observed in other parts of Holderness where detailed fieldwork has been undertaken with limited early prehistoric material noted (Ref 9-27).

The study of early prehistoric period in the wider Holderness area has, however, revealed important information about the early Holocene landscape of the area. Some of the earliest human activity within the British Isles is recorded within the region, with sites like Starr Carr near Seamer, and Sproatley in Holderness demonstrating sites that were occupied for a significant period of time (Ref 9-27). The latter site, Sproatley, was identified during archaeological works for a new National Grid gas pipeline in the southern area of Holderness, and the works undertaken noted that the undulating land of modern day Holderness is misleading, with valley bottoms being up to 9m lower in the early Mesolithic period (9,000-4,000 BC) (*ibid* 248). This would suggest that the raised sites where early prehistoric remains have been recorded would have been more pronounced, and it would appear that areas of gravel were also targeted as they represented a source of raw material, such as flint and chert, for tool making (*ibid*, 248-249). As such, the results of the GI works undertaken as part of the current Scheme have the potential to help target areas of high potential for early prehistoric sites as they could provide information relating to the former profile of the landscape, helping to identify previous higher area that are now buried.

Later prehistoric remains from the Neolithic (4,000-2,300 BC) onwards are often more visible in the archaeological record. Features of the later prehistoric include funerary monuments and settlement sites. Within the study area, there are two non-designated Bronze Age (2,300-800 BC) round barrows, in addition to the scheduled bowl barrow discussed above. Both of these round barrows are located to the south-west of Skerne (MHU22358; MHU4547) to the south of the Scheme.

Iron Age (800 BC – AD 50) features are more visible in the landscape of the study area than previous prehistoric periods. There are five assets dated solely to the Iron Age, as well as 15 assets dated to the Iron Age/ Roman period. The latter are discussed in the Roman section below. The Iron Age remains comprise three settlement sites, one at Gransmoor Quarry (MHU3260), and two further settlement sites and square barrows located within the Scheme boundary to the east of Nafferton (MHU15523; MHU15529). An Iron Age square barrow is recorded at Hastem Hills (MHU9974), located within the Scheme boundary to the north-east of Gransmoor, and a further two Iron Age square barrows are recorded also within the Scheme boundary to the west of Wansford (MHU22366).

There are also several prehistoric assets recorded within the study area, which have not been dated to a specific prehistoric period. These include a cropmark complex at Crossham Hills (MHU340), enclosures and a pit alignment to the south of Hill Farm (MHU21011), a multiple ditch system of late prehistoric date (MHU4542) and a later prehistoric ditch (MHU22072). There have also been various flint finds of flakes and tools recorded throughout the study area (MHU21013; MHU21014; MHU21015; MHU21024; MHU5711; MHU6753; MHU8433; MHU8439). Some of the settlement sites are expected to date to the Iron Age period, while the flint find spots are likely to be of Mesolithic, Neolithic or Bronze Age date.

#### 9.5.1.4.2 Roman (AD43-450)

Similarities in the form of assets dating to the Iron Age and Roman periods mean it is often difficult to date assets from these periods without excavation. Although only two assets dating purely to the Roman period have been recorded within the Study Area for Section 1, a number of the assets dating to, or thought to have their origins in, the Iron Age may have continued in use through to the Romano-British period. Furthermore, a number of the undated sites may also relate to Romano-British activity.

There are 15 assets of Iron Age to Roman date recorded within the study area. These mostly consist of areas of linear cropmarks representing agricultural practices, consisting of enclosures, trackways and field systems. These are concentrated in agricultural land around Wansford (MHU22242; MHU22245; MHU22247; MHU22360; MHU22364; MHU8205), Gransmoor (MHU22254; MHU7586), Skerne (MHU22359; MHU22361), Nafferton (MHU22384; MHU7451; MHU4112) and Wilsthorpe (MHU3290). There is also the site of a settlement complex recorded near Wansford (MHU8204).

There are also two assets of solely Roman date recorded within the study area. These comprise a ditch, pit and land drains on land east of The Beeches, Skerne (MHU22982), as well as the find of a fragment of Roman vessel at Auburn Sands (MHU8931).

There are limited known Roman settlements or roads recorded in this area. Evidence from the wider area of the East Riding of Yorkshire include a settlement at Brough approximately 25 km south of Bainton. *Petuaria* was a Roman fort, established in AD70 until AD125, while the adjacent *civitas* was thought to be in use until the 4<sup>th</sup> century AD. This site is also thought to be the location of a ferry crossing across the Humber which connected Ermine Street on either side of the river. On the northern side, the road ran from Brough to York.

#### 9.5.1.4.3 Early Medieval (450-1066)

While no assets dating to the early medieval period have been recorded within the study area, there is clear documentary evidence for activity during this period. The majority of settlements which the planning application boundary passes are recorded as early as the Domesday Book of 1086, indicating the presence of the settlements from at least the later years of the early medieval period, and many may have earlier origins. Settlements recorded in the Domesday Survey include Auburn, Fraisthorpe and Wilsthorpe near the landfall, as well as Gransmoor, Skerne, Nafferton, Lowthorpe, and Hutton Cranswick, the latter originally being recorded as two separate settlements. Many of these settlements also have place-names that also suggest an earlier origin with the '*ton*' element pointing to an Anglo-Saxon origin, while the '*thorpe*' element is often taken to suggest a Scandinavian origin (Ref 9-28). However, much of the land surrounding the settlements would have been mixed agricultural land and it is this land through which the Scheme passes. Ploughlands have been recorded at a number of settlements including Skerne, Gransmoor, Nafferton and Wilsthorpe, and while there may have been some woodland in other Route Sections, the Section 1 landscape of Holderness appears to have been relatively free from woodland by the early medieval period (Ref 9-29).

While place-name evidence suggests strongly that many of the existing settlements have their origins in the early medieval period, there is the potential that at least some of the cropmark sites that appear to be Iron Age and Romano-British may be early medieval in date, or represent sites that continued in use into the early medieval period. Metal detecting undertaken as part of the Scheme on some of the cropmark sites assumed to be Romano-British failed to identify finds to positively date sites, while concentrations of pottery often common on Roman sites were also lacking. While this might suggest areas that have been picked over by previous metal detecting groups, it is possible that the lack of Iron Age or Roman material could point to sites of an early medieval date.

Previous work has also suggested that certain landscapes were preferred during the early medieval period, with the slightly higher ground where the Wolds start to rise being targeted by early medieval activity (Ref 9-29). If this is the case, sites such as the possible field systems at the point where Sections 1 and 2 meet (MHU22106; MHU281; AECOM050), could be early medieval rather than Iron Age or Roman in date.

#### 9.5.1.4.4 Medieval (1066-1500)

There are eight non-designated assets of medieval date recorded within the study area. While a number of settlements of early medieval and medieval date survive as extant villages and hamlets within this section, a number of other villages and hamlets have been deserted, or at least suffered some reduction in size, since the medieval period. Evidence for medieval settlement includes the deserted or shrunken medieval villages of Gransmoor (MHU3255), Great Kelk (MHU8066) and Skibedon (MHU8123), the remains of which comprise earthworks associated within the former settlements.

Further evidence of medieval activity in the study area includes the site of Skerne Grange, a Cistercian grange located to the south-west of the village (MHU2556).

Standing buildings from the medieval period are rare in the study area and comprise exclusively of churches. The Grade II\* listed Church of St Peter in Hutton (NLHE: 1161006) has 12<sup>th</sup> and 13<sup>th</sup> century surviving fabric although much of its current appearance dates to the 15<sup>th</sup> century rebuilding and 19<sup>th</sup> century restoration. A 12<sup>th</sup> century font from the church is on display at the Hull and East Riding Museum. It features decoration in the form of an arcade of ten bays with human and animal figures within each arch. The Grade I listed Church of St Leonard at Skerne (NHLE: 1084138) is also of medieval origin with more surviving of its 12<sup>th</sup> century nave and chancel, and 13<sup>th</sup> century north aisle. There is also reset beakhead decoration and surviving tomb effigies, possibly of the 12<sup>th</sup> or 13<sup>th</sup> century, internally. The survival of such buildings into the modern landscape and their history of alteration and restoration

demonstrates the continued importance of religion as a central tenet of people's lives through the intervening centuries.

Evidence suggests that agriculture formed the main activity undertaken in the area during the medieval period, with remains recorded at a number of locations. These include remains of ridge and furrow (MHU22169), open fields (MHU3997), a parish boundary ditch (MHU3286) and earthwork banks (MHU4537).

There are also 10 assets of medieval/ post-medieval date recorded within the study area. These include further areas of ridge and furrow (MHU21145; MHU21146) and former settlement sites at Skerne (MHU8208), Hutton (MHU9628) and Wansford (MHU9628), as well as a platform and ditches (MHU22357) and the former site of a chapel at Wilsthorpe (MHU14863). The remaining assets of this date are finds of medieval/ post-medieval pottery from Wansford, Hutton and Bustard Nest (MHU17934; MHU19829; MHU13450).

The landscape of Holderness, with the River Humber to the south, the River Hull to the west, and an earthwork bank known as the 'King's Dyke' to the north, was somewhat cut off from the east of England at the start of the medieval period. Settlement patterns in the Domesday book suggests that the area was occupied by a large number of small villages and hamlets which were held by a large number of freeholders, but in the years following the Norman Conquest that land became a single holding which was granted to the Aumale family who were to hold it for almost 200 years (Ref 9-30).

Accounts suggest that the Holderness landscape during the medieval period was something of a wetland area, with watercourses, meres, and ponds located throughout the area. The area was referred to as a '*mersshy contree*' by Chaucer when he talks about the area in the Summoner's Tale, part of the Canterbury Tales original written in the late 14<sup>th</sup> century (Ref 9-31), suggesting the wetland nature of the landscape was relatively well known outside of the region.

As noted in the early medieval section, it is clear that some of the land around the many small settlements located throughout the landscape had been improved and turned to arable agriculture by the time of the Domesday Survey, and this land formed part of the arable, pasture and meadow fields that made up the common field system that prevailed in the study area. However, it is clear that other land uses were still in place in the 11<sup>th</sup> to 13<sup>th</sup> century with turbaries for cutting turf (used for building and fuel) recorded in a number of areas including Winkton near Barmston 4km south of the landfall (Ref 9-30).

The settlement pattern during this period points to the meres being the focus of settlement as they represented better land and would also have provided resources such as fresh fish, reeds for thatching, and areas of ground for rough grazing (*ibid* 203). It has also been suggested that the waterways would have formed the most convenient transport link, and it is this pattern of small settlements surrounded by agricultural land that was dominant when the abandonment of settlements in the medieval period commenced. Such abandonment was linked to a various factors, including plague, and soil exhaustion through over farming, as well as coastal erosion and other environmental changes. However, within the study area most settlements were not fully abandoned and rather reduced in size, with a number of the villages around which the alignment passes having well preserved earthwork remains demonstrating their former size. These include Gransmoor (MHU3255) and Great Kelk (MHU8066), with ridge and furrow cultivation also surviving as earthworks at both Gransmoor and Kelk. Ridge and furrow cultivation, some of which may be post-medieval in date, was well represented throughout the study area on aerial photographs until the second half of the 20<sup>th</sup> century when intensive agriculture removed much of the earthwork remains. The geophysical survey undertaken for the Scheme identified evidence for ridge and furrow surviving as buried features through much of the study area, with the alignment passing through the fields that surrounded the settlement (see **Appendix 9C** and **9D** for the full aerial photographic, LiDAR, and geophysical survey reports).

While the majority of this section lies within the low-lying landscape of Holderness, the western limits fall within the start of the Wolds. The word Wold comes from the Old English *Wald* for woodland, and much of the area is thought to have formerly been covered in woodland pasture with some suggesting that ancient woodlands survived in the areas as late as the 17<sup>th</sup> century (Ref 9-29). There is also documentary evidence that the "Wolds landscape", which makes up an area of this section, was referenced by the medieval period with a 13<sup>th</sup> century Icelandic documentary source noting that Saint

Olaf landed at a Yorkshire harbour “off the wold” suggesting the area was known as the Wolds by some people (Ref 9-29). Bustard Nest Farm, located in this western end of Section 1 where the Wolds start to rise, may have been settled during the medieval period as ridge and furrow (MHU22169) and medieval pottery (MHU13450) has been found in the general area. However, geophysical survey failed to identify any traces of settlement activity within the route corridor, with anomalies limited to a few linear features (AECOM055) which might point to any potential settlement linked to the ridge and furrow is located away from the planning application boundary, with the route passing through the associated field system.

#### 9.5.1.4.5 Post-Medieval (1500-1900)

There are 38 post-medieval assets within the study area, including 10 listed buildings and 28 non-designated assets within the study area. In addition to the listed buildings, there are a number of extant non-designated buildings as well as former sites of buildings of post-medieval date located within the study area. A further five assets that had not been assigned a date or period on the East Riding HER, but are assumed to be post-medieval and are therefore discussed in this section.

The development of the area is highlighted by the increased number of buildings recorded in the study area some of which clearly replaced earlier medieval buildings within the core of surviving medieval settlements and some of which represent a number of settlements growing in size. Extant buildings are concentrated in the villages in the study area, including house (MHU6284), smithy (MHU18153) and Methodist chapel (MHU18128) in Hutton, a further chapel (MHU15148) and bridge (MHU18123) in Skerne, and a church in Gransmoor (MHU4949). Other extant buildings include the Gate House in Wansford (MHU14877) and the Keepers House in Sunderlandwick (MHU20432). Outside the settlements isolated buildings are generally farms which vary in size and complexity. Extant farmsteads are present at South Kingsfield Farm (MHU14859) and Millingdale Farm (MHU14977), both of which feature large farmhouses and had accompanying large formal courtyard farms, whilst smaller farmsteads are represented, for example by Carr House (AECOM061), featuring a modest farmhouse with a loose courtyard to the rear formed by two linear farmstead ranges. Although only the farmhouse now survives. Other farms in the study area are more standardised comprising a farmhouse to the south of either a U-shaped or square farmstead. Examples can be seen at Low Stonehills (AECOM062) and High Stonehills (AECOM063).

There are also a number of former buildings including two smithies in Gransmoor (MHU14998; MHU15010), two former vicarage sites (MHU18152; MHU18126) and an allotment (MHU18155) in Hutton, a former school in Skerne (MHU15149) and a former Methodist chapel (MHU15012) and a landing (MHU8432) in Wansford.

While watercourses are noted as being a major source of transport during the medieval period, post-medieval improvements also included new and improved infrastructure. This included a large number of new roads/tracks and bridges (the latter needed to bridge the many drainage dykes that were constructed to help drain the landscape) as well as the Hull to Scarborough Railway (MHU8811) which runs through the study area. The railway line was constructed in the 1840s with later additions.

As with earlier periods, agriculture was the main activity within the study area and the alignment passes through the fields that surrounded many of the small settlements that are distributed through the area. Cartographic sources for the study area are relatively limited until the 18<sup>th</sup> and 19<sup>th</sup> century when enclosure award and tithe plans provide the first detailed surveys of some of the parishes and townships including Foston (Ref 9-32) and Gransmoor (Ref 9-33). These also demonstrate that the landscape through which the route passes was dominated by agricultural land, and this remains the situation into the later 19<sup>th</sup> century when the first edition Ordnance Survey plans depict a landscape very similar to that which survives into the present day. Agricultural features recorded within the study area include field boundaries (MHU22383) and a pinfold (MHU14997), while geophysical survey has also noted a large number of former field boundaries that have been removed to form larger fields.

Evidence of other trades are also apparent in the landscape through the heritage assets that have been recorded. These include assets linked to extraction including former chalk pits and kilns (MHU12474; MHU18148) and a brickyard (MHU18122), while in Skerne a number of mills were operating by the late 18<sup>th</sup> century (Ref 9-34). By 1790 an extensive mill working area was in operation, with a dyehouse, cotton and worsted mill, counting-house and combing and weaving shops, although the mill struggled to raise capital until the water supply was improved in 1795 (Ref 9-34). The management of water was



key to improving the waterlogged Holderness area, and while agriculture was taking place within the study area, documentary evidence suggests that flooding had been causing problems in various parts of the wider county. This resulted in the construction of a number of drains during the late 18<sup>th</sup> century to aid land improvement, with the largest drain being the Beverley and Barmston Drain constructed after being passed by an Act of Parliament in 1798 (Ref 9-35), although a network of other drains were constructed including examples around Wansford.

Other post-medieval features recorded include the site of cropmarks (MHU17473), a find of pottery (MHU19830), the site of a well (MHU14879), and a possible Civil War period redoubt (MHU4084). This latter site is a form of defensive structure usually constructed rapidly by digging ditches and using the spoil to form banks. This possible site was recorded through aerial photography as a cropmark, although no traces of this feature were recorded through geophysical survey (see **Appendix 9D**).

A further five assets that had not been assigned a period on the HER are assumed to be post-medieval. These are a former public house (MHU18154), a manor house (MHU18127) and a possible former structure in St Leonard's Churchyard (MHU17404), as well as an undated milestone (MHU18125) and milestone grit fragments (MHU19658).

By the closing years of the 19<sup>th</sup> century the general picture of the study area is of a landscape dominated by agriculture. Settlement was concentrated in a handful of villages scattered throughout the landscape, many of which had their origins in the early medieval period, and which had grown throughout the 19<sup>th</sup> century. A number of dispersed farmsteads (see **Appendix 9F**) had been established in the wider area to manage the various holdings, with some removal of field boundaries to form larger fields taking place.

#### 9.5.1.4.6 Modern (1900-present)

There are 22 assets of modern date recorded within the study area, all of which are related to the Second World War. These predominantly consist of defensive features located around Fraisthorpe and Auburn Sands at the eastern end of the scheme to defend the coastline against enemy invasion. The features were built as part of coastal defences along the North Sea coast constructed during the Second World War. The defences include pill boxes (MHU9986; MHU21019; MHU21021; MHU21022; MHU21027; MHU21033; MHU21034; MHU21035), anti-tank cubes (MHU21152; MHU21031; MHU21020; MHU21016), trenches and weapon pits (MHU21012; MHU21023; MHU21026), trackways (MHU21017), beach defences (MHU21018) and lights (MHU21028) and other military buildings (MHU21029; MHU21032).

There are also two further Second World War assets recorded further inland, with a bombing decoy located to the west of Skerne (MHU18434) and four bomb craters were recorded to the west of Hutton (MHU22356).

The third edition Ordnance Survey mapping of the area indicates that during the 20<sup>th</sup> century the study area remained mostly rural in nature, comprising agricultural fields around small settlements. Despite this there have been a number of developments to the area including the construction of modern roads and modern residential and commercial buildings which has seen an expansion in some settlements. Other more recent developments include a new windfarm near the landfall site. However, the most noticeable change in the landscape of the alignment is linked to the agricultural land use of the study area. The intensification of arable agriculture in the second half of the 20<sup>th</sup> century resulted in the loss of large areas of ridge and furrow cultivation that had survived as earthworks into the 1940s, while many field boundaries were also removed to accommodate large machinery linked to the industrialisation of agriculture. These changes are well represented in the mapping of the area, while former field boundaries, drainage, and the ridge and furrow cultivation has been recorded as buried features throughout the area in geophysical survey data.

#### 9.5.1.4.7 Undated Assets

There are 17 undated assets recorded within the study area. These mostly consist of archaeological features, including ditches (MHU15379; MHU7591; MHU8064), enclosures (MHU2561; MHU330; MHU336; MHU6535), square features (MHU3987), field boundaries (MHU7456), ring ditches (MHU8124; MHU7455) and Corka dikes hole (MHU18124).

### 9.5.1.5 Walkover Survey

An archaeological site visit of the current Section 1 area was undertaken on the 11<sup>th</sup> and 12<sup>th</sup> November 2021, with the focus on the landfall to Wansford, as the majority of the planning application boundary from Wansford to the end of Section 1 corresponds with the previous CCS scheme which was subject to an archaeological walkover survey in 2013 with the data collected published as part of the Development Consent Order (DCO) application (Ref 9-21). A second visit was undertaken on the 19<sup>th</sup> January 2022 to examine a new route alignment near the landfall site.

No new features were recorded, although possible worked flint was observed in a number of fields near the landfall, including Field 4 where previous fieldwalking has recorded lithic scatters (MHU21024). Finds of lithics were, however, sporadic and not clustered suggesting general prehistoric activity rather than focused activity.

### 9.5.1.6 Aerial Photographs and LiDAR

A review of aerial photography and LiDAR data for the Section 1 area largely confirmed the presence of previously identified heritage assets, or provided additional information on previously recorded sites, and confirmed that the landscape through which the alignment passes has been largely agricultural since at least the end of the Roman period. More detailed information on previously recorded assets included the extensive cropmarks recorded near the landfall in Fields 4, 6, and 7 which are thought to represent part an Iron Age/Romano-British settlement and field system (MHU340 & MHU3290). Most of this activity is located on slightly higher ground to the north which lies to the north of the planning application boundary.

More extensive remains were also recorded in Field 35, as well as to the west in Fields 38-41. This again related to sites that had been previously recorded, with most assumed to be Iron Age/Romano-British (MHU4112 and MHU15523). The exception to this is the possible Civil War redoubt (MHU4084), although no traces of this site were recorded through geophysical survey.

The review of aerial photography also identified a number of field boundaries. Most of these could be traced on 19<sup>th</sup> century and later mapping, and as a result have not been given unique identifying numbers. However, some may be earlier and as a result have been highlighted (AECOM051; AECOM052). Other sites that had not been previously recorded include fragmentary remains of a possible ditch/field system in Field 19 (AECOM056) and a possible round barrow (AECOM054).

The full report covering the review of aerial photographs and LiDAR data can be found as **Appendix 9C**.

### 9.5.1.7 Geophysical Survey

A new programme of geophysical survey was undertaken as part of the current scheme, with the new survey covering a 60m wide corridor, where access and ground conditions allowed. This survey, as with the aforementioned aerial photographic review, recorded a number of field boundaries highlighting the agricultural nature of the landscape. Most of these can be traced on 19<sup>th</sup> century mapping, although a limited number may be earlier and represent medieval/earlier post-medieval field systems. The survey also confirmed the presence of a number of previously recorded heritage assets, and, in broad terms, geophysical survey data mirrored agricultural boundaries seen in the historical mapping

The survey also provided some additional clarity on assets that had been previously identified and recorded on the HER through aerial photography, including Iron Age and Romano-British activity (MHU8066; MHU15523; MHU4112). However, in some areas of known archaeology the geophysical anomalies were not as clear as expected, including a possible Iron Age/Romano-British settlement complex (MHU8204), and the potential Civil War period redoubt (MHU4084). It has been suggested that this latter site may not be visible on geophysical data due to the ditches being infilled shortly after construction, and as a result there would be limited differences between the ditch fill and the surrounding geology.

The most significant new remains encountered were in the western end of Section 1, in Field 98, where traces of a possible field system were encountered (AECOM050). Remains were not identified through aerial photography in this area, and it is possible that the site represents remains of a larger field system recorded on the HER that is thought to be Iron Age/Romano-British in date (MHU287; MHU346;

MHU22106). This previously recorded site has been recorded approximately 500 m to the north-west, and continues to run along the western side of the newly recorded remains within Fields 100 and 102 (which are within Section 2 of the scheme). However, there is no clear link with the remains in the wider landscape, and metal detector surveys also failed to recover Iron Age/Romano-British material. As a result, the site could be later in date and be early medieval or medieval in date.

An extensive programme of archaeological geophysical survey had also previously been undertaken for the Yorkshire and Humber (CCS Cross Country Pipeline) DCO (Ref 9-36). Large sections of this project followed the same alignment as the current scheme, with the data published as part of the DCO application. As a result the publicly available data collected as part of the CCS scheme was also consulted and was found to corroborate the findings of the SELG2 surveys.

The full geophysical survey report can be found in **Appendix 9D**.

### 9.5.1.8 Metal Detector Survey

The targeted metal detector survey within Section 1 examined a total of 15 fields, with significant finds recovered from six of the fields. These were all dated to the Roman and medieval periods and included coins, brooches, and a spindle whorl. However, later material was also recovered including modern material near the coast which is assumed to be linked to the fortification of the coastline during the First and Second World War.

In general, the finds recovered corresponded with sites that had been previously recorded through aerial photography or geophysical survey. This included a possible Roman weight in Field 3, and a Roman brooch in Field 22, both of which are areas where cropmark and geophysical survey data had suggested field systems or settlement activity. A medieval buckle was also recovered from Field 68 which falls within the field systems linked to the village of Hutton Cranswick, while a medieval spindle whorl was discovered in Field 97. This latter field is in an area of ploughed out ridge and furrow potentially associated with some form of medieval settlement near Bustard Nest Farm.

Two silver pennies dating to the reign of Edward I were recovered from Field 2. These were found in close proximity and dated to 1302-03 and 1305-06. Their close proximity and tight date may suggest that they formed a 'purse hoard' deposited in the early 14<sup>th</sup> century and recently disturbed by ploughing (see **Appendix 9E** for discussion). A number of medieval settlements have been recorded in the wider area, including Wilsthorpe some 750 m to the north and Auburn approximately 700 m to the south, while further remains of medieval date are thought to have been lost through coast erosion.

There were no concentrations of finds that might suggest a site that had not previously been identified through geophysical survey or aerial photography, and the limited number of finds suggested that the areas examined had been previously detected.

No items dating to the prehistoric period or early medieval period were recovered as part of the metal detector survey. A full report can be found in **Appendix 9E**.

### 9.5.1.9 Assessment of Baseline

This section presents an assessment of the heritage value and the contribution of setting of designated and non-designated assets within the study area. It also presents an assessment of the archaeological potential of the area within the planning application boundary. This section identifies whether there is the potential for impact as a result of the proposed development and identifies which assets are subject to assessment in Section 9.6 of this chapter.

#### 9.5.1.9.1 Designated Heritage Assets

##### *Scheduled Monuments*

The Wharram Hill embankment cross is located approximately 125 m west of the planning application boundary near the point at which it crosses the Burton Drain (NHLE 1005199). The purpose of the asset is not clear, although it is thought to date to the medieval period or later. It is also not clear if the asset survives as an earthwork as the field in which the asset is located is used for arable agriculture, although it does appear to survive as a cropmark on aerial photography. Assuming the asset survives as slight earthworks or sub-surface features, the asset has archaeological and historic interest for the information

it will contain regarding its date and purpose. As the purpose of the asset is not clear, it is hard to determine the contribution its setting makes to its significance. However, as the planning application boundary lies on the opposite side of the Burton Drain, and as any changes to its setting will be temporary during construction, the site has been scoped out of further assessment.

### *Conservation Areas*

Hutton Conservation Area is located approximately 180m east of the planning application boundary. The conservation area was designated in 1977. The significance and historic development of the settlement is detailed in the Hutton Conservation Area Appraisal (Ref 9-37).

The conservation area covers around half of the village of Hutton. The village has its origin in the medieval period, as demonstrated by the surviving medieval fabric in the Church of St Peter, however today the vast majority of buildings are post-1850. A large number of buildings are identified in The Conservation Area Character Appraisal (Ref 9-37) as non-designated buildings that make a positive contribution to its character and appearance. As only three buildings within the area have a formal designation, it is the non-designated buildings and the spaces between them that predominantly form the character. The appraisal notes that architectural embellishment is minimal throughout the area and that reflects its origin as an agricultural village. The Conservation Area Appraisal (Ref 9-37) identifies four character areas within the village.

- The first, the focal point, is the area of green and the churchyard around the Grade II\* listed Church of St Peter (NHLE 1161006). The small collection of non-designated buildings including the Old Vicarage and Manor House, which in combination with the Church and with several smaller non-designated buildings create the character of this central part of the village around an informal green formed by grass verges and pockets of open space.
- The second character area relates to development just south of the central area on Church Street where there is a more ordered linear form of development.
- The third character area is at the south end of the conservation area where it has a more open character with fewer dwellings, including the Grade II listed 18<sup>th</sup> century Pit Top Farmhouse (NHLE 1346482) and its associated Grade II listed windmill (NHLE 1161022).
- The fourth character area is at Mill Street and Orchard Lane, to the north and west of the central here. This area features more modern development. At the junction of Mill Street and Orchard Road there are open views north towards Driffield.

The heritage value of the conservation area is drawn from its historic and architectural interest as an example of a small agricultural settlement with its origins in the medieval period, but that expanded in the 18<sup>th</sup> and 19<sup>th</sup> century with improvements to farming practices, in common with many rural settlements across the country.

Hutton is surrounded in all sides by flat agricultural land. There are long distance views of the village when approaching from the north and along the main Driffield to Beverley highway which is located approximately 800m east of the village. The village is located on a slight rise in the landscape and stands above the surrounding land. There are only limited views of the surrounding countryside from within the conservation area as it is a fairly tight knit settlement. The Conservation Area Appraisal (Ref 9-37) notes key views of the settlement from the main Beverley to Driffield road west of the settlement which show the landscape setting of the village including its agricultural roots and its siting on a low rise in the surrounding topography.

The non-designated buildings are generally domestic, and their heritage value is drawn from their historic and architectural interest as modest 19<sup>th</sup> century houses and cottages in a rural village setting. The exception is the 19<sup>th</sup> century Jubilee Chapel, a Wesleyan Chapel now converted to residual use. In both cases the village and streetscape provide the setting for the assets.

The Grade II\* Church of St Peter (NHLE 1161006) has architectural, archaeological and historic interest as a medieval church at the core of the settlement with evidence for several phases of redevelopment, including in the 13<sup>th</sup> century, 15<sup>th</sup> century and 19<sup>th</sup> century. It also has associative historical interest in its 19<sup>th</sup> century restoration by Ewan Christian, who was the architect to the Ecclesiastical Commissioners from 1851 to 1895. The church is stone built with a slate roof structure. Its current appearance owes much to the 19<sup>th</sup> century restoration. The setting of the church is defined by its place

within the village and its churchyard. The churchyard contains upstanding grave memorials and mature trees that contribute to the function and aesthetic quality of the building. The churchyard has a brick boundary wall to Church Lane. Although the church is the largest building within the village, it does not over dominate because of its relatively low height and the mature landscaping within and around its grounds. The church tower can be viewed in the key view of the conservation area from the road to the west of the village.

The Grade II listed Pit Top Farmhouse and walls adjoining (NHLE 1346482) and its associated windmill (NHLE 1161022) have architectural and historic interest as an 18<sup>th</sup> century farm on the southern limits of the small rural settlement of Hutton. Pit Top Farmhouse is of two-storeys constructed in pinkish-brown brick in Flemish bond with ashlar dressings under a pantile roof. It is a polite double-fronted farmhouse and its enclosing walls to either side ramp upwards towards house from square end piers. Its appearance demonstrates the prosperity of farming in the 18<sup>th</sup> century. Although non-designated, the farmstead ranges survive to the north and west of the house in much the same layout as present on the first edition OS map of 1855. They are generally single-storey story, brick-built and with pantile roofs. The farmstead includes the Grade II listed windmill, located to the north-west of the house, which has architectural and historical value as part of the functional setting and operation of the 18<sup>th</sup> century farm. The windmill has lost its sails but is still a prominent feature in the local landscape, and is apparent in the key view of the conservation area from the road to the west of the village. In fact, it is more prominent than the church tower in these views.

Due to the potential for impact as a result of the Proposed Development, Hutton Conservation Area, the Grade II\* Church of St Peter (NHLE 1161006), and the Grade II listed Pit Top Farmhouse (NHLE 1346482) and its associated Grade II listed windmill (NHLE 1161022) is assessed in Section 9.6 of this ES. The individual non-designated buildings in the conservation area are not assessed due to the lack of potential for significant effects through changes to their individual settings.

#### *Listed Buildings*

Aside from the buildings within Hutton Conservation Area, listed buildings in the study area are generally focused in the settlements of Fraisthorpe, Wansford and Skerne.

In Fraisthorpe there is one listed building within the study area; the Grade II listed late 17<sup>th</sup> – early 18<sup>th</sup> century Manor Farmhouse (NHLE 1083850). It is located approximately 470m east of the planning application boundary. It is constructed in pinkish-red brick with whitewashing to the principal frontage facing west. The building has architectural and historic interest as an example of an early farmhouse. It also has archaeological interest in its development since its appearance suggests that the building has been extended, or a former agricultural range has been incorporated into the house.

The building's setting comprises its farmstead buildings, the surrounding garden, the farmland and its village location. The settlement at Fraisthorpe is shown on 19<sup>th</sup> century OS maps as a loose collection of three farms with ribbon development along the roadside between, including a smithy and 13<sup>th</sup> century chapel. The farmstead is shown as a double courtyard to the rear and south of the building with a further L-shaped range to the north. Many of these structures are extant. A small garden is present to the west of the farmhouse, but the main garden appears to have been to the rear of the northern farm buildings where an orchard is also shown. This is no longer extant and the rear garden is now directly to the rear of the farmhouse in a former yard. The view from the building's frontage features the road and the village location, followed by a flat landscape of fields. The farmland, whether worked by this farm or not, provides a functional setting for the farmhouse and farmstead and contributes to understanding of its historic interest.

Due to the potential for temporary impacts to the asset through change to its setting, Manor Farmhouse (NHLE 1083850) is assessed in Section 9.6 of this ES chapter.

In Wansford there are five listed buildings within the study area; the Grade II\* listed Church of St Mary the Virgin (NHLE 1162211); the Grade II listed Churchyard lychgate and wall (NHLE 1346307); the Grade II listed Old Vicarage (NHLE 1084139); the Grade II listed 'Fishing Post' old school and master's house (NHLE 1309733); and the Grade II listed Pleasant Wood Farmhouse (NHLE 1084140).

Wansford is located approximately 450 m east of the planning application boundary. Aside from Pleasant Wood Farmhouse, which is on the outskirts of the village, the other four listed buildings are

clustered in the historic core of the village and they were all designed and built in the late-19<sup>th</sup> century by the eminent Victorian architect George Edmund Street, for the landowner Sir Tatton Sykes. The buildings have a shared, designed visual and functional setting and a group relationship with each other through this connection. The Church of Mary the Virgin (NHLE 1162211) was built in the gothic revival style and replaced an earlier church of which there is documentary evidence from at least the early-14<sup>th</sup> century, but the location of the earlier church is not known. The church has a squat bell tower over the west end with a pointed roof and weathervane. Around the church the churchyard is enclosed by the separately listed ashlar wall with its timber-frame lychgate (NHLE 1346307). The churchyard contains upstanding grave memorials and mature trees that contribute to the historic and architectural interest of the church. To the north of the church is the Old Vicarage (NHLE 1084139) which was designed in the Jacobean revival style in orange-red brick with stone detailing and an irregular plan with a plain tiled roof featuring prominent brick stacks with black trefoil arcading and stone bands.

The same architectural styling is used on the Master's House (NHLE 1309733) to the north, whilst the Old Schoolhouse portion of the building is in Gothic Revival Style. The use of these traditional architectural forms for this group of buildings evokes the traditional English village. They have architectural, artistic and historical interest as examples of the Victorian design of a planned village centre that can be contrasted with Victorian design for municipal centres. The building's settings are deliberately green with mature trees and hedged boundaries to the road. The buildings are all located on the west side of the road and overlook green space to the east, where there is some specimen tree planting. There are key views of the church on approach from the south and south-west where it sits within farmland contributing to the architectural and historic interest of the building as part of its traditional village styling. The same is true of views of the Old Schoolhouse when travelling south through the village. The fields to the west of the assets therefore contribute to the design intention of this ground of buildings.

Pleasant Wood Farmhouse (NHLE 10841440) is located approximately 150 m south of the planning application boundary. It is on the northern outskirts of the village and does not form part of the designed asset grouping discussed above. It is mid-18<sup>th</sup> century although the roof was remodelled in mid-19<sup>th</sup> century. The farmhouse is of two storeys in red and yellow brick under a hipped tiled roof with tall brick axial stacks. The frontage is to the east onto the road. The farmhouse has architectural and historic interest as an example of a large mid-18<sup>th</sup> century farmhouse that demonstrates the austere detailing of the period, but on a large building that also demonstrates the prosperity of farming at this time. The farmhouse is set within a large garden enclosed by low hedges and containing few mature trees. It faces its farmstead which is located across the lane to the west. This was shown on 19<sup>th</sup> century OS maps a large rectangular courtyard of buildings with smaller outbuildings to the north and west. Around half of the farmstead ranges have been demolished and replaced with larger modern agricultural units, although the ranges lining the road opposite the house remain. These are single and two-storey in brick. A low brick wall with stone coping links the buildings. The farm is located on the northern outskirts of Wansford in farmland. Although much altered, the farmstead contributes to the functional setting of the farmhouse and aids in understanding the building's historic interest, as does its farmland setting.

Due to the potential for temporary impacts through change to their setting the Church of St Mary the Virgin (NHLE 1162211), Old Vicarage (NHLE 1084139), old school and master's house (NHLE 1309733) and Pleasant Wood Farmhouse (NHLE 10841440) are assessed in Section 9.6 of this ES chapter.

Despite forming part of the designed asset grouping, the setting of the Churchyard lychgate and wall (NHLE 1346307) is limited to its relationship with the church. Its setting does not extend to the planning application boundary and it is therefore not assessed further in this ES chapter.

In Skerne there are two listed buildings within the study area; the Grade I listed Church of St Leonard (NHLE 1084138) and the Grade II listed Eagle public house (NHLE 1391423). The Church of St Leonard is the oldest building in the settlement and demonstrates its medieval origins. It comprises a 12<sup>th</sup> century nave and chancel with a 15<sup>th</sup> century west tower and a 19<sup>th</sup> century vestry and south porch. The church is of stone ashlar, but the nave and chancel are rendered with flagstone dressings. The church has archaeological and architectural/artistic interest in its style, development sequence and medieval origins, and illustrative and communal historical interest.

The church is located within its churchyard accessed via a private lane at the south end of the village. 19<sup>th</sup> century maps name the adjacent building complex the Manor House and whilst that building is clearly not medieval, the relationship between the two probably reflects the medieval core of the village. The 19<sup>th</sup> century mapping also shows some possible fossilised medieval strip fields on the north side of the village, but these are no longer discernible. The churchyard contains upstanding grave memorials and mature trees that enclose the asset on all sides, save for the access lane to the north-west of the asset. This small break in the trees allows the church to be seen on in views southward on Back Lane, but it is otherwise not visible from within the settlement or from beyond the settlement on the north side. The churchyard contributes to the architectural and historical interest of the asset by providing an element of its functional context and pleasant green backdrop to the building.

The Grade II listed Eagle public house (NHLE 1391423) dates to the early 19<sup>th</sup> century and was licensed in 1822. It is of two storeys in rendered brick with a pantile roof. The ground floor was altered in the early 20<sup>th</sup> century with the insertion of multi-pane bay windows. At the time of designation in 2005, the Eagle was still in use as a public house and the listing description notes its importance as a rare surviving example of an unimproved public house, where beer is served directly from the beer storage area. According to the listing description, the heritage value of the public house was derived from its historic and architectural interest in its early plan form, the plainness and simplicity of its little-altered interior, and for the modesty of its exterior. The building has since been converted to residential use.

The setting of the public house is informed by its roadside location and the village context. As a building which has always had the dual function of pub and house, this setting contributes to the heritage value of the asset regardless as to whether it is now a house instead of a pub. The asset appears in the street scene as just another residential building, but it sits directly on the pavement in contrast to other residential buildings in the village which have small front gardens lined by hedges or low brick walls. This marks the building out as different to others in the area and contributes to understanding of the building's history.

Both listed buildings within Skerne are well screened from the Proposed Development by intervening buildings and their settings do not extend to the Proposed Development Site. They are therefore scoped out of further assessment in this chapter.

The only listed building in the study area that is not within one of the area's settlements is Outgates Farmhouse (NHLE 1161973). The farmhouse is located approximately 380 m north of the planning application boundary. It dates to 1789 and is constructed in red-brick that has been whitewashed. It is one story with an attic, under a pantile roof with axial stacks. The farmhouse has heritage value derived from its architectural and historic interest as an example of a large 18<sup>th</sup> century polite farmhouse. The setting of the farmhouse is its farmstead, garden, access lane and farmland. 19<sup>th</sup> century OS maps show the farmhouse located to the south-east side of a loose U-shaped courtyard farmstead. There is a garden shown to the south-east of the farmhouse and orchard across the lane to the north. The farmstead buildings are still extant and provide the functional context for this polite farmhouse. They are generally single-storey brick ranges with pantile roofs. The garden also remains, enclosed by a low hedge and containing a small number of mature trees. The orchard has been developed with modern agricultural buildings that are out of scale and character with the historic buildings and detract from its heritage value on approach from the north. The farm sits within farmland and farmhouse has relatively open views to the south-east where the landscape is gently undulating in contrast to the flat land to the immediate south. This provides the functional context for the buildings as well providing a pleasant green backdrop to views of and from the asset.

Due to the potential for temporary impacts to the asset through change to its setting in views from the farmhouse, Outgates Farmhouse (NHLE 1161973) is assessed in Section 9.6 of this ES chapter.

#### 9.5.1.9.2 Non-designated Heritage Assets

There are 17 non-designated farms throughout the study area which are shown on 19<sup>th</sup> century OS maps. The most common arrangement comprises a farmhouse to the south of either a U-shaped or a full square courtyard farm. The farmsteads generally have gardens to the front of the farmhouse's principal frontage which in most cases look out south over farmland. The farms have heritage value as examples of 19<sup>th</sup> century farms, several of which are still in operation and which retain the majority of their historic farmstead ranges and the farmhouse alongside more modern agricultural buildings. Their settings are informed by their location within farmland which contributes to their historic interest by

providing their functional setting and aiding understanding of the asset. Views from the farmhouses over farmland also contribute to understanding of the assets and their aesthetic qualities.

A description of these farms and their settings is contained within **Appendix 9F**. The following assets may be affected and have been taken forward for assessment: Millingdale House Farm (MHU14977) and Old Gawdy Hole (AECOM074).

There are non-designated buildings in Gransmoor located approximately 400 m south-west of the planning application boundary at its closest extent. However these are all adequately screened from the proposed development by existing mature trees or intervening buildings. It is not considered that the proposed development will result in significant effects to non-designated built heritage assets within Gransmoor and they are therefore not considered further in this ES chapter.

There are non-designated buildings in Skerne located approximately 250 m south of the planning application boundary at its closest extent, however these are all adequately screened from the proposed development by existing mature trees and hedgerows and intervening buildings. It is not considered that the proposed development will result in significant effects to non-designated built heritage assets within Skerne and they are therefore not considered further in this ES chapter.

There are non-designated buried archaeological assets throughout the study area, with a number of sites recorded within the planning application boundary. The majority of these have been recorded as cropmarks through aerial photography, or as buried remains through geophysical survey. Most of these features appear to represent the remains of field systems, enclosures, and trackways, although a number of possible settlements and burials have also been noted. The majority have been tentatively dated to the Iron Age and Roman periods. They are considered to have archaeological and historic interest as they could provide information linked to the development of settlements, as well as the past populations who lived in the area. In general, they are considered to be of medium or low value, and as they are within the planning application boundary there is the potential for physical impacts on the assets. Assets within Section 1 that have been taken forward for assessment are MHU21031, MHU21026, MHU330, AECOM113, AECOM114, MHU9974, MHU7586, AECOM060, MHU8066, MHU15523, MHU4084, MHU4112, MHU8204, MHU22361, MHU8208, AECOM055, MHU8124, and AECOM050.

Areas of ploughed out ridge and furrow, as well as former field boundaries recorded through geophysical survey and evident on 19<sup>th</sup> century historic mapping, are considered to be of negligible value and have not been taken forward to assessment.

#### 9.5.1.9.3 Previous Ground Disturbance

The planning application boundary within Section 1 is limited to agricultural land, with settlements and farmsteads falling outside of the planning application boundary. As a result, large scale development and ground disturbance within the planning application boundary is limited to agricultural practices with arable cultivation being the most common form of agriculture taking place. This form of agriculture has, however, resulted in the loss of earthwork remains since the Second World War, with features such as ridge and furrow now largely levelled within the study area. This intensive ploughing has also potentially had an impact on buried remains, including the Iron Age and Romano-British field systems that are prevalent throughout the East Riding, and may be the reason features identified in historic aerial photographs were not identified through geophysical survey. These include a ring ditch that may represent a possible barrow (MHU8124), and a possible Civil War redoubt (MHU4084) which were both identified on historic aerial photographs, but were not recorded by geophysical survey.

Previous archaeological work has also been limited within the planning application boundary, as well as the study area. The largest element of archaeological work undertaken within the planning application boundary was the work associated with the CCS project which included a walkover survey of the majority of the scheme alignment, as well as extensive geophysical survey, although no intrusive investigations took place.

Significant intrusive works within the planning application boundary are limited to excavations undertaken as part of the Fraisthorpe Windfarm development which is located near the eastern end of the current scheme, and falls within Fields 3, 5, and 8 of the planning application boundary. Works undertaken included evaluation trenching based on geophysical survey data which confirmed that the geophysical survey had been successful in identifying part of an Iron Age/Roman field system near



Turbine 3 some 900 m south of the application boundary (Ref 9-38). These remains were, however, extremely limited and fragmentary, and it is not clear if further archaeological works were required.

#### 9.5.1.9.4 Potential Archaeological Remains

##### *Palaeoenvironmental Remains*

Previous works undertaken with the wider Holderness landscape have identified remains of palaeochannels and former river channels, as well as waterlogged remains of former mires and lakes. The study of the early prehistoric period in the wider Holderness area has also revealed important information about the early Holocene landscape, and it has been noted that its study has the potential to provide information that could be used when examining the land submerged land under the North Sea known as Doggerland (Ref 9-38). The low-lying nature of the study area, as well as the relatively high water table, means that there is the potential for waterlogged deposits to survive, and there is also the potential for palaeoenvironmental deposits to survive through most areas of the planning application boundary. The potential is assessed to be medium.

##### *Early Prehistoric and Bronze Age Remains*

Remains dating to the early prehistoric period (Mesolithic through to the Bronze Age) are limited within the planning application boundary, as well as the study area, with most assets dating to this period being chance finds lithics/stone tools. However, archaeological investigations within the study area have been limited, and work within the wider East Riding landscape has revealed prehistoric remains from the late palaeolithic/Mesolithic through to the Bronze Age. While settlement and funerary remains dating to these periods is rare, the potential for further finds of lithics is considered to be medium.

##### *Iron Age*

Extensive remains dating to the Iron Age have been recorded within the planning application boundary, as well as the study area. While clear evidence of settlement activity is limited, the extensive field systems and trackways that are associated with settlement remains are well represented through geophysical survey and aerial photography as the ditches that are associated with these kind of features appear to survive relatively well as buried features. In most cases the geophysical survey results correspond with the cropmarks recorded on aerial photographs, although in some areas the geophysical survey has identified assets not previously recorded through aerial photography. The potential for encountering further remains dating to this period is considered to be low in areas where geophysical survey has been undertaken, and medium in areas where geophysical survey has not been undertaken.

##### *Roman*

A continuation of the type/form of settlement activity from the Iron Age into the Roman period means that differentiating between sites can be difficult. Many sites may also have continued in use into the Roman period, and as a result the visibility of Roman remains is the same as Iron Age remains, with field systems, trackways, and enclosures being well represented through geophysical survey and aerial photography. The potential for encountering further remains dating to this period is considered to be low in areas where geophysical survey has been undertaken, and medium in areas where geophysical survey has not been undertaken.

##### *Early Medieval*

Evidence for early medieval activity within the planning application boundary, as well as the study area, is limited. It is assumed that most activity dating to this period is focused within the settlements that still exist, with the planning application boundary passing through the field systems that surrounded the settlements. Geophysical survey has not identified any features suggestive of early medieval activity, while the metal detector survey failed to identify any concentrations of early medieval finds/objects. As a result, the potential for encountering previously unrecorded early medieval remains is considered to be low.

##### *Medieval*

As with the early medieval period, evidence of medieval activity is also limited within the planning application boundary as well as the study area. This is again due to the planning application boundary passing around the settlements and instead running through the field systems that surrounded them. Extensive remains of ploughed out ridge and furrow and field boundaries that are assumed to date to the medieval period and later has been recorded through aerial photography and geophysical survey

providing further evidence of the planning application boundary passing through the agricultural lands associated with settlements. As a result, the potential for encountering previously unrecorded medieval settlement remains is considered to be low, although the potential for encountering further agricultural remains such as ridge and furrow or field boundaries is considered to be medium.

### *Post-Medieval*

The pattern of settlement is focused on the villages, hamlets, and farmsteads through which the planning application boundary passes continues in the post-medieval, with sites dating to this period largely limited to agricultural remains. These include ridge and furrow and field boundaries, as well as associated features such as retting ponds, all of which have been identified within the planning application boundary through aerial photography and geophysical survey. As a result, the potential for encountering previously unrecorded post-medieval settlement remains is considered to be low, while the potential for encountering further agricultural remains such as ridge and furrow or field boundaries is considered to be medium.

## 9.5.2 Section 2 – Bainton to Market Weighton

### 9.5.2.1 Physical Site Conditions

#### 9.5.2.1.1 Topography

Section 2 traverses land wholly comprised of agricultural farmland, with the route running from the south-east of Bainton down to the south of Middleton-on-the-Wolds, south and then south-west across Goodmanham Wold to the beginning of Section 3 at the south of Market Weighton. This section of the study area traverses the limestone low hills of the Yorkshire Wolds, the chalk formation of which provides exceptionally good drainage. Ground levels raise from 44m aOD at Bainton up to 57 m aOD south of Middleton-on-the-Wolds. These then climb steadily to c.125 m aOD where the study area crosses the A1079 Arras Hill/York Road before dropping down to the beginning of Section 3 south of Market Weighton, to 30 m aOD.

#### 9.5.2.1.2 Geology

Section 2 measures c.15 km and extends from Bainton in the north-east to Market Weighton in the south-west. Underlying bedrock consists of chalk, while superficial deposits are only recorded toward the north-east of the area where Diamicton Till is shown around Bainton and immediately east of Middleton-on-the-Wolds (Ref 9-22). Soils in the section are generally very good and well drained, with the Wolds area dominated by shallow lime-rich loamy soils over the chalk bedrock, although further to the east these give way to slightly acidic soils and some loamy clayey soils where the Wolds give way to the lower-lying land of Holderness (Ref 9-24).

A detailed review of the geology can be found in **Chapter 10: Geology and Hydrology**.

### 9.5.2.2 Historic Landscape Characterisation

A review of the Historic Landscape Characterisation (HLC) data for the Section 2 area shows the study area as falling within the Wolds landscape. As with the majority of the scheme, and as mentioned above, the landscape is again dominated by agricultural land, with a limited number of dispersed settlements and farmsteads scattered throughout the study area, all of which are avoid by the alignment. However, while the lower lying wetlands of Holderness in Section 1 are characterised by the extensive drainage network required to make the land suitable for arable cultivation, the well-drained chalklands of the Wolds are free from such features. The Wolds do, however, contain more woodlands, including some areas linked to the designed landscapes/parklands which exist in the area, although the area is dominated by arable cultivation. A brief overview of the HLC data is provided in **Table 9-7**, and the full details of the HLC data for the area can be found in the report (Ref 9-25 and Ref 9-26).

Although all fifteen 'broad types' of landscape character defined as part of the HLC assessments are represented within Section 2, the area is again dominated by 'Fields and Enclosures', with the remaining types making up a relatively small percentage of the landscape under investigation. This dominance is most visible in the central part of the Section, around areas such as Lund, South Dalton, and Arras, which fall within Character Type CA07 'High Wolds Plateaux' where 'Fields and Enclosures' make up

94.2% of the area (Ref 9-25). Full information on the various HLC subcategories have not been included due to the large number encountered throughout the scheme<sup>2</sup>.

**Table 9-7: HLC types within Section 2. Only the dominant 'Broad Types' of landscape have been listed due to the large number of landscape types covered by the Section.**

HLC ID	Name	Broad Type (Dominant Types Only)
CA09	Eastern Wolds Dip Escarpment	'Fields and Enclosures' (76.9%); 'Settlement' (4.7%); 'Coastal' (4.7%); and 'Woodland' (3.5%).
CA07	The High Wolds Plateaux	'Fields and Enclosures' (94.2%); 'Woodland' (2%); 'Settlement' (1%); and 'Recreation and Leisure' (0.9%).
CA06	Western Wolds Limestone Escarpment	'Fields and Enclosures' (78.1%); 'Woodland' (10.5%); 'Settlement' (3.5%); and 'Unenclosed Land' (2%).

### 9.5.2.3 Designated Heritage Assets

There are no designated heritage assets within the planning application boundary.

Within the study area of Section 2 there are nine scheduled monuments, four Grade II listed structures and one Grade II Registered Park and Garden. There are no World Heritage Sites, conservation areas, or registered battlefields.

With the exception of the oval barrow 750 m north of Wallis Grange (NHLE 1012203), the scheduled monuments within the study area are located approximately 2 km east of Market Weighton, between 90 m and 560 m east of the planning application boundary. These monuments are prehistoric dating from the Late Neolithic period to the Early Bronze Age period and consist of ceremonial bowl burials representing early burial practices within a ceremonial landscape. A total of 12 barrows are recorded in the area adjacent to High Wold Farm (NHLE 1014256; 1007501; 1012089; 1012091; 1012088; 1013672; 1012092; 1012090) but another seven are recorded to the south of High Wold Farm, immediately outside the boundary of the study area.

The Grade II listed structures date predominantly to the post-medieval period with the exception of the fragmented remnants of a medieval wayside cross (NHLE 1407170) which is potentially the Molescroft Cross which was originally sited on the main approach road to Beverley and marked the outer limits of the Sanctuary of Beverley Minster established by King Athelstan in 938 AD. This structure is located approximately 20 m east of the planning application boundary to the east of the present-day Southwold Farm near the centre of Section 2.

The post-medieval Grade II listed buildings consist of the late 18<sup>th</sup> century red brick Kiplingcotes Farmhouse (NHLE 1161307), located to the west of Dalton Hall approximately 324 m east of the planning application boundary, and the late 18<sup>th</sup> century Moneypot Hill Farmhouse (NHLE 1346961) situated approximately 850 m to the north of Kiplingcotes Farmhouse. A Grade II listed milestone (NHLE 1084150) is also located approximately 75 m to the east of East Field Farm, approximately 350 m to the east of the planning application boundary. It dates to the early 19<sup>th</sup> century, bearing the legend "Beverley 8 Malton 20."

The last designated heritage asset within the study area is the Grade II listed Houghton Hall Park (NHLE 1000923). This is located towards the end of Section 2, immediately to the east of the planning application boundary. It consists of park/pleasure grounds laid out to the design of Thomas White in

<sup>2</sup> Full details of the HLC process can be found in (Ref 9-25). Landscapes could be categorised as one of fifteen 'Broad Types' of landscape, and were further divided into one of 137 'Historic Landscape Character' types. Full details of the HLC for the East Riding can be found in (Ref 9-25 and Ref 9-26).

1768 to accompany the manor house of Houghton Hall. The hall and grounds lie approximately 1 km to west of Sancton and consists of approximately 100 ha of sloping grounds including grass and woodland.

## 9.5.2.4 Archaeological and Historic Background

### 9.5.2.4.1 Prehistoric (up to AD 43)

A total of 30 assets dating to the prehistoric period have been recorded within the Section 2 study area, including the nine designated assets discussed above. Evidence for activity preceding the Bronze Age is relatively limited, but includes find spots of Mesolithic flints (MHU7775), as well as a Neolithic axe head found to the south of Lairhill House (MHU3747). Limited funerary monuments from the Neolithic period are recorded and include the scheduled oval barrow near Wallis Grange (NHLE1012203) and a long barrow south of High Wold Farm (MHU252).

Pollen evidence demonstrates that woodland clearance had begun in the later Neolithic period, and continued into the Bronze Age period, and by the late Bronze Age period both pastoral and arable agriculture was taking place (Ref 9-40).

The presence of monuments linked to burial continues into the Bronze Age, with Section 2 containing a large number of burial mounds occurring both individually and in groups. These include a large number of scheduled monuments that form part of the High Wold Bronze Age barrow cemetery near High Wold Farm, located to the east of the planning application boundary (NHLE 1014256; 1007501; 1012089; 1012091; 1012088; 1013672; 1012092; 1012090). Further non-designated examples have also been recorded in the same area (MHU18020-22, AECOM004), while additional barrows have been noted south of Middleton on the Wold (MHU3743), and east of Kiplingscote Station (MHU9468). A number of beakers, which were presumably originally deposited in burial mounds, have also been recorded, including two examples from the Kiplingscotes Farm area on South Dalton Wold (MHU2687 and MHU8334).

Although evidence for burial within the rolling Wolds landscape during the Bronze Age is extensive, evidence for general settlement activity within the study area, as well as other areas in the north of Britain, is limited. It has been suggested that the Wolds landscape may have been used as a place for the dead during this period, although it is clear that settlements must have existed to house and support the populations building the burial monuments.

Sites of possible Bronze Age date, based on their form and associations, include a possible trackway that has been identified through aerial photography south of Market Weighton (MHU2182), and a series of trackways and possible enclosures to the south-east of Market Weighton (MHU7358). This latter site has been tentatively dated through its association with a Bronze Age barrow that lies immediately outside of the study area (MHU242).

The only significant non-funerary related feature identified within the study area is the Wolds Entrenchment, a substantial earthwork and cropmark feature consisting of banks and ditches (MHU3351). Although the purpose of this feature is not known, it has been tentatively dated to the Bronze Age, and extends for some distance through the Wolds landscape, and across the line of the planning application boundary.

The Iron Age period is a direct contrast to the Bronze Age in terms of settlement evidence with a number of sites dating to the Iron Age recorded within the Section 2 study area through aerial photography (see Ref 9-40), and geophysical survey. Rectilinear enclosures (MHU22105) along with a site containing enclosures, a trackway and linear ditches (MHU8113) have been found to the south and south-east of Bainton. Further to east of Bainton is another settlement site with its origins firmly in the Iron Age period but with occupation that continued through to the medieval period. Rectilinear enclosures and linear ditches indicating small scale settlement were found to the south of Middleton on the Wolds (MHU22143), along with Iron Age square barrows (MHU22144, AECOM005, AECOM006). Human remains dating from the Middle Iron Age period were also found next to the Goodmanham Dale Road to the east of Goodmanham (MHU21961), along with further square barrows and an extensive ladder settlement (MHU10895) to the south-east. This site has been recorded through aerial photography running for over 1.5 km, with the southern end of the settlement located near the well documented Arras Cemetery site some 1.1 km south of the study area.

All of this evidence suggests a major transition from the Bronze Age into the Iron Age with an increase in population as well as a change to the formal field systems associated with settlements. However, it has been suggested that at least some of the sites may have been used during earlier periods and that the settlement sites only become visible on aerial photographs when more substantial enclosures appear in the Iron Age (Ref 9-41). It is also clear that not all of the landscape of the Study Area was cleared of the woodland that had occupied it during the preceding periods. Evidence suggests that Iron Age settlement, especially in the Holme area, may have been limited to enclosed settlements located in the drier clearings amongst the woodland (Ref 9-41).

The importance of this woodland in relation to settlement activity in the Iron Age, and into the Roman period, has also been linked to the industrial activities taking place from the Late Iron Age. Although industrial sites within Section 2 are not as prevalent as those encountered in the landscape of Section 3, where evidence for pottery production and iron smelting has been recorded, it has been suggested that the woodland and peat available would have been used for such activities (Ref 9-42). Such activities may have commenced in the Study Area during the Bronze Age, although clear evidence is lacking until the Iron Age, when production on an industrial scale commences (Ref 9-42).

#### 9.5.2.4.2 Roman (AD43-450)

As has been noted above, similarities in the form of assets dating to the Iron Age and Roman periods mean it is often difficult to date assets from these periods without excavation. Although only six assets dating purely to the Roman period have been recorded within the Study Area for Section 2, a number of the assets dating to, or thought to have their origins in, the Iron Age may have continued in use through to the Romano-British period. Furthermore, a number of the undated sites may also relate to Romano-British activity.

The majority of assets dating to the Roman period are find spots, with pottery recovered on Etton Wold (MHU13483), a brooch near Sancton (MHU19873), and a small assemblage of coins and pottery from Crossfield House to the south of Market Weighton (MHU239). This latter site is located within an area where fragmentary remains of settlements and their associated field systems have been recorded through geophysical survey and as cropmarks, with a possible roadside settlement (AECOM007) and associated road (MHU4164) recorded approximately 500 m to the east. Similar settlement and field system remains have also been recorded to the west, within Section 3, although the road continues into Section 2 (MHU63).

There is limited evidence for the industrial activities recorded in Section 3 taking place in the Section 2 study area, although it seems likely that the better land of the Wolds was used for agriculture and that possible settlements dating to the Iron Age continued in use into the Roman period. Indeed, a key issue in assigning dates to field systems and settlements sites is the lack of excavation within the study area, as well as the wider landscape, and it seems likely that many of the systems recorded in between Market Weighton and Bainton, and specifically the South Dalton/Sancton Wold area, continued in use into the Roman period.

#### 9.5.2.4.3 Early Medieval (450-1066)

Only two assets of early medieval date have been recorded within the study area, although material from elsewhere in the East Riding of Yorkshire region suggests that the area was settled during the early medieval period. While the planning application boundary avoids the main villages and towns in the area, a number of the settlements within the wider Section 2 landscape have their origins in the early medieval period, with villages such as Lund, Bainton, and Middleton-on-the-Wold all well established by the time of the Domesday survey of 1086. Furthermore, elements of the names also suggests an early medieval origin with Lund noted as coming from the Old Norse for grove or copse, while the 'ton' element also suggests an Anglo-Saxon origin (Ref 9-43).

Like relatively large areas of the East Riding, the majority of Section 2 has not yet been covered by the Victoria County History Committee meaning that the history and development of the various parishes covered by the study area are not easily accessible. However, the study area passes through the northern limits of the Parishes of South Dalton, near the centre of Section 2, and Sancton, at the western limits of the Section, both of which were discussed in Volume 4 of the East Riding VCH (Ref 9-44). This notes that a settlement was recorded from at least the 8<sup>th</sup> century when the church at South Dalton was gifted by Osred, King of Northumbria, to the church of St. John at Beverley (Ref 9-44). Documentary

evidence from the Parish of Sancton show it was divided into a number of relatively substantial manors as early as 1066, including the manor of Sancton, and the manor of Houghton which was located near the western limits of Section 2 (Ref 9-44). These settlements are, however, avoided by the planning application boundary, and from data collected through geophysical survey, metal detector survey, and aerial photography it seems likely that the land through which the planning application boundary passes was used for agriculture, especially woodland pasture, during the early medieval period. As stated in the Section 1 baseline, the possibility that large areas of the Wolds were covered in woodland comes from the understanding that the word 'wold' has its origins in the Old English '*wald*' meaning wood (Ref 9-45). Fox (Ref 9-45) goes on to note how the wolds of the early medieval period would have been a landscape of woodland pasture, rather than the open agricultural land now associated with the term, with herdsman occupying huts near grazing areas on a seasonal basis.

While place-name and documentary evidence suggest the settlements avoided by the planning application boundary may date to the early medieval period, features within the study area are limited to a single find spot, this being a silver gilt mount (MHU22207). This was recovered from near the projected alignment of a Roman road (MHU4164) to the south-east of Market Weighton, and while only a single find might suggest the road in this area continued in use into the early medieval period.

#### 9.5.2.4.4 Medieval (1066-1500)

The relatively limited evidence for early medieval activity within the planning application boundary, and its associated study area, continues into the medieval period with only three assets dating to the medieval period recorded, along with further two assets dating to the medieval and/or post-medieval period. Assets dating to the medieval include the Grade II listed wayside cross, thought to be the Molescroft Cross, near South Dalton Wold (1407170). The remaining two assets consist of the site of a former windmill (MHU264), and the find spot of a pendant (MHU20516), while both of the assets dating to the medieval/post-medieval period are linked to agriculture and include ridge and furrow (MHU22339) and earthwork boundaries (MHU22106).

This lack of remains is most likely a result of the planning application boundary avoiding the key settlements, most of which have their origins in the early medieval period, and instead passing through the field systems that were associated with the settlements. As noted above in the early medieval section, there is good toponymic and documentary evidence to demonstrate an early medieval date for most of the settlements surrounding the study area, and it would appear that these population centres remained the focus of settlement into the medieval period and beyond, with the land around used for agriculture. While documentary evidence for land use is limited across the study area, records for South Dalton show both arable and pastoral agriculture taking place, with some reference to limited areas of woodland used for wood and hunting (Ref 9-44), and it can be assumed that a similar situation existed throughout the landscape through which the planning application boundary passes. Indeed, the landscape of the study area falls within the 'East Yorkshire sub-province' identified by Roberts and Wrathmell (Ref 9-29). This is characterised by long standing nucleated settlements, with many showing signs of continuous occupation from the early medieval period through to the modern day (Ref 9-29).

While the abandonment of settlements during the medieval period is well documented (for example see Ref 9-46), there is no clear evidence for remains of deserted medieval villages within the study area or the immediate surroundings of Section 2, although some shrinkage may have taken place at settlements such as South Dalton and Lund. It is possible that some of the arable fields through which the planning application boundary passes were moved to pasture as a result of depopulation, a factor that may have partially resulted in the well-preserved ridge and furrow that was observed on aerial photographs into the middle of the 20<sup>th</sup> century, but which has now been lost to the intensive agriculture of the later 1900s.

Although cropmarks show well in the Wolds landscape, major works such as that undertaken by the Royal Commission on the Historical Monuments of England (RCHME) in the 1990s focused very much on the Roman and prehistoric landscape, and highlighted the need for a detailed assessment of the medieval and later landscape (Ref 9-40). However, current evidence suggests that the landscape through which the planning application boundary passes was primarily agricultural during the medieval period.

#### 9.5.2.4.5 Post-Medieval (1500-1900)

While there is a marked increase in the number of assets recorded during the post-medieval period, the landscape through which the planning application boundary passes remains one dominated by agriculture. A total of 20 assets dating to the post-medieval period have been recorded within the Section 2 study area, along with a further two assets which are dated to the medieval and post-medieval period. Four of the assets dating to the post-medieval period are designated, and include Kiplingcotes Farmhouse (NHLE 1161307) and Moneypot Farmhouse (NHLE 1346961), both of which are Grade II listed buildings. The roads infrastructure is also represented by the Grade II listed milestone near East Field Farm (NHLE 1084150), while the final designated asset is Houghton Hall, a Grade II Registered Park and Garden (NLHE 100923). This designed landscape has the Grade I listed Houghton Hall at its centre (NHLE 1160656), although the hall falls outside of the study area and only the northern elements of the designated landscape fall within the study area. The planning application boundary also fall outside of the designated landscape.

The non-designated assets are largely associated with agriculture, small scale industry, and the infrastructure of the area. Industrial remains which supported agriculture in the area include old chalkpits and lime kilns (MHU12456, MHU12461, and MHU9610 4950), as well as brickfields/works (MHU12458). Assets linked to infrastructure include a number of milestones (MHU12457, MHU12522, MHU12852, and MHU13516), as well as railways (MHU8816, MHU8831, and) and structures linked to railways (MHU13515 and MHU19726).

Although some reduction in settlement size took place in the post-medieval period, the large-scale abandonments that had commenced during the medieval period due to elements such as plague, and resulted in settlements shrinking, did not occur during the post-medieval period. This resulted in the growth of the settlements that survived the desertions, and have survived into the present day.

The earliest cartographic sources for many of the settlements within the Section 2 study area are the Enclosure Plans dating to the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, and Tithe Plans of the early 19<sup>th</sup> century. Although these do not survive for all parishes through which the planning application boundary passes, those that do survive suggest that little has changed in the general layout of the settlements from the late 18<sup>th</sup> century through to the present day. However, as the planning application boundary avoids all of the settlements, it is the landscape surrounding most of the villages that is of more interest. The process of enclosure was slightly later in the Wolds, with most of the area unenclosed in 1771 (Ref 9-47). However, in just over 50 years the landscape of the Wolds had been largely enclosed with a large number of farmsteads constructed as part of the agricultural shift (Ref 9-47). In most cases the field systems recorded on the surviving enclosure awards remain relatively similar to those observed today, with the main change being the removal of many smaller field boundaries to create larger fields, a process that was widespread in the 20<sup>th</sup> century.

One area where the removal of field systems does not seem to have happened is the parish of Lund located in the eastern half of Section 2. A survey of the parish dated 1795 shows the settlement similar in shape and size to that which survives today, although many of the garden plots in the centre have now been in-filled with new houses (Ref 9-48). While a new road now skirts around the north western side of the settlement, only a limited number of the fields have been reduced and sub-divided.

A similar view is also visible at Middleton-on-the-Wold where the Enclosure Plan of 1803 shows a number of large fields around the settlement that have now been subdivided by the introduction of drains (Ref 9-49). The general settlement and street pattern can also be traced in the modern-day village, although a large number of new houses have been built, mainly during the 20<sup>th</sup> century, while the railway flanks the settlement to the north-west.

However, perhaps the best examples of a fossilised landscape is that of South Dalton, where the plan that accompanied the Enclosure Act of 1822 shows a settlement with associated field system that can be traced in the modern landscape (Ref 9-50 and Ref 9-51). While the village and manor house lie immediately outside of the study area, sections of the Dalton Estate fall within the study area and within the planning application boundary. The manor of South Dalton was first acquired by the Hotham family in 1680, and by 1870 they owned almost all of the parish (Ref 9-52). The original hall that forms the centre of the estate is Grade II\* listed (NHLE 1161304), while the core of the estate is a Grade II\* Registered Park and Garden (NHLE 1000922), with its western limits lying adjacent to the study area boundary. As the designated parkland was established in the 18<sup>th</sup> century (Ref 9-44), it has not been subject to the same level of 20<sup>th</sup> century ploughing encountered elsewhere in the study area resulting

in better preservation of ridge and furrow as earthworks. However, the outer limits of the estate, which are not part of the Registered Park and Garden and through which the planning application boundary passes, continue to have been used for arable agriculture which has removed traces of earlier ridge and furrow cultivation.

The first accurate mapping that provides details for all of the landscape covered by the study area are the various editions of the Ordnance Survey maps produced from the 1860s onwards. These provide detailed mapping of the main settlements as well as the rural landscape that surrounds them, and through which the planning application boundary passes.

In most cases the First Edition survey shows the settlements still conforming to the typical medieval settlement plan with the house and living areas fronting on to the main street, with a garden plot stretching out to the rear. This can be seen on the First Edition survey of Lund, dated 1855, where the settlement plan largely resembles that encountered on the survey of 1795 (Ref 9-48), although it is perhaps interesting to note that the eastern side of the village seems to be formed out of larger plots suggesting higher status dwellings. Lund also appears to be little changed at the end of the post-medieval period with the Second Edition Ordnance Survey mapping of 1892 also showing a very similar street pattern, suggesting that most of the infilling of garden plots dates to the modern period.

This is also the case at Middleton where the majority of infilling of garden plots seems to have taken place in the 20<sup>th</sup> century, although there are a number of changes and signs of development between the 1803 survey (Ref 9-49) and the First Edition Ordnance Survey mapping of 1855. These additions continued in the second half of the 19<sup>th</sup> century with a new rectory added to the eastern limit of the village by the time of the Second Edition Survey of 1892, along with a number of new properties to the west.

Although the early Ordnance Survey maps provide important information about the development of the settlements, they also provide the first full accurate survey of the rural landscape surrounding the villages, and it is this landscape through which the planning application boundary passes. Again, there is very little change in the general field systems compared with the view today, with most surviving field boundaries visible on the First and Second Edition Ordnance Survey mapping. To the west of Lund, both Vicarage Farm and Corporation Farm are recorded on the First Edition survey of 1855, although neither are recorded on the 1795 survey suggesting they were established at some point between 1795 and 1855. The First Edition Ordnance Survey mapping does name one of the fields immediately to the east of the planning application boundary as 'Mill Hill' suggesting a mill occupied this area at some point (AECOM010), although there is no other evidence for a mill here.

The historic mapping clearly demonstrates that from at least the 18<sup>th</sup> century the land through which the scheme runs was used for agriculture, and evidence from geophysical survey, metal detector surveys, and a review of aerial photographs and LiDAR data also seems to support this.

#### **9.5.2.4.6 Modern (1900-present)**

Although it is clear that the settlements and farmsteads located within the study area continued to develop during the modern period, there is only a single cultural heritage asset dating to this period recorded within the study area. This is the crash site of a Halifax bomber lost in 1943 (AECOM057). The main focus of settlement activity remains towns and village that fall outside of the study area, with the landscape through which the planning application boundary passes remaining dominated by arable agriculture and the dispersed farmsteads that support it.

Mapping from the 20<sup>th</sup> century shows the removal of a number of field boundaries across the study area, although the field systems recorded from the earlier mapping of the late 18<sup>th</sup> and early 19<sup>th</sup> centuries are still visible in the modern agricultural landscape. While the intensive deep ploughing of the second half of the 20<sup>th</sup> century has removed much of the earthwork ridge and furrow that had remains into the 1940s, some traces still appear to survive as subsurface features with geophysical survey recording remains at in a number of areas including around north of South Dalton, and near Lund. Traces have also been recorded as shallow earthworks through LiDAR surveys at Dalton Grade II\* Registered Park and Garden (NHLE 1000922), with remains surviving due to a lack of arable cultivation. However, in general the remains of medieval and post-medieval arable agriculture have been removed by more recent agriculture.

The single asset dating to the modern period recorded within the study area is, as noted above, the crash site of a Halifax bomber (serial number LK681) which was lost near South Dalton on the 3<sup>rd</sup>



November 1943 (AECOM057). The aircraft with its crew of six had been carrying a civilian named Dorothy Robson who was testing a new bomb site when it crashed into the higher ground while trying to break through the low cloud, and all seven were killed.

#### 9.5.2.4.7 Undated assets

There are 14 undated assets within the study area. The majority of these are cropmark sites representing field systems and enclosures and probably date to the Iron Age and Roman period (MHU2485, MHU287, MHU3076, MHU346, MHU6567, MHU6568, and MHU6571), although other remains include human remains recovered from near Kiplingcotes (MHU3142). Give the number of Bronze and Iron Age burials from the Kiplingcotes area, this latter site may also be prehistoric.

#### 9.5.2.5 Walkover Survey

Walkover surveys for the current scheme have been completed, although these have been targeted. The approach to the walkover and the results were also checked against data published as part of the CCS DCO application in 2013 and followed a similar alignment (Ref 9-21). As a result, the majority of the planning application boundary has been covered by the previous walkover survey, and the current site visits were targeted on areas not covered by CCS. An archaeological site visit of the current Section 2 area was undertaken on the 20<sup>th</sup> October, and the 9<sup>th</sup> and 10<sup>th</sup> November 2021, with most sections of the alignment visited and specific areas walked. These latter areas included the area north of Lund, as well as the land south of Godmanham Lodge Farm.

No new sites were recorded as part of the walkover survey, and systematic fieldwalking was not undertaken as part of the pre-submission works.

#### 9.5.2.6 Aerial Photographs and LiDAR

As with other Sections of the alignment, a review of aerial photography and LiDAR data for the Section 2 area largely confirmed the presence of previously identified heritage assets, or provided additional information on previously recorded sites, and confirmed that the landscape through which the alignment passes has been largely agricultural since at least the end of the Roman period.

More detailed information on previously recorded assets included the extensive cropmark site recorded in Fields 122 which is thought to represent part of the Iron Age/Romano-British settlement and field system west of the Dalton Estate (MHU6567), as well as remains of a large ladder settlement on Goodmanham Wold in Field 129 (MHU10895).

While new assets were limited, and largely linked post-medieval agricultural land use and include traces of former field boundaries, traces of a possible Roman roadside settlement were observed south of Market Weighton in Fields 135 and 136 (AECOM006). This site was originally recorded through geophysical survey undertaken as part of the CCS scheme, and the current aerial photographic review has helped further define its extent. However, the fragmentary nature of the site on geophysical survey data might suggest it has been heavily truncated as a result of 20<sup>th</sup> century ploughing.

The full report covering the review of aerial photographs and LiDAR data can be found as **Appendix 9C**.

#### 9.5.2.7 Geophysical Survey

A programme of geophysical survey was undertaken as part of the current scheme, with the survey covering a 60m wide corridor, where access and ground conditions allowed. This survey identified a number of field boundaries recorded highlighting the agricultural nature of the landscape, as well as ploughed out ridge and furrow. Most of the field boundaries can be observed on 19<sup>th</sup> century mapping, although a limited number may be earlier and represent medieval/post-medieval field systems.

The survey also provided some additional clarity on assets that had been previously identified and recorded on the HER through aerial photography. This included the remains of possible settlements and field systems in Fields 101 (MHU22106), and Field 129 (MHU10895). Further remains of a possible Roman road site settlement original recorded as part of the CCS scheme were also noted in Fields 135 and 136, with the main focus of activity near the projected line of a supposed Roman road in Field 135 (AEOCM007).

However, a new possible site was also recorded in the western end of Field 130 (AECOM058) where a section of ditch or track with a small enclosure of square barrow was noted. This site is thought to be Iron Age based on other remains encountered in the wider area.

An extensive programme of archaeological geophysical survey was also undertaken for the CCS project (Ref 9-36). Large sections of this project followed the same alignment as the current scheme, and as a result the data collected as part of the scheme and published as part of the DCO application was reviewed as part of the current assessment. This review noted that the CCS works had also identified a number of former field boundaries that are visible on the First Edition Ordnance Survey mapping of the area, and post-medieval plough marks confirming the agricultural nature of the landscape. The survey also confirmed the presence of a number of previously recorded heritage assets, and in broad terms, geophysical survey data mirrored agricultural boundaries seen in the historical mapping.

The full geophysical survey report can be found in **Appendix 9D**.

### 9.5.2.8 Metal Detector Survey

The targeted metal detector survey within Section 2 examined a total of 13 fields, with significant finds recovered from eight of the fields. These were all dated to the Roman and medieval periods with the exception of one area where possible remains of an aircraft crash site were recovered (Field 120).

In general, the finds recovered corresponded with sites that had been previously recorded through aerial photography or geophysical survey. This included Roman items from Fields 113, 114, and 116 where a cropmark site suggested field systems or settlement activity. However, two medieval spindle whorls were also recovered from the same general area (Fields 111 and 113), although these are assumed to represent stray losses as the land would have formed part of the field systems associated with the medieval villages of Middleton-on-the -Wolds (1.5 km to the north) and Lund (2 km to the east).

A concentration of aluminium fragments was recorded in Field 120 where a Halifax bomber had crashed during the Second World War (AECOM057). As a result, it is assumed that the aluminium fragments are related to the crashed aircraft.

There were no concentrations of finds that might suggest a site that had not previously been identified through geophysical survey or aerial photography, and the limited number of finds hinted to the areas examined as having been previously detected.

No items dating to the prehistoric period or early medieval period were recovered as part of the metal detector survey. A full review of the data can be found in **Appendix 9E**.

### 9.5.2.9 Assessment of Baseline

This section presents an assessment of the heritage value and the contribution of setting of designated and non-designated assets within the study area. It also presents an assessment of the archaeological potential of the area within the planning application boundary. This section identifies whether there is the potential for impact as a result of the proposed development and identifies which assets are subject to assessment in Section 9.6 of this chapter.

#### 9.5.2.9.1 Designated Heritage Assets

##### *Scheduled Monuments*

An Early or Middle Neolithic oval barrow has been recorded adjacent to the planning application boundary near an area where an existing access track will be upgraded on the north edge of Etton Wold (NHLE 1012203). The barrow has archaeological and historic interest for the information it could provide regarding human activity during the Neolithic, and specifically death and burial practices. The barrow is located midway down the north slope of Etton Wold in a slightly elevated position. It does not appear to be intervisible with other barrows, and its positioning mid-way down a slope in the undulating Wolds landscape means it is not very visible in the landscape, suggesting its setting was originally its immediate surroundings and that it was not designed to be visible in the wider area. Its setting, therefore, is not considered to contribute to its significance. As there will be no physical impacts on the asset, and any changes to its setting will be temporary and negligible, the barrow has been scoped out of further assessment.

A total of 12 barrows are recorded in an elevated position near High Wold Farm, and between 80 m and 500 m east of the planning application boundary (NHLE 1014256; 1007501; 1012089; 1012091; 1012088; 1013672; 1012092; 1012090). The bowl barrows are thought to date to the Late Neolithic/Early Bronze Age, and although damage by ploughing survive as slight earthworks and are visible as cropmarks. They have both archaeological and historic interest for the information they contain about the communities living in the area in the prehistoric period, as well as funerary practices.

The barrows are located in an elevated position and it is assumed they were designed to be visible in the surrounding landscape, although it is not clear how wooded the landscape was when they were built and as a result woodland may have limited long views of the barrows. It would appear that the grouping were designed to be intervisible due to them being constructed in close proximity. Consequently, their setting contributes to their significance. However, the planning application boundary passes to the west of the grouping and does not sever any lines of intervisibility. Any changes to the setting will be temporary and there will be no direct physical impacts. Therefore, the grouping of barrows will not be taken forward to the impact assessment stage.

### *Registered Park and Garden*

The Grade II Registered Houghton Hall Park (NHLE 1000923) is located approximately 100 m south of the planning application boundary at its closest extent. The planning application boundary runs to the north and west of the asset. The parkland forms the grounds of Houghton Hall (built c.1760) and they were laid out to the design of Thomas White in 1768. The grounds are approximately 100ha of land which slopes slightly to the south. The southern boundary is formed by Houghton Lane, while the by-road between North Cliff and Market Weighton forms the western boundary. Fences divide North Park from fields and the east side is bounded by tracks and fencing around the Presbytery. The main entrance, which has a non-designated 19<sup>th</sup> century lodge called White Lodge (AECOM113), is on the east side of the North Cliff to Market Weighton road. The non-designated White Lodge is approximately 150m south of the planning application boundary. A drive runs eastwards to the Grade I listed Houghton Hall (NHLE 1160656), sheltered on its north side by Lodge Plantation, and then curves north-eastwards as an avenue, turning to the south-east to a point where five drives or tracks leading from other entrance points to the north and east converge, around 80m north-west of the Hall. A drive leads south-east from this point to the north side of the hall. Key designed views of the Hall looking south are achieved on these drives. The Hall is located outside the formal study area for this assessment at 1.1km south of the planning application boundary, however the Registered Park and Garden is its designed setting. The hall's principal vista is to the south overlooking the formal garden and naturalised landscaped grounds beyond the Grade II listed Ha-ha (NHLE 1346329). These also feature views of a large serpentine pond that dominates the southern side of the park. The grounds are laid out in naturalistic style comprising stands of mature trees, grass and woodland. On the north side of the hall there are lawns divided from the park by cast-iron fencing, and views across North Park to open land beyond. The first edition OS map of 1855 shows separate belts of tree planting enclosing the view north at different distances, such that it appears as though the view is naturally limited, rather than formally enclosed in planting. These stands of trees are to the west of the hall immediately north of Home Farm and the kitchen garden area, to the north of the hall, north of North Farm (AECOM085), and to the east of the hall to the north and west of a building marked as Houghton Cottage (AECOM114).

The design of the park is intimately linked to the design of the hall. The park is the completion of an artistic vision that was created to showcase the architectural and artistic interest of the hall and the other buildings within the park's boundary. It provides the designed setting for all the assets within the boundary. The park has artistic and architectural interest in its design philosophy and style which is a good example of an 18<sup>th</sup> century naturalistic garden design comprising a pleasure ground and parkland. The parkland has historical interest due to its association with the Langdale family and their patronage of the nationally significant landscape architect, James White, a pupil of Lancelot 'Capability' Brown. The garden is one of a number of gardens in Yorkshire that White worked on with and without Brown. The survival of White's original design drawing for the park strengthens this association and adds to the asset's artistic and illustrative historical interest. The plan contributes to the ability to understand the design intention of the park and aids in understanding subsequent changes.

The setting of the garden includes its siting, approaches and carriage drives, as well as any designed key views of, from and within the garden. The setting is an agricultural landscape to the north, east and west and the heavily wooded Houghton Moor to the south. The settlement of Market Weighton is the

nearest town, to the north-west of the garden. It has expanded towards the park from its historic extent. The nearest village is Sancton, a short distance to the east of the park. Views from within the park feature views of the agricultural landscape beyond its boundary in managed ways. The planting design, particularly to the north of the hall, is such that the intention is to provide the appearance of long unenclosed views over the surrounding landscape when in fact the individual belts of tree planting combine together to form a naturalistic boundary to views that is related to the sloping natural topography. Likewise to the south, belts of trees focus the view on the east and west sides. Views from within the park of the landscape outside the park are therefore managed and limited.

Due to the potential for temporary impacts as a result of the proposed development, Houghton Hall Park is assessed in Section 9.6 of this ES chapter.

#### *Listed Buildings*

In contrast to Section 1, the listed buildings located within the study area for Section 2 are all isolated buildings outwith the area's settlements. This reflects the route passing through agricultural land for most of this Section.

The Grade II listed milestone (NHLE 1084150) is located approximately 350 m to the east of the planning application boundary on the B1248. It is gritstone mounting block with a round headed cast iron insert reading 'Beverley 8 Malton 20'. The asset has historic interest as an early 19<sup>th</sup> century example of a vernacular milepost that provides historic interest and understanding to the road. The setting of the asset is the road and the distances to nearby towns as expressed on the asset. This provides understanding of its historic function and context. The setting of the asset does not extend to the planning application boundary.

The Grade II listed Moneypot Hill Farmhouse (NHLE 1346961) is located approximately 280m east of the planning application boundary. It is late 18<sup>th</sup> century constructed of brown brick under a pantile roof with brick axial stacks. The farmhouse has architectural and historic interest as an example of a modestly-sized late-18<sup>th</sup> century farmhouse. Adjoining the west elevation of the farmhouse there is a lower two-storey barn that has been partially converted to residential use. The first edition OS map of 1855 shows the farm as a truncated L-shape with the main linear east-west aligned range containing the farmhouse and adjoining barn to its west side with a short projection to the south. A dense shelter belt of trees is shown curving around the building on the north side, whilst the south side is open onto a garden/yard with a pond to the south-west corner of the buildings. The buildings shown on the first edition map all survive, and are curtilage listed buildings of the farmhouse. They are red brick with pantile roofs like the farmhouse and are likely to be contemporary with it. The shelter belt of trees and the garden to the south of the farmhouse are also still present and it is still accessed from the road to its east side. The farm therefore retains much of its original setting in a largely unaltered state and this contributes to the historic integrity of the building. It provides the visual and functional context for the farmhouse and contributes to understanding of its purpose. The principal elevation of the farmhouse faces south with long views overlooking flat open fields, this farmland setting also contributes to the historic interest and understanding of the farmhouse through providing its functional context and providing a pleasant green outlook in views to and from the asset. Key views of the asset are achieved traveling north on the lane to the west of the asset.

Due to the potential for temporary impacts to the asset through change to its setting, Moneypot Hill Farmhouse is assessed in Section 9.6 of this ES chapter.

The Grade II listed Kiplingcotes Farmhouse (NHLE 1161307) is located approximately 324 m east of the planning application boundary. It is a late-18<sup>th</sup> century farmhouse of two storeys in red brick. The farmhouse has architectural and historic interest as an example of a large late-18<sup>th</sup> century farmhouse. The first edition OS map of 1855 shows the farmhouse forming the south-west corner of loose double courtyard farm, the first to the immediate north of the house being a loose U-shape and then beyond it, an L-shaped range with an additional range adjoining the north side. A dense shelter belt of trees is enclosing the farm on all but the south side, which side is open onto an orchard and formal garden, with a pond to the south-east. Around half of the farm buildings shown on the first edition map have been demolished and the farmstead now contains large modern agricultural units that are out scale and character with the historic buildings. The farm buildings that survive are curtilage listed buildings of the farmhouse. The shelter belt of trees and the garden to the south of the farmhouse are still present and

it is still accessed from the road to its west side. The farm therefore retains much of its original setting and this contributes to the historic integrity of the building. It provides the visual and functional context for the farmhouse and contributes to understanding of its purpose. The principal elevation of the farmhouse faces south overlooking the Wolds framed either side by the shelter belt of trees. The land rises to the south of the farmhouse, however, so long views are only possible from its upper windows and views towards the farmhouse from the surround landscape are limited. Nevertheless, the farmland setting contributes to the historic interest and understanding of the farmhouse through providing its functional context.

Due to the limited nature of the views to the south of the asset, and the screening provided by the shelter belt of trees around the asset on the north and west, it is not considered likely that the development will result in significant effects to the asset. It is therefore not assessed further in this ES chapter.

The Grade II listed medieval wayside cross (NHLE 1407170) is located approximately 20 m east of the planning application boundary. The cross base consists of a stone base of just over 1m square with a chamfered top. The stump of a cross shaft is present in the base, standing to around 0.5m, and a further two sections of broken cross shaft are located a short distance to the north. A final pyramidal capstone is also present. The cross-shaft base may have been moved to present location when Kiplingcotes Station was erected in the mid-19<sup>th</sup> century however it is also possible that it is in its original location marking a medieval crossroads. The asset has artistic and historic interest as an example of medieval sculpture and ritual which, if reassembled, would be largely complete. It also has potential historic interest as it is thought that the cross may be the missing Molescroft Cross. The Molescroft Cross was one of four such crosses marking the outer limits of the Sanctuary of Beverley Minster established by King Athelstan in 938 AD. The other three crosses are separately designated. The asset has group value with the other three crosses and with Beverley Minster. The present setting of the asset does not readily contribute to the understanding of the asset as it is not currently known whether the asset was placed there in the mid-19<sup>th</sup> century as an attractive feature on approach to the new station, or whether it was in its original location marking a medieval crossroads. If part of the landscaping design for the Victorian station, its setting relationship with the station would be an important element of its setting providing understanding of its present siting and its value as an object of art to the Victorian station designers.

The proposal in the immediate vicinity of the asset is for HDD under the line of the former railway, this will leave the asset's present setting intact. It is therefore not considered likely that the proposed development will result in significant effects to the asset and it is not considered further in this ES chapter.

#### 9.5.2.9.2 Non-designated Heritage Assets

There are eleven non-designated farms throughout the study area which are shown on 19<sup>th</sup> century OS maps. The most common arrangement comprising a farmhouse to the west of either a U-shaped or a full square courtyard farm. The farmsteads generally have gardens to the front of the farmhouse's principal frontage which look out over farmland. The farms have heritage value as examples of 19<sup>th</sup> century farms, several of which are still in operation and which retain the majority of their historic farmstead ranges and the farmhouse alongside more modern agricultural buildings. Their settings are informed by their location within farmland which contributes to their historic interest by providing their functional setting and aiding understanding of the asset. Views from the farmhouses over farmland also contribute to understanding of the assets and their aesthetic qualities.

A description of these farms and their settings is contained within **Appendix 9F**. The following assets may be affected and have been taken forward for assessment: East Field (formerly Middleton Ings) (MHU12455), Vicarage Farm (AECOM080), Lund Wold House (AECOM081), Cotegarth Walk Farm (MHU13289), and High Wold (named on the first edition OS map as Craven Wold or Mount Ararat) (AECOM083).

Kiplingcote Railway Station (MHU13515) and Kiplingcotes Signal Box (MHU19726) are located approximately 30m and 100m west of the planning application boundary respectively. They served the York, Market Weighton and Beverley line. Kiplingcotes station was built in 1865 and the signal box was added in the late 19<sup>th</sup> or early 20<sup>th</sup> century. The station is no longer active, and the railway line has been removed. The station has been converted to residential and commercial use and the signal box is now

a garden building. The station is of two storeys in rendered brick with single storey wings to either side. The signal box is of brick to the ground floor with regularly spaced arched windows, whilst the upper floor has larger 12-pane Yorkshire sliding sash windows. The buildings have architectural and historic interest as an example of mid-19<sup>th</sup> and early 20<sup>th</sup> century rural railway infrastructure. They also have associative historical value due to their connection to the local landowner, Lord Hotham, for whose personal use the station was originally created. It was part of the negotiation for the railway line to pass through his estates. The buildings have group value and a shared setting that is informed by the fossilised route of the historic railway in the surrounding landscape which is now used as a footpath. The railway line contributes to the asset's heritage interest through aiding understanding of their former function, whilst the rural surroundings also contributes to the architectural interest of this rural station. The route of the former railway line associated with the station will be impacted by the scheme at a distance of over 500m from the asset. The proposal in the immediate vicinity of the asset is for HDD under the line of the former railway. It is therefore not considered likely that the proposed development will result in significant effects to the assets.

There are non-designated assets throughout the study area, with a number of sites recorded within the planning application boundary. As with Section 1, the majority of these have been recorded as cropmarks through aerial photography, or as buried remains through geophysical survey. Most of these features appear to represent the remains of field systems, enclosures, and trackways, although a number of possible settlements and burials have also been noted, and the majority have been tentatively dated to the Iron Age and Roman periods. They are considered to have archaeological and historic interest as they could provide information linked to the development of settlement, as well as the past populations who lived in the area. In general, they are considered to be of medium or low value, and as they are within the planning application boundary there is the potential for physical impacts on the assets. Assets within Section 2 that have been taken forward for assessment are MHU22106, MHU22143, AECOM057, MHU6567, MHU4435, MHU10895, AECOM006, AECOM058, and AECOM007.

Areas of ploughed out ridge and furrow, as well as former field boundaries recorded through geophysical survey and evident on 19<sup>th</sup> century historic mapping, are considered to be of negligible value and have not been taken forward to assessment.

#### 9.5.2.9.3 Previous Ground Disturbance

The planning application boundary within Section 2 is limited to agricultural land, with settlements and farmsteads falling outside of the planning application boundary. As a result, large scale development and ground disturbance within the planning application boundary is limited to agricultural practices with arable cultivation being the most common form of agriculture taking place. As with the wider East Riding landscape, this form of agriculture has resulted in the loss of earthwork remains since the Second World War, with features such as ridge and furrow now largely levelled within the study area. This intensive ploughing has also potentially had an impact on buried remains, including the Iron Age and Romano-British field systems that are prevalent throughout the East Riding, although the geophysical survey undertaken as part of the scheme has identified buried features surviving in a number of areas.

Previously archaeological work has also been limited within the planning application boundary, as well as the study area, and is largely limited to small episodes of archaeological monitoring or watching briefs.

#### 9.5.2.9.4 Potential Archaeological Remains

##### *Palaeoenvironmental Remains*

Due to the geology and topography of the Wolds landscape through which Section 2 passes, there is limited potential for palaeoenvironmental deposits to survive within the planning application boundary. The potential is assessed to be negligible.

##### *Early Prehistoric and Bronze Age Remains*

Remains dating to the early prehistoric period (Mesolithic through to the Bronze Age) are limited within the planning application boundary, as well as the study area, with most assets dating to this period being chance finds lithics/stone tools, and Bronze Age funerary remains. However, archaeological investigations within the study area have been limited, and work within the wider East Riding landscape has revealed prehistoric remains from the late Palaeolithic/Mesolithic through to the Bronze Age. The

well drained undulating landscape of the Wolds would have also represented an attractive landscape for the more sedentary way of life that developed from the Neolithic onwards. Many of the remains from these periods, with the exception of burial mounds/cairns, are relatively ephemeral and are not easily identified through geophysical survey or aerial photography with most settlement sites identified through flint scatters. The potential for new funerary remains is considered to be low, while the potential for further finds of lithics is considered to be medium.

#### *Iron Age*

Extensive remains dating to the Iron Age have been recorded within the planning application boundary, as well as the study area. While clear evidence of settlement activity is limited, the extensive field systems and trackways that are associated with settlement remains are well represented through geophysical survey and aerial photography as the ditches that are associated with these kind of features appear to survive relatively well as buried features. In most cases the geophysical survey results correspond with the cropmarks recorded on aerial photographs, although in some areas the geophysical survey has identified assets not previously recorded through aerial photography. The potential for encountering further remains dating to this period is considered to be low in areas where geophysical survey has been undertaken, and medium in areas where geophysical survey has not been undertaken.

#### *Roman*

A continuation of the type/form of settlement activity from the Iron Age into the Roman period means that differentiating between sites can be difficult. Many sites may also have continued in use into the Roman period, and as a result the visibility of Roman remains is the same as Iron Age remains, with field systems, trackways, and enclosures being well represented through geophysical survey and aerial photography. The potential for encountering further remains dating to this period is considered to be low in areas where geophysical survey has been undertaken, and medium in areas where geophysical survey has not been undertaken.

#### *Early Medieval*

Evidence for early medieval activity within the planning application boundary, as well as the study area, is limited. It is assumed that most activity dating to this period is focused within the settlements that still exist, with the planning application boundary passing through the field systems that surrounded the settlements. Geophysical survey has not identified any features suggestive of early medieval activity, while the metal detector survey failed to identify any concentrations of early medieval finds/objects. As a result, the potential for encountering previously unrecorded early medieval remains is considered to be low.

#### *Medieval*

As with the early medieval period, evidence of medieval activity is also limited within the planning application boundary as well as the study area. This is again due to the planning application boundary passing around the settlements and instead running through the field systems that surrounded them. Extensive remains of ploughed out ridge and furrow and field boundaries that are assumed to date to the medieval period and later has been recorded through aerial photography and geophysical survey providing further evidence of the planning application boundary passing through the agricultural lands associated with settlements. As a result, the potential for encountering previously unrecorded medieval settlement remains is considered to be low, although the potential for encountering further agricultural remains such as ridge and furrow or field boundaries is considered to be medium.

#### *Post-Medieval*

The pattern of settlement being focused in the villages, hamlets, and farmsteads through which the planning application boundary passes continues in the post-medieval, with sites dating to this period largely limited to agricultural remains. These include ridge and furrow and field boundaries, as well as associated features such as retting ponds, all of which have been identified within the planning application boundary through aerial photography and geophysical survey. As a result, the potential for encountering previously unrecorded post-medieval settlement remains is considered to be low, while the potential for encountering further agricultural remains such as ridge and furrow or field boundaries is considered to be medium.

## 9.5.3 Section 3 – Market Weighton to River Ouse

### 9.5.3.1 Physical Site Conditions

#### 9.5.3.1.1 Topography

Section 3 traverses the low flat plains to the west of the Yorkshire Wolds and runs in a steady south-westerly direction from the south of Market Weighton, over the River Foulness towards Howden before stopping at the River Ouse and the beginning of Section 4. Like the previous sections, land is predominantly dedicated to agricultural farming with sporadic instances of small areas of woodland. The landscape drops gently from c.30 m aOD at Market Weighton down to around 5 m to the south of Spaldington and to around 5 m aOD to the north of Howden. Land levels towards the River Ouse around the area of Barnby on the Marsh are even lower, registering at 3 m aOD to reflect an area of previous marsh land and historic intertidal flooding and warping.

#### 9.5.3.1.2 Geology

Section 3 measures a total distance of 22.9 km and extended from the River Ouse in the south west through to the north-east to the south of Market Weighton. Bedrock geology within the study area is therefore varied over such a long area. Market Weighton and the north-eastern end of Section 3 is located upon Lias Group bedrock, a conglomerate of mudstone, siltstone, limestone and sandstone. The large majority of the Section is located upon bedrock geology consisting of undifferentiated mixture of mudstone, silt stone and sandstone. The south-western end of Section 3 towards the River Ouse is located upon sandstone (Ref 9-23). Overlying superficial geology is Lacustrine deposits of clay interspersed with thin strips of alluvial clay, silts and gravels that follow the route of the River Ouse and the River Foulness (Ref 9-24).

Soils in Section 3 also vary from wet very acid sandy and loamy soils in the east, to slowly permeable and seasonably wet rich loamy and clayey soils in the west, with a band of loamy and clayey floodplain soils along the River Foulness (Ref 9-24).

A detailed review of the geology can be found in **Chapter 10: Geology and Hydrology**.

### 9.5.3.2 Historic Landscape Characterisation

A review of the Historic Landscape Characterisation (HLC) data for the Section 3 area shows the study area as falling within the Wolds landscape. As with the majority of the scheme, and as mentioned above, the landscape is again dominated by agricultural land, with a limited number of dispersed settlements and farmsteads scattered throughout the study area, all of which are avoid by the alignment. As with Holderness in Section 1, the landscape of Section 3 is dominated by lower-lying wetlands, and as a result it is covered with drains and dykes to assist with drainage. These have, historically, also been used for warping in an attempt to improve the fertility of the soil, with arable cultivation prevalent throughout Section 3. A brief overview of the HLC data is provided in **Table 9-88**, and the full details of the HLC data for the area can be found in the report (Ref 9-25 and Ref 9-26).

Although all fifteen 'broad types' of landscape character defined as part of the HLC assessments are again represented within Section 3, the area is again dominated by 'Fields and Enclosures', with the remaining types making up a relatively small percentage of the landscape under investigation. The industrial importance of the major watercourses is, however, evident with the 'Manufacturing and Commercial' area representing 3.2% of the area 'Humberhead Levels and Walling Fen' landscape, although it should be noted that these industrial areas are located outside of the study area around the lower reaches of the River Ouse (Ref 9-25). Full information on the various HLC subcategories have not been included due to the large number encountered throughout the scheme<sup>3</sup>.

---

<sup>3</sup> Full details of the HLC process can be found in Ref 9-25. Landscapes could be categorised as one of fifteen 'Broad Types' of landscape, and were further divided into one of 137 'Historic Landscape Character' types. Full details of the HLC for the East Riding can be found in Ref 9-25 and Ref 9-26.



**Table 9-8: HLC types within Section 3. Only the dominant 'Broad Types' of landscape have been listed due to the large number of landscape types covered by the Section.**

HLC ID	Name	Broad Type (Dominant Types Only)
CA03	Humberhead Levels and Walling Fen	'Fields and Enclosures' (75.6%); 'Coastal' (11.4%); 'Manufacturing and Commercial' (3.2%); and 'Settlement' (3.1%).
CA02	South East Vale of York South	'Fields and Enclosures' (88.5%); 'Settlement' (2.8%); 'Woodland' (2.3%); and 'Settlement' (2.21%).

### 9.5.3.3 Designated heritage assets

There are no designated heritage assets within the planning application boundary.

Within the study area of Section 3 there are five Grade II listed structures. There are no scheduled monuments, World Heritage Sites, conservation areas, registered parks/gardens, registered battlefields or protected wrecks.

The five listed buildings all originate from the post medieval period. Two are directly associated with the railways and consist of North Howden Station (NHLE 1233349) built in 1840 for the Hull and Selby Railway line as well as the accompanying signal box (NHLE 1346759) constructed in 1873 for the North Eastern Railway. Both are located approximately 173 m south of the planning application boundary. Two listed buildings are grouped as a farmhouse (NHLE: 1031352) and associated barn (NLHE: 1083339) at Common Farm, located approximately 46 m north of the planning application boundary. The fifth listed building is approximately 550m to the north of Howden Station and is a windpump at Brickyard Farm (NHLE 1160639), approximately 245 m north of the planning application boundary.

### 9.5.3.4 Archaeological and Historical Background

#### 9.5.3.4.1 Prehistoric (up to AD43)

A total of 23 heritage assets dating to the prehistoric period have been recorded within the Section 3, representing activity from the Lower Palaeolithic through to the Iron Age. In cases where a specific period has been assigned, the majority of sites have been dated to the Iron Age, with pre-Iron Age activity relatively limited. Evidence for earlier activity is largely limited to find spots which include a Neolithic polished stone axe from Barnby on the Marsh (MHU20440) and a Bronze Age scraper from Bielsbeck Farm (MHU17978), while a possible standing stone has been recorded to the south of Howden Station (MHU17259) and a settlement is recorded near Howden Wood (MHU1775). Evidence for earlier activity has also been identified at a number of Iron Age/Roman sites, with Lower Palaeolithic material recovered near Tollingham (MHU1125), and Early Bronze Age material recorded near Asselby (MHU8005).

Evidence from field survey undertaken as part of the Humber Wetlands project has shown that large areas of Section 3 were river floodplain during the early prehistoric period, and such a landscape would have undoubtedly been exploited by the hunter-gatherers of the Mesolithic, with further exploitation taking place during the Neolithic (Ref 9-42). This lack of early prehistoric activity was also observed on the Asselby to Pannal gas pipeline, the eastern section of which falls within the Section 3 study area (Ref 9-53). It has, however, been suggested that this is at least partially due to warping<sup>4</sup> (D Evans *Pers. Comm.* 30<sup>th</sup> November 2012). This process took place in the post-medieval period to improve the fertility of the ground near rivers and water courses, and has masked a lot of earlier sites through the deposition of silts.

There is a change in the visibility of sites dating to the Iron Age, where substantial activity is seen in Section 3, with a total of 17 Iron Age assets dispersed through the study area. Although sites dating to this period are distributed along the section, a major concentration has been identified in the Welham

<sup>4</sup> Warping is the process of deliberately flooding land periodically/seasonally so that the soils are improved by the silts left behind by the flood water.

Bridge area with evidence of settlement activity suggesting this area was a centre for iron production during the Iron Age, as well as in the Roman period. Limited investigations mean the dating of cropmark sites in the area is difficult, but assets tentatively dated to the Iron Age include settlement remains either side of the River Foulness at Welham Bridge (MHU10805, MHU21761, and MHU22502). Work undertaken as part of the Humber Wetlands Project suggested that iron was recovered from peat in the form of bog ore in the area, while the area also offered wood for smelting, and good water transport links to the Humber (see Ref 9-42 and Ref 9-41).

The exploitation of the waterways as a method of transport has been highlighted through the discovery of a log boat at Hasholme (MHU4999 – not shown on figures as it is outside of the study area). This Iron Age boat, located approximately 1km to the east of the study area was excavated in 1984 and proved that large quantities of iron could be transported via the region's waterways (Ref 9-42). Large quantities of slag have also been discovered within, and immediately outside, the study area at Welham Bridge, and analysis of the material has suggested that at least 800 currency bars could have been made in this area, with a total of 33,600 kg of charcoal required for production (Ref 9-41), demonstrating the scale of the activity being undertaken in this area during this period.

The change in settlement is also evident in the multitude of early Iron Age to Romano-British field enclosures throughout the study area. Enclosures dated to this period have been found east of High Garth (MHU18646); at Howden Common (MHU3198); at Marl Farm, Holme upon Spalding Moor (MHU23369); and north of Tollingham, where a complex enclosure system was found along with trackways and field systems (MHU22633). Six other examples of early field systems are dispersed along the study area of Section 3, clearly depicting early farming communities (see MHU1142, MHU21646; MHU21761; MHU22316; MHU21646; MHU10836). Alongside these early field systems, early Iron Age to Romano-British settlement sites have also been located (MHU10805 and MHU1127), proving the proliferation of settlement activity in the region to complement the early iron production practices. Signs of human occupation are also demonstrated by the occasional presence of Iron Age dated small finds – in this instance, an Iron Age dated toggle was found (MHU19856) to the south-east of Holme Upon Spalding Moor.

#### 9.5.3.4.2 Roman (AD43-450)

As discussed above in the prehistoric section (9.5.3.4.1), the first period for which extensive remains have been recorded within the Section 3 study area is the Iron Age and Roman/Romano-British period, with large numbers of Romano-British sites suggesting that the landscape within Section 3 was well settled. Heritage assets representing settlements, field systems and industrial processes have been recorded throughout Section 3, although concentrations have again been identified near Welhambridge and Tollingham, near the middle of the Section 3 study area. In total, there are 27 non-designated heritage assets of Roman date recorded in Section 3.

The activity in the area seems to be largely based around the industrial activities taking place, with iron working/smelting recorded from the Iron Age onwards. There are five Romano-British iron smelting sites recorded within the study area (MHU10788, MHU10796, MHU10799, MHU10801, MHU10803), all located to the east and south-east of Welham Bridge.

The emergence of the pottery production industry is also evident within the Roman period. There are at least four sites pertaining to Romano-British pottery production. These are Throlam (MHU1161), Ladies Parlour Farm (MHU7367), north-east of Skiff Farm (MHU8445), and to the east of Bramley Farm (MHU9782). Further kiln sites have also been identified immediately outside the study area around Welhambridge and Tollingham. Many of the kilns are located near settlement sites, rather than in one central location, suggesting the pottery was produced by individuals rather than as part of a large scale organised complex (Ref 9-41). Work on material from the area has led some authors to suggest that this region of Britain was something of a 'backwater' with Roman influence being fairly limited due to the limited amount of Roman material culture coming into the Throlam/Tollingham/Welham Bridge area (Ref 9-42). However, although Roman material may not have been coming into the area in large quantities, the pottery and iron did appear to be leaving the area with waterways and rivers being utilised to facilitate transportation, something that is typical of many other rural areas of Roman Britain. Romano-British pottery scatters are also frequent in this area of the kiln sites (see MHU7192, lying south-west of High Garth Farm, MHU8897 to the east of Skiff Farm, and MHU7190 and MHU8792), highlighting the potential for further industrial and settlement sites in the area.

A number of settlements and field systems have also been recorded throughout Section 3. As with earlier sites, most of these have been identified through aerial photography and geophysical survey undertaken as part of the current scheme, as well as earlier projects including CCS (Ref 9-21). Settlement sites within the study area tentatively dated to the Roman period due to their form include examples north of Skip Farm (MHU7186), another at Bursea (MHU6880) and a settlement complex at Rascal Moor (MHU1128). A Roman villa is also recorded at Howden (MHU20031) demonstrating that there were enough resources here to warrant the presence of occupation by people possessing relatively high status, or at least, wealth and manpower enough to construct a residential stone structure. Geophysical survey undertaken as part of the CCS project also identified further evidence for Romano-British settlement activity immediately outside the current study area (Ref 9-21), suggesting this part of the landscape was heavily exploited during the Roman period. The high frequency of find spots also attest to this, and examples include three Roman silver rings (MHU20866; MHU20878; MHU22265), as well as a brooch and a nail cleaner (MHU19854).

#### 9.5.3.4.3 Early Medieval (450-1066)

Evidence for activity during the early medieval period is relatively limited within the study area with only a single site recorded within the study area. This is an Anglo-Saxon long brooch (MHU19855). While HER evidence does not attest for occupation of the study area during this period, early documentary records do indicate that a number of the settlements in the area have their origins with the Anglo-Saxon period, and it is possible that much of the evidence for activity during this period is locked below these settlements, and located away from the current Scheme which passes around the settlements. Documentary and place-name evidence show that a number of settlements in the wider area potentially have their origins in the early medieval period. Asselby, Barmby-on-the-Marsh, Howden, Newsholme, and Spaldington are all recorded in the Domesday Book, while Howden is recorded from at least in 959, and Barmby-on-the-Marsh was initially recorded in 1050 (Ref 9-43). Analysis of place-names also shows that these settlements had pre-medieval origins, with both Anglican and Scandinavian influences visible such as Barmby on the Marsh, of which 'Barmby' is Scandinavian and 'marsh' as an additional Old English suffix. Other examples within the wider area include Asselby which again includes the Scandinavian 'by' suffix, while the 'ham' suffix in names such as Tollingham or Wleham is thought to derive from the Anglo-Saxon for village or small settlement.

Evidence for settlement in the Yorkshire area during this time is limited outside of the elevated Wolds area (see Ref 9-54), and explained partially through the re-use, or continued use, of settlement sites with earlier stratigraphy lost to later development. Additionally, rising sea levels noted during the post-Roman period were blamed for higher water levels within the flood plains, thus creating uninhabitable land, and burying habitable land under layers of silt. As a result, the agricultural use of the landscape seems to have reduced, and instead the area became something of a maritime resource exploited from the higher ground of the Wolds (Ref 9-42). The re-use of some of the waterways that became navigable again with the rise in sea levels is also suggested by the site of an Anglo-Saxon boat, dated to about 600, which was recorded in association with a wooden quay near Welhambridge (D. Evans *pers. comm.* 30<sup>th</sup> November 2012). However, most evidence for early medieval activity within Section 3 is limited to investigations within surviving settlements in the wider landscape.

#### 9.5.3.4.4 Medieval (1066-1500)

There are 25 non-designated heritage assets dating to the medieval period within the study area, with a further five assets dating to both the medieval and post-medieval period. The majority of these are agricultural and include large areas of ridge and furrow (including MHU22488, MHU22494, MHU22497, and MHU22498), as well as other assets linked to open field systems (MHU1016). Many of these elements of the agricultural landscape survived as earthworks until the mid-20<sup>th</sup> century and are visible on early aerial photographs. However, the intensification of ploughing in the years following the Second World War resulted in many earthworks remains being lost, with traces now only visible as cropmarks or on geophysical survey. Further evidence of the increased use of agriculture are the presence of retting<sup>5</sup> pits (MHU22306 and MHU22499) which have also been dated to the medieval period, but may have continued in use into the post-medieval period, while previous studies of the wider region outside

---

<sup>5</sup> Retting pits are used in the processing of flax, with flax steeped or soaked in ponds until the plant starts to rot allowing the flax fibres to be separated from the woody stem of the plant.

the study area have also confirmed that there is a large increase in the amount of settlement and agricultural practices within this region of Yorkshire (Ref 9-41).

As with the early medieval period, settlement activity from the medieval period is focused in the areas currently occupied by surviving towns and villages, and the study area avoids these settlements, passing instead through the field systems that surrounded the towns and villages. Some evidence for settlement activity has been recorded, with four moated sites identified including examples at Howden (MHU1761), to the north-east of Cavill Hall (MHU7689), and to the north of Howden station (MHU1760), while earthworks are noted at Garth Hall (MHU15411). Evidence of settlement has also been indicated by the presence of a chapel at Bursea (MHU15544).

However, it is clear that the social and economic struggles of the period, caused by impacts of events such as plague, also took their toll on the landscape of the study area, with a number of deserted medieval villages (DMV) recorded in the wider landscape. Evidence of abandonment within the study area include the site of Caville (MHU20734), which may also have its origins in the early medieval period (Ref 9-43). Parts of this site were the focus of an archaeological watching brief which revealed a trackway and at least seven buildings with post-holes and pits (Ref 9-55). Other clear evidence of abandonment includes the deserted medieval village of Thorpe Lidget, although this is located to the south, and outside, of the study area near Howden (MHU3190).

#### 9.5.3.4.5 Post-medieval (1500-1900)

Development in the landscape during the post-medieval period, including changes in agriculture and the growth of some settlements, makes this period the most visible within the Section 3 study area, with a total of three designated assets, and 27 non-designated assets dating to the post-medieval period. A further five sites dating to the medieval and post-medieval period were also noted on the HER.

All three listed buildings are Grade II listed, with two, North Howden Station (1233349) and North Howden Signal Box (1346759), linked to the development of the railways in the 19<sup>th</sup> century. The remains listed building is a windpump at Brickyard Farm (1160639). The majority of the non-designated assets within Section 3 are located in the key settlements that fall within the study area, with assets outside of the settlements linked to agricultural practices, such as warping, as well as the development of the railways.

Like the medieval period, settlement activity was focused on the handful of villages recorded throughout Section 3, with many dating to the medieval period or earlier. These settlements include Asselby, within the study area, as well as Barmby-on-the-Marsh, Holme-on-Spalding-Moor, and Hoden in the surrounding landscape. The land within the study area was largely, as it is now, agricultural land, although early mapping for the area is limited. An early survey dated 1767 for the Bishopsoil area, near Featherbed Lane, shows a number of field boundaries that resemble the modern field system (Ref 9-56). These fields include the large irregular shaped field to the south of Featherbed Lane through which the Application Boundary passes, with the land marked as belonging to *Cavil*<sup>6</sup>. The survey also shows a number of farms in the area of Caville Hall and the possible moated site which may have its origins in the medieval period (MHU7689). This survey does not, however, show Owlet Hall which is noted on later surveys near Featherbed Lane (MHU11630).

A slightly earlier survey of Portington, dated 1754, shows the land immediately to the south of Bishopsoil (Ref 9-57). While this survey covers the landscape immediately south of the current study area, it is useful in that it again depicts a landscape that can be recognised in the modern fieldscape, albeit with many of the smaller fields merged to form larger units.

Further mapping for Section 3 is provided by a number of Enclosure and Tithe Plans dating to the late 17<sup>th</sup> and early 18<sup>th</sup> century. Although these do not survive for all areas of the planning application boundary, the Enclosure Plans for the Parishes of Asselby, dated 1840 (Ref 9-58), and Holme-on-Spalding-Moor, dated 1777 (Ref 9-59), both show a field pattern that can be traced in the modern day landscape. Although the survey covering Asselby only covers a small section of the Application Boundary, the Holme-on-Spalding-Moor survey covers a larger section, and shows a number of surviving holdings. These include Skiff Farm, as well as the farmstead/settlement of Bursea near Welham Bridge. This fossilised landscape of smaller fields represents something of a rare survivor in a

---

<sup>6</sup> Modern day Caville.

landscape where large fields are more prevalent. These larger fields are certainly evident on the later Enclosure Plan of Asselby, although the long narrow crofts can still be seen behind the main street.

The Tithe Plan of Wressle dated 1839 also shows a landscape dominated by smaller fields surviving into the mid-19<sup>th</sup> century, although many have now been removed (Ref 9-60 ERYAS PE155/33). This survey also shows the settlements of Newsholme and Brind, both of which largely follow the same plan to which they survive today, as well as the farmstead of Prickett Hill which lies to the north of the Alignment in the Brind Crossing area (AECOM001). This latter site is shown as comprising at least two structures with associated stockyard/garden area, and is located on a track joining Brind and Newsholme, part of which survives today.

Although the landscape through which the Alignment passes was largely agricultural, the Brind Tithe Plan does show a major change dating to the mid-19<sup>th</sup> century, with a railway line depicted as cutting the area on a north-west to south-east alignment. This line, named the Selby to Hull line, survives as an active line with a crossing near Brind and was opened in 1840 (MHU8829). The construction and operation of the line also involved a large amount of associated infrastructure, with a number of these sites surviving. These include the North Howden Station (1346759) and signal box (1233349), both of which are Grade II listed buildings.

The Application Boundary also transects one other abandoned line in Section 3, this being the Hull and Doncaster Railway which opened in 1885 (MHU8805). This abandoned line is cut by the Application Boundary to the west of Asselby.

Agricultural productivity was often hampered by flooding which resulted from the low-lying nature of much of the study area. As a result, drainage schemes were increased in the late 18<sup>th</sup> and 19<sup>th</sup> centuries, with dykes and drains feeding into the main rivers such as the River Ouse (Ref 9-61). These were supplemented with banks that provided some defence against flooding, and pumping houses to control the water level, although some areas were temporarily allowed to flood allowing the rich river silts to improve the fertility of the land. This process, known as warping, was common during the later 18<sup>th</sup> and 19<sup>th</sup> century, and can be traced in place-names such as Warp Farm, while a number of drains used for this purpose have also been recorded (MHU22495), along with associated sluice gates (AECOM002 and AECOM003) within and adjacent to the planning application boundary respectively. These latter sites, and associated drain, seem to have gone out of use by the later 19<sup>th</sup> century as the Second Edition Ordnance Survey mapping of 1891 shows it as being much reduced. Drainage was instead provided by the "New Drain" which was dug to the north of the former "Warping Drain".

It is the First Edition Ordnance Survey (OS) mapping that provides the first detailed mapping covering the general area, and depicts a landscape in transition. Although an earlier 18<sup>th</sup> century survey by Thomas Jefferys (1775) covered all of the East Riding of Yorkshire, the scale of the survey was only sufficient to provide details of settlements and roads, and not the field systems surrounding the settlements through which the Alignment passes (LL F912.4274 J63Y). Many of the fields marked on the earlier surviving surveys, such as the Tithe and Enclosure Plans, are still visible on the First Edition OS map, although the move to remove field boundaries to create larger fields had started by the time of the First Edition OS. The majority of the surviving farmsteads are also marked on the First Edition survey, along with Prickett Hill (AECOM001) and Owlett Hall (MHU11630), which have both now been demolished. A smithy marked near Brind, and near to the planning application boundary, is also depicted (MHU14517) although this has also now been removed.

Other sites linked to agriculture located within the study area include farmhouses such as Beilsbeck Farm (MHU14700) located to the north-west of North Cliffe, as well as New Burse Farm (MHU18596), and Avenue Farm (MHU20782). However, the majority of the previously recorded assets are located in the settlement centres, and therefore beyond the planning application boundary, and include a mixture of private houses and public buildings. These include houses (MHU14561, MHU14525, MHU11384), public houses (MHU14520, MHU11782 and MHU14519), churches (MHU7154), and a poorhouse (MHU14518). Trades linked to both the agricultural and daily life of the population are also represented with sites including a number of smithies (MHU14517 and MHU 14524), as well as a brick and tile works (MHU14521). This latter site also includes a windpump which is a Grade II listed building (10617).

By the time of the Second Edition Survey mapping, c.1891/92, further field boundaries had been removed, with the general landscape representing one dominated by agriculture. Areas where the

removal of field boundaries is more prominent include the land between Asselby and Newsholme where the “New Drain” and the Hull and Doncaster Railway are also marked for the first time. Fields had also been enlarged between Brind and Featherbed Lane, although the long field that is now evident along the southern side of Featherbed Lane remains divided into a number of smaller fields. However, little had changed in the field systems around the Welham Bridge and Tollingham area, although the issues caused by the low-lying land seem evident with sections of the fields around the River Foulness marked as liable to flooding

By the closing years of the post-medieval period, the landscape through which the Application Boundary passes remained a landscape dominated by agriculture. Many of the key villages that had existed at the start of the period remained the key settlement areas. The largest changes on the line of the Application Boundary related to the enlargement of fields through the removal of field boundaries, drainage and the management of water, and the construction of railways lines.

#### 9.5.3.4.6 Modern (1900 – present)

Although the landscape of the study area continued to develop into the modern period, the number of recorded sites dating to the period is limited, with only two non-designated heritage assets recorded within the study area. These are Avenue Farm (MHU20782) located to the south south-west of Market Weighton, which was probably actually constructed in the 19<sup>th</sup> century, and the site of RAF Holme on Spalding Moor. This latter site was opened in the summer of 1941, and continued in use by the RAF until 1957 when it was handed over to Blackburn Aviation (Ref 9-62). Flying continued to take place until the 1980s when the airfield was closed (Ref 9-63), and while the main airfield site survives as an industrial estate to the east of the planning application boundary, remains of buildings and runways have been recorded within the planning application boundary on aerial photography and through geophysical survey (AECOM011).

As with earlier periods, the area covered by the study area is dominated by agricultural land, with the main villages representing the main focus for settlement. The practice of removing hedgerows continued into the 20<sup>th</sup> century, with the number of large fields continuing to grow by the time of the Third Edition Ordnance Survey mapping of c.1909/1910. However, there does seem to have been a slowing of this practice in many areas, with the field systems recorded in the first quarter of the 20<sup>th</sup> century still visible in the present landscape.

Perhaps the largest impact on the landscape was the intensive industrialisation of agriculture which followed the Second World War, which resulted in the loss of vast areas of ridge and furrow cultivation. Aerial photography dating to the 1940s shows large areas of ridge and furrow cultivation surviving as earthworks, but in the years that followed the Second World War much of this was lost as a result of ploughing, with remains only surviving as sub-surface features and apparent through geophysical survey.

#### 9.5.3.4.7 Undated assets

There are eleven undated assets within the study area. Three of these are soil and cropmarks (MHU10864; MHU10987 and MHU8009) and three are ditched enclosures or field systems (MHU1148; MHUS1158, MHU 325; MHU3338). Although the form of these could quite possibly indicate prehistoric or Roman features, lack of positive dating evidence makes definitive conclusions impossible. An unclassified mound (MHU2867) also suggests the location of a possible barrow but again, no dating evidence is available to reach a firm identification. Other undated features include ditches and ponds at Newholme Marsh (MHU10568), an unidentified settlement site (MHU7347) south of Market Weighton and the street known as Old Lane, Brind (MHU7757).

#### 9.5.3.5 Walkover Survey

An archaeological site visit of the Section 3 area was undertaken on the 8<sup>th</sup> and 9<sup>th</sup> November 2021, with most sections of the alignment visited and specific areas walked. These latter areas included the Tollingham area where significant Iron Age and Roman remains have previously been encountered, and a concentration of Roman pottery was observed near the field boundary of Fields 159 and 161. The previous CCS scheme also covered areas of the current Scheme and as such was subject to an archaeological walkover survey in 2013, and data published as part of the DCO application was also reviewed as part of the current assessment (Ref 9-21).

### 9.5.3.6 Aerial Photographs and LiDAR

A review of aerial photography and LiDAR data for the Section 3 area largely confirmed the presence of previously identified heritage assets, or provided additional information on previously recorded sites, and confirmed that the landscape through which the alignment passes has been largely agricultural since at least the end of the Roman period. More detailed information on previously recorded assets included the extensive cropmark site recorded in Fields 142 to 147 which represents part of the Iron Age/Romano-British settlement and field system near Common Farm (MHU7374 & MHU63). Here the review undertaken for the current assessment revealing additional cropmarks to the west of Cliffe Road, near the line of a possible Roman road (MHU63). More extensive remains were also recorded in Field 164 at a previously recorded a possible Iron Age/Romano-British site near Bursea Lodge (MHU21676).

A number of potentially new sites were recorded. These were largely linked to post-medieval agricultural land use and include traces of former field boundaries, ridge and furrow, and drainage features (AECOM018; AECOM020; AECOM022; AECOM023). Some of these seem to predate the First Edition OS mapping of the area and could therefore be 18<sup>th</sup> century or earlier in date.

The most significant site encountered appears to be the remains of an Iron Age/Romano-British settlement and associated enclosures recorded as cropmarks in Field 179 (AECOM026). This site was also confirmed through geophysical survey, although the remains appeared less clear which may suggest buried features have been damaged by ploughing.

Possible fragmentary remains of a field system were also noted in Field 173 and 174 (AECOM030), although geophysical survey in this area suggested the anomalies were field drains/more recent agricultural remains.

The full report covering the review of aerial photographs and LiDAR data can be found as **Appendix 9C**.

### 9.5.3.7 Geophysical Survey

A programme of geophysical survey was undertaken as part of the current scheme, with the survey covering a 60m wide corridor, where access and ground conditions allowed. This survey identified a number of field boundaries recorded highlighting the agricultural nature of the landscape, as well as ploughed out ridge and furrow. Most of the field boundaries can be observed on 19<sup>th</sup> century mapping, although a limited number may be earlier and represent medieval/post-medieval field systems.

The survey also provided some additional clarity on assets that had been previously identified and recorded on the HER through aerial photography, although in some areas of known archaeology the geophysical anomalies were not as clear as expected. This included the area of previously recorded Iron Age and Romano-British metal working and pottery production near Tollingham in Fields 154-162 (MHU10836; MHU22633; MHU1161; MHU1128). A similar situation was observed in Field 179 where aerial photography identified an extensive settlement site and associated field system assumed to date to the Iron Age/Romano-British period (AECOM026). It is possible that the lack of visibility in the geophysical survey data is a result of features being damaged by ploughing, and further investigation will be needed to determine the level of preservation across these areas of known archaeology.

Data published in the public domain as part of the CCS DCO application was also reviewed as part of the current scheme due to both route corridors following the same/very similar alignments (Ref 9-36). This survey also noted a landscape dominated by agricultural remains with a number of former field boundaries visible on the First Edition OS mapping of the area recorded, as well as field drains and post-medieval plough marks. The survey also confirmed the presence of a number of previously recorded heritage assets, and in broad terms, geophysical survey data mirrored agricultural boundaries seen in the historical mapping.

The full geophysical survey report can be found in **Appendix 9D**.

### 9.5.3.8 Metal Detector Survey

The targeted metal detector survey within Section3 examined a total of seven fields, with significant finds recovered from four of the fields. These were all dated to the Roman and medieval periods, with

the exception of one area where a concentration of 20<sup>th</sup> century military buttons were recovered (Fields 178/179).

As with other areas where the metal detector survey was undertaken, the finds recovered generally corresponded with sites that had been previously recorded through aerial photography or geophysical survey. This included Roman items from Fields 178 and 179 where aerial photography and geophysical survey had identified a possible settlement site. Pottery was also identified in these fields during the metal detector survey and most of this dated to the Roman period, although one sherd was thought to be prehistoric. A single sherd of medieval pottery (of Humberware) was also recovered.

Medieval material once again included a small number of coins (Field 179) and a spindle whorl (Field 164). These were recovered from areas of ploughed out ridge and furrow and are therefore assumed to represent stray losses.

A concentration of 20<sup>th</sup> century buttons in Field 178 and 179 are unexplained and to date no evidence for a temporary military camp here has been located. The buttons (34 in Field 178 and five in Field 179) were mainly “General Service” buttons, but others included units such as the Royal Marines, the Yorkshire Regiment, and the Irish Regiment. A number of US Army buttons were also recovered, as well as two New York Military Police buttons. It has been suggested that the buttons might be the result of old uniforms being ploughed into the soil as a fertiliser/method of enrichment (D. Harrison *pers. comms.* 29<sup>th</sup> April 2022). Historically wool was used as a source of soil enrichment, and the uniforms dating from the period of the buttons would have been largely wool, so this theory was first brought forward for a similar site in Bedfordshire (D. Harrison *pers. comms.* 29<sup>th</sup> April 2022).

No concentrations of finds that might suggest a previously unrecorded site were identified as part of the survey, with the exception of the military buttons that might represent some form of temporary military camp. However, the mixed nature of the buttons might also point to a different reason for the deposition of the assemblage, such as dumps of material.

Apart from a single sherd of pottery, no items dating to the prehistoric period or to the early medieval period were recovered as part of the metal detector survey. A full review of the data can be found in **Appendix 9E**.

### 9.5.3.9 Assessment of Baseline

This section presents an assessment of the heritage value and the contribution of setting of designated and non-designated assets within the study area. It also presents an assessment of the archaeological potential of the area within the planning application boundary. This section identifies whether there is the potential for impact as a result of the proposed development and identifies which assets are subject to assessment in Section 9.6 of this chapter.

#### 9.5.3.9.1 Designated Heritage Assets

Within the study area of Section 3 there are five Grade II listed structures. These comprise two farmstead assets, two are railway assets and the other is industrial.

The Grade II listed Common Farmhouse (1031352) and the associated Barn at Common Farmhouse (1083339) are located approximately 46 m north of the planning application boundary. The buildings have architectural and historic interest as an example of a mid-18th century farmstead that has seen limited alteration. They have group value with each other and form key elements of each other's setting. The farmhouse and threshing barn are mid-18<sup>th</sup> century. They are constructed in red-brick with pantile roofs. The house is two-storey as the threshing barn is two-storeys in height, but is a signal large space internally. The farmhouse is located on the north axis of a loose L-shaped courtyard formed by the barn on its west side. The farmstead is located at the Burse Lane Ends crossroads and the barn is aligned onto the road, whilst the house is set back behind the farmyard and garden to its south-west side. A low brick wall encloses the southern end of the farmyard with a hedge a short distance further south along the road. The farm therefore retains much of its original setting and this contributes to the historic integrity of the buildings. It provides the visual and functional context for the farmhouse and contributes to understanding of its purpose. The principal elevation of the farmhouse faces south-west where planting by the side of the road partially screen long views out, but regardless of this the farm itself is



experienced within the rural farmland landscape. The farmland setting contributes to the historic interest and understanding of the farmhouse and barn through providing their functional context.

There is the potential for temporary impacts to the assets through change to their setting during construction. These assets are therefore assessed in Section 9.6 of this ES chapter.

The Grade II listed North Howden Station and Station Master's House (NHLE 1233349) and its accompanying Grade II listed signal box (NHLE 1346759) are located approximately 173 m south of the planning application boundary. The station building was constructed in 1840 for the Hull and Selby Railway line and it is shown on the 6" OS map of 1855. The signal box was added to the railway in 1873, and is shown for the first time on the 25" map of 1890. The station is still active. It is part-two storey and part single storey in red brick with sandstone detailing. The signal box is listed due to its group value with the station. It is a type 1A signal box as defined by the North Eastern Railway, Southern Division. The signal box is of brick to the ground floor with regularly spaced arched windows, whilst the upper floor has larger 12-pane Yorkshire sliding sash windows. The buildings have architectural and historic interest as an example of mid-19th and late-19th century rural railway infrastructure. The buildings have group value and a shared setting that is informed by the existing historic railway and level crossing. The 6" OS map of 1855 also shows a railway inn (MHU14520), to the south-west side of the line, and an inn and posting house (MHU14519), to the north-east side of the line. Both of these non-designated buildings are still extant, but neither is now an operational inn or public house. The buildings have group value with the station buildings as contemporary buildings that were sited there to take advantage of passing trade from people using the railway. They contribute to the station's historic interest. The railway line contributes to the assets' heritage interests through aiding understanding of their function.

The proposal is to HDD under the railway line approximately 270 m west of the station. As there will be no physical impacts to the assets or to the railway line that forms an important aspect of their settings, it is not considered likely that the proposed development will result in significant effects to the assets through temporary change to their setting during construction.

The Grade II listed Windpump (NHLE 1160639) at the former Howden Brick and Tile Works is located approximately 245 m north of the planning application boundary. It was part of the former pumping mill to the brick yard, which was added to the site in 1873. It consists of a tapering tower built in brick laid to header bond, with a timber cap and sails and cast-iron fittings. It is approximately 6 metres high with an arched entrance and timber staging above. Inside the structure the central vertical pump rod remains. The pump drained the adjacent clay pipe and discharged water into a ditch several hundred yards away. The windpump has historic and architectural interest in its design and technological innovation as a rare example of a wind-powered industrial pump.

The setting of the wind pump is the former brickyard, although no buildings associated with the brick yard remain. Its location is now marked by a pool of water in the place of former clay extraction. This provides an understanding of the wind pump's original purpose, the water body and surrounding mature trees therefore contribute to the aesthetic architectural interest of the building. The asset is not prominent in the surrounding landscape due to the existing vegetation on the former brick works site. Although the goods from the brickworks were most likely transported on the railway to the south, the functional and visual setting of the pump, as part of that complex, does not extend to the station or to the planning application boundary.

Due to the land within the planning application boundary not providing a contribution to the asset's heritage value, the proposed development does not have the capacity to impact upon the asset through temporary change to its setting.

#### 9.5.3.9.2 Non-designated Heritage Assets

There are 21 non-designated farms throughout the study area which are shown on 19<sup>th</sup> century OS maps. The most common arrangement comprising either a farmhouse forming a corner of a planned courtyard farm or a detached farmhouse located to one side of a U-shaped or a full square courtyard farm. The farmsteads generally have gardens to the front of the farmhouse's principal frontage which look out over farmland. The farms have heritage value as examples of 19<sup>th</sup> century farms, several of which are still in operation and which retain the majority of their historic farmstead ranges and the farmhouse alongside more modern agricultural buildings. Their settings are informed by their location

within farmland which contributes to their historic interest by providing their functional setting and aiding understanding of the asset. Views from the farmhouses over farmland also contribute to understanding of the assets and their aesthetic qualities.

A description of these farms and their settings is contained within **Appendix 9F**. The following assets may be affected and have been taken forward for assessment: High Common Farm (AECOM086), Duck Nest (AECOM090), Skiff Farm (AECOM092), Park House (AECOM100), Warp Farm (AECOM101), and Beechtree Farm (AECOM101).

Top Cottages (AECOM103) are located approximately 135 m north-west of the planning application boundary. They were shown on the first edition 6" map of 1855 as two cottages with yards to their north-east side and a single outbuilding, surrounded by trees to the south-east and south-west sides. On the 25" OS map of 1890 and on modern maps they are shown as three dwellings. The cottages now have gardens to the south-west side and smaller outbuildings and a field to the north-west, the former outbuilding having been demolished. Mature trees are still present on the south-east and south-west sides of the buildings. The cottages have heritage interest as an example of a set of estate farm cottages probably used by farm labourers in the 19<sup>th</sup> century. Their setting is their gardens and their surrounding farmland which provides understanding of their siting. Due to the degree of screening provided by the existing mature trees to the south-west and south-east sides of the asset, it is not considered likely that the proposed development would result in significant effects to the asset.

The Royal Oak Public House (MHU11782) is located approximately 180 m west of the planning application boundary. It appears for the first time on the 25" OS map of 1890 and dates to the late 19<sup>th</sup> century. The public house is aligned onto the A614 with a principal two-storey range flanked by single story in line wings. The building has historic and architectural interest as a late-19<sup>th</sup> century rural roadside public house; however this has been diminished by its conversion that erodes understanding of its historic purpose. The setting of the asset is informed by its rural and roadside location. The surrounding green fields contribute to this. It is not considered likely that the proposed development will result in significant effects to the asset during construction.

Sleights Cottage (Poplar Farm) (AECOM104) is located approximately 55 m west of the planning application boundary. It is shown on the 6" OS map of 1855 as a single dwelling with a garden to its south-west side. The cottage is of two storeys, constructed in rendered brick under a pantile roof with a brick ridge stack. There is a single-storey projection on the north side also with a pantile roof. The building has historic and architectural value as an example of a 19<sup>th</sup> century rural roadside cottage and its name suggests that it was an estate cottage of the nearby Sleights House which was located a short distance to the north (now demolished). The asset's rural location with surrounding green fields contributes to the understanding of its historic interest. Due to the principal elevation of the cottage facing south-east there is the potential for temporary impact to the asset through change to its setting during construction. It is therefore assessed in Section 9.6 of this ES chapter.

There are non-designed buildings in Brind located approximately 300 m north of the planning application boundary at its closest extent, however these are all adequately screened from the proposed development by the existing railway line which has mature trees along its boundaries. It is not considered that the proposed development will result in significant effects to non-designated built heritage assets in Brind and they are therefore not considered further in this ES chapter.

There are non-designed buildings in Newsholme located approximately 180 m north-west of the planning application boundary at its closest extent, however the settings of these assets are defined by the place within the settlement and its streetscapes. They are all adequately screened from the proposed development by intervening buildings and boundary planting. It is not considered that the proposed development will result in significant effects to non-designated built heritage assets within Newsholme and they are therefore not considered further in this ES chapter.

There are non-designated assets throughout the study area, with a number of sites recorded within the planning application boundary. As with previous sections, the majority of these have been recorded as cropmarks through aerial photography, or as buried remains through geophysical survey. Most of these features appear to represent the remains of field systems, enclosures, and trackways, although a number of possible settlements and burials have also been noted, and the majority have been tentatively dated to the Iron Age and Roman periods. They are considered to have archaeological and

historic interest as they could provide information linked to the development of settlement, as well as the past populations who lived in the area. In general, they are considered to be of medium or low value, and as they are within the planning application boundary there is the potential for physical impacts on the assets. Assets within Section 3 that have been taken forward for assessment are MHU63, MHU7347, MHU10864, AECOM032, MHU8009, MHU10836, MHU22633, MHU1128, MHU1161, MHU21676, AECOM031, MHU3198, MHU22505, AECOM022, MHU9207, MHU8805, and AECOM019.

Areas of ploughed out ridge and furrow, as well as former field boundaries recorded through geophysical survey and evident on 19<sup>th</sup> century historic mapping, are considered to be of negligible value and have not been taken forward to assessment.

#### 9.5.3.9.3 Previous Ground Disturbance

The planning application boundary within Section 3 passes through agricultural land, with settlements and farmsteads falling outside of the planning application boundary. As a result, large scale development and ground disturbance within the planning application boundary is limited to agricultural practices with arable cultivation being the most common form of agriculture taking place, although a number of areas of biomass and turf cultivation were noted as part of the walkover survey. As with the wider East Riding landscape, arable agriculture has resulted in the loss of earthwork remains since the Second World War, with features such as ridge and furrow now largely levelled within the study area. This intensive ploughing has also potentially had an impact on buried remains, including the Iron Age and Romano-British field systems that are prevalent throughout the East Riding, although the geophysical survey undertaken as part of the scheme has identified buried features surviving in a number of areas including Field 179, as well as around Tollingham.

Previously archaeological work has also been limited within the planning application boundary, as well as the study area, and is largely limited to small episodes of archaeological monitoring or watching briefs. The eastern end of the Asselby to Pannal pipeline was located near the River Ouse crossing, although no remains were recorded through geophysical survey or trial trenching (Ref 9-53).

#### 9.5.3.9.4 Potential Archaeological Remains

##### *Palaeoenvironmental Remains*

Previous works undertaken with the Vale of York landscape, which falls within Section 3, have identified remains of palaeochannels and former river channels, as well as waterlogged remains, and research has shown that the area has been subject to dramatic changes in water levels over the last 20,000 years (Ref 9-64). The low-lying nature of the study area, as well as the relatively high-water table and the deliberate deposition of deposits through warping, means that there is the potential for waterlogged and palaeoenvironmental deposits to survive through most areas of the Section 3 planning application boundary. The potential is assessed to be medium.

##### *Early Prehistoric and Bronze Age Remains*

Remains dating to the early prehistoric period (Mesolithic through to the Bronze Age) are limited within the planning application boundary, as well as the study area, with most assets dating to this period being chance finds lithics/stone tools. However, archaeological investigations within the study area have been limited, and work within the wider East Riding landscape has revealed prehistoric remains from the late palaeolithic/Mesolithic through to the Bronze Age. Furthermore, there is the potential that later agricultural practices, such as warping, as well as episodes of flooding due to raised water levels could have masked earlier remains. Many of the remains from these periods, with the exception of burial mounds/cairns, are relatively ephemeral and are not easily identified through geophysical survey or aerial photography with most settlement sites identified through flint scatters. The potential for new funerary remains is considered to be low, while the potential for further finds of lithics is considered to be medium.

##### *Iron Age*

Extensive remains dating to the Iron Age have been recorded within the planning application boundary, as well as the study area, with significant concentrations around Tollingham and Welham Bridge. While clear evidence of settlement activity is limited, the extensive field systems and trackways that are associated with settlement remains are well represented through geophysical survey and aerial photography, while evidence of industrial activities such as iron production has also been noted. In most cases the geophysical survey results correspond with the cropmarks recorded on aerial photographs,

although in some areas the geophysical survey has identified assets not previously recorded through aerial photography. The potential for encountering further remains dating to this period is considered to be low in areas where geophysical survey has been undertaken, and medium in areas where geophysical survey has not been undertaken.

#### *Roman*

A continuation of the type/form of settlement activity from the Iron Age into the Roman period means that differentiating between sites can be difficult. Many sites may also have continued in use into the Roman period, and as a result the visibility of Roman remains is the same as Iron Age remains, with field systems, trackways, and enclosures being well represented through geophysical survey and aerial photography. The potential for encountering further remains dating to this period is considered to be low in areas where geophysical survey has been undertaken, and medium in areas where geophysical survey has not been undertaken.

#### *Early Medieval*

As with previous sections, evidence for early medieval activity within the planning application boundary, as well as the study area, is limited. It is assumed that most activity dating to this period is focused within the settlements that still exist, with the planning application boundary passing through the field systems that surrounded the settlements. Geophysical survey has not identified any features suggestive of early medieval activity, while the metal detector survey failed to identify any concentrations of early medieval finds/objects. As a result, the potential for encountering previously unrecorded early medieval remains is considered to be low.

#### *Medieval*

As with the early medieval period, evidence of medieval activity is also limited within the planning application boundary as well as the study area. This is again due to the planning application boundary passing around the settlements and instead running through the field systems that surrounded them. Extensive remains of ploughed out ridge and furrow and field boundaries that are assumed to date to the medieval period and later has been recorded through aerial photography and geophysical survey providing further evidence of the planning application boundary passing through the agricultural lands associated with settlements. As a result, the potential for encountering previously unrecorded medieval settlement remains is considered to be low, although the potential for encountering further agricultural remains such as ridge and furrow or field boundaries is considered to be medium.

#### *Post-Medieval*

The pattern of settlement being focused on the villages, hamlets, and farmsteads through which the planning application boundary passes continues in the post-medieval, with sites dating to this period largely limited to agricultural remains. These include ridge and furrow and field boundaries, as well as associated features such as retting ponds, and sluice gates/drains linked to warping, all of which have been identified within the planning application boundary through aerial photography, geophysical survey, and map regression. As a result, the potential for encountering previously unrecorded post-medieval settlement remains is considered to be low, while the potential for encountering further agricultural remains such as ridge and furrow or field boundaries is considered to be medium.

## **9.5.4 Section 4 – River Ouse to Drax Substation**

### **9.5.4.1 Physical Site Conditions**

#### **9.5.4.1.1 Topography**

The study area of Section 4 of the scheme is situated to the north of Drax village and to the south-west of Barmby on the Marsh in North Yorkshire. Its eastern and northern extent is formed naturally by the River Ouse, which is aligned in an undulating orientation from the south-east to the north-west. The area of the proposed converter station site and the study area is located on a natural flood plain next to the river with the ground relatively flat, gently sloping from 6 m aOD from the north and west to 5 m aOD towards the east and south towards the river. Drax power station is located to the immediate west of the Section 4 study area and is set upon an island of slightly higher ground measuring a maximum of 8 m aOD.

### 9.5.4.1.2 Geology

Section 4 is located on bedrock geology of Sherwood Sandstone (Ref 9-22). Superficial overlying geology is formed from alluvium following the route either side of the River Ouse consisting of clay, silt, sand and gravels. Further to the west and the Drax power station, superficial deposits consist of formations of Hemingbrough Glaciolacustrine clay (Ref 9-22).

The majority of the Section 4 area is dominated by slowly permeable seasonally wet loamy clayey soils, although the area near the River Ouse changes to loamy clayey soils with naturally high groundwater (Ref 9-24).

A detailed review of the geology can be found in **Chapter 10: Geology and Hydrology**.

### 9.5.4.2 Historic Landscape Characterisation

The North Yorkshire and Lower Tees Valley Historic Landscape Characterisation defined the landscape in historical terms, creating a mapped analysis of the historic components of the landscape (Ref 9-65). Drawn to a standard methodology, the landscape is divided into historical landscape character types (HLC) which sit within a series of “broad types”. As with Sections 1-3, the landscape of Section 4 is dominated by agricultural land with arable cultivation being the dominant land use both now and historically. The landscape is very similar to that found in Section 3 due to it falling within the Value of York, with the exception being Drax Power Station located near the western end of the planning application boundary.

A definition of both the broad types and the HLCs that are present within the study area of Section 4 are given in **Table 9-9** below.

**Table 9-9: HLC types within Section 4**

HLC ID	Location description	HLC Type	HL CC ode	Broad Type
HNY5266	South-east area of Section 4 adjacent to the river	Modern improved fields	EL22	Enclosed Land
HNY5289	Large area of Section 4 including the central and northern area including Drax Abbey farm and the priory remnants	Modern improved fields	EL22	Enclosed Land
HNY5665	South-west area of Section 4	Unknown planned enclosure	EL17	Enclosed Land
HNY5566	Central and NE area of Section 4 bordering the river	Unknown planned enclosure	EL17	Enclosed Land
HNY5569	Narrow area at the western edge of Section 4 incorporating the Dax power station further to the west	Utilities	IND2	Industrial
HNY5668	Area bordering the south of Section 4 including Drax village	Linear village	SM3	Settlement

### 9.5.4.3 Designated Heritage Assets

There are no designated heritage assets within the planning application boundary,

There are no designated assets within the study area, although a limited number of designated assets have been recorded immediately outside of the study area. These are largely medieval in date and are focused to the south near the settlement of Drax, and include the Grade I listed Church of St Peter and St Paul (1148397) which also has a Grade II listed cross base in its churchyard (1174116). Scheduled monuments include the remains of Castle Hill (1017455) and Scurff Hall (1017485), while the remains of Drax Priory are located almost 1km to the north of the proposed converter station site (1016857). There are no World Heritage Sites, conservation areas, registered parks/gardens or registered battlefields.

## 9.5.4.4 Archaeological and Historical background

### 9.5.4.4.1 Prehistoric (up to AD43)

There are no prehistoric finds or features recorded on the North Yorkshire HER within the study area of Section 4. A review of Section 3 immediately to the north-east across the River Ouse shows some limited evidence of prehistoric activity. Evidence from field survey undertaken as part of the Humber Wetlands project has shown that large areas around the River Ouse were river floodplain during the early prehistoric period which would have been exploited in both the Mesolithic and Neolithic periods, with the majority of activity recorded focused on the raised areas that would have represented dry ground (Ref 9-64). Studies on the extent of the wetlands during the prehistoric period have noted that Drax was probably located on the edge of the wetland, while areas such as Asselby would have been small 'islands' surrounded by the wetlands (Ref 9-64). In addition to the wetlands limiting the opportunity for human activity, the process of warping from the mid-post-medieval period onwards may have covered and occluded many of these earlier sites (Ref 9-21). This would be applicable for the later periods preceding the medieval periods.

Both geophysical survey and aerial photographic interpretation have identified potential features that could be prehistoric in date. These include remains of a possible enclosure/field system within the planning application boundary immediately adjacent to the proposed converter station site recorded during the geophysical survey (AECOM015), and a possible Iron Age enclosure recorded to the south of the converter station site through aerial photography (AECOM053).

### 9.5.4.4.2 Roman (AD43 – 450)

There are no Roman finds or features within the study area of Section 4. As noted in Section 3 above, a large number of Roman and Iron Age sites associated with metal working have been recorded in the wider Vale of York landscape, and there is evidence for water courses such as the Ouse being used as transport and communications during this period (see Ref 9-42 and Ref 9-64). Although not within the study area, a Roman villa has been noted to the immediate south of Scurff Hall at Scurff Hall Farm (MNY24803), while ditch/field systems have been recorded further to the south (MNY36026). The evidence suggests that while settlement during this period in the wider landscape was not uncommon, especially near watercourses, that land through which the planning application boundary passes was probably waterlogged/wetland for large periods of time, with the better Wolds landscape used for agriculture.

### 9.5.4.4.3 Early Medieval (450-1066)

There are no early medieval finds or features within the study area of Section 4. However, as has been discussed previously in Sections 1-3, many of the settlements in the wider landscape probably had their origins in the early medieval period, if not earlier, and the nearby village of Drax is no exception to this. Drax is mentioned in the Domesday Book as being within the Hundred of Barkston, and was one of the smaller settlements with "6 villagers, a priest and 2 freemen" (Ref 9-66), although a settlement is noted from as early as 959 when Drax was referred to as *Ealdedrege* (Ref 9-43).

The name Drax is thought to come from the Scandinavian *drag*, or Old English *draeg*, both of which mean 'portage' and suggest the settlement was originally on the edge of the River Ouse or the wetlands rather, than being surrounded by fields as it currently is (Ref 9-67). This is again a result of changes in sea level/water level, where rises in sea levels after the Roman period would have created marsh land or intertidal areas unsuitable for habitation in large areas of the Vale of York.

While physical evidence for early medieval activity is limited, traces of an early chapel dedicated to St Wilfred were recorded during excavations of a possible Roman villa a short distance to the south of the study area near Scurff Hall (MNY10083), although no remains have been recorded within the planning application boundary or the study area.

### 9.5.4.4.4 Medieval (1066-1500)

There is one non-designated heritage asset dating to the medieval period within the study area, this being an area of ridge and furrow cultivation to the north of the planning application boundary near the River Ouse (MNY10117).

While there is limited evidence for medieval activity within the study area, the medieval period is well represented in the wider landscape with a number of designated assets in the surrounding landscape. These include the scheduled Augustinian Priory to the north-west of the study area (1016857) which was owned by William Paynel during the early 12<sup>th</sup> century and survived until it was suppressed in August 1537 (Ref 9-68). Elements of this site survive as earthworks, although the neighbouring Drax Abbey Farm seems to overlie sections of the site, while the fishponds have been infilled during the 20<sup>th</sup> century. The Grade I listed Church of St Peter and St Paul, which is located in Drax some 800 m to the south-east of the proposed converter station site, has origins in the early 13<sup>th</sup> century although it has been subject to a number of alterations in the following centuries (1148397). Outside the church and to the immediate south is an associated Grade II listed stone cross monument (1174116), while the scheduled site of Scurff Hall is located to the east of Drax (1017485). This monument includes the buried and earthwork remains of the medieval moated manor house which was originally assarted (reclaimed from the fen and legally claimed) by the del Scurth family in 1286. Drax Castle earthworks, to the south of Drax, also highlight the focus of activity around Drax (1017455), and it seems likely that the landscape through which the planning application boundary passes was used for agriculture once the water levels had dropped enough to allow them to be exploited. This is supported with the only asset recorded within the study area being traces of ridge and furrow cultivation (MNY10117).

#### 9.5.4.4.5 Post-medieval period (1500-1900)

Development in the landscape of this area was most prevalent in this period with the growth of both agriculture and settlement. This was propagated by the increased land drainage whereby flood plains were crossed with ditch systems and areas were subjected to systemic warping, and the planning application boundary is dominated by agricultural land that subject to this method of land improvement.

However, while this activity is well represented in the wider landscape, there are only three assets recorded within the study area. These include the site of Wren Hall which lies immediately east of the proposed converter station site (AECOM012), a railway line (AECOM013), and Black Tom Staith, a mooring point on the banks of the River Ouse (AECOM014).

Drax is described in 1848 as a small parish on the River Ouse which had been much improved by drainage and which was comprised of both arable and pastureland, as well as woodland (Ref 9-69). The Topographical Dictionary of England (Ref 9-69) describes that a grammar school was established in 1669 by Charles Reed (the present-day Reed School) along with six alms houses. Two railway lines served Drax. The Drax Hales Railway station was on the North Eastern Railways Selby to Goole line (closed in 1964 by the Beeching cuts). Drax Abbey was on the Hull, Barnsley, and West Riding Junction Railway (closed in 1932) by the London and North Eastern Railway, and this line passed through the underground DC cable route to the east of the proposed converter station site (AECOM013). While the alignment of the Hull and Barnsley Railway can be traced as an earthwork to the north and south of the planning application boundary, the section in the area of the scheme has been levelled and removed, although buried remains possibly survive as the feature was recorded by both the geophysical survey and the aerial photographic review.

Examination of the 1840 Tithe Maps show the village of Drax surrounded by agricultural land next to the River Ouse with Wren Hall, Drax Hall and Scurff Hall, as well as Drax Abbey, clearly depicted. The roadways servicing the village are still present today with the main east-west and north-south road conjunction, with the settlement pattern still evident. A review of the First Edition OS mapping c.1853 shows little change to the layout of the village, with the field systems closest to the River Ouse largely resembling those surviving today. The field systems around Wren Hall are also recognisable, although many of the smaller fields (including the Converter Station site) have had field boundaries removed to form larger units. The importance of the River Ouse as communication and trade link is also recognised with within the study area with 'Black Tom Staith' noted to the south of the point at which the planning application boundary crosses the Ouse (AECOM014).

The Second Edition OS mapping of 1890 (1:2500) provides a similar representation of the study area, with the planning application boundary dominated by agricultural land.

#### 9.5.4.4.6 Modern period (1900-present)

Only one non-designated asset dating to the modern period is found within the study area and this is a boundary ditch running into the River Ouse to the north-east (MNY10116) identified on aerial photography.

The development of the settlement of Drax and the study area differed little from the layout seen in the 1840 Tithe Maps with agricultural land still dominating the land surrounding the village. OS maps from 1952 (1:10,560) show the site of the Drax Hales station and the railway line aligned north-west/south-east, which ran to the south of the study area. The Selby to Goole railway line marked the last railway line to be constructed in the study area. Opened to freight in 1910, and passengers in 1912, the line finally closed in 1964 (Ref 9-70). The 1972 OS map (1:2500) shows both railway lines as dismantled with Drax Power Station clearly to the west. Signs of increased settlement with residential houses are seen spreading out from the centre of Drax village towards the power station. Drax Power Station came online in 1974 after the Selby coalfields were discovered in 1967 and was further extended in 1986 (Ref 9-35).

One modern field boundary is recorded at the edge of the study area (MNY10116) identified on aerial photography, while both the geophysical survey (**Appendix 9D**) and aerial photography interpretation (**Appendix 9C**) undertaken as part of the current scheme have noted a number of former field boundaries.

#### 9.5.4.5 Walkover Survey

An archaeological walkover survey of the current scheme was undertaken on the 8<sup>th</sup> November 2021 and included most sections of the route corridor as well as the converter station site.

This survey confirmed that there were no heritage assets surviving as earthworks or above ground features in the proposed converter station site, or within the planning application boundary, and also noted that the converter station was relatively well screened to the south, east, and north. Tree cover between the proposed converter station and Drax village also appeared to block/limit any views of the proposed converter station, or the existing power station, from designated assets including the Grade I listed church (LB1148397).

It also noted that Wren Hall (AECOM012), located on the north side of the proposed converter station site, survived as a well preserve complex and was currently undergoing some improvement works including vegetation clearance, while the former railway line in this area had been removed with the fields returned to agriculture (AECOM013).

While traces of ridge and furrow ploughing surviving as earthworks were observed in the fields immediate adjacent to the settlement of Drax, no remains were identified in the fields through which the current scheme passes.

The previous CCS scheme also covered areas of the current Scheme and as such was subject to an archaeological walkover survey in 2013 (Ref 9-21). As a result, data collected as part of that survey, and made available to the public as part of the DCO application, was also used to assess the landscape, and archaeological potential.

#### 9.5.4.6 Aerial Photographs and LiDAR

A review of aerial photography and LiDAR data for the Section 4 area identified a number of assets. These included a linear feature surviving as a cropmark in Field 214 (AECOM017), which appears to correspond with a footpath and field boundary recorded on the First Edition OS plan of the area. A possible Iron Age enclosure was also recorded to the south of the proposed converter station site (AECOM53).

The review also noted the alignment of the Hull, Barnsley, and West Riding Junction Railway as a cropmark (AECOM013), although the feature has been largely removed with the land returned to agriculture within the planning application boundary.

The full report covering the review of aerial photographs and LiDAR data can be found as **Appendix 9C**.



### 9.5.4.7 Geophysical Survey

A programme of geophysical survey was undertaken as part of the current scheme, with the survey covering a 60m wide corridor, where access and ground conditions allowed. This survey identified a number of field boundaries recorded highlighting the agricultural nature of the landscape, as well as ploughed out ridge and furrow. Most of the field boundaries can be observed on 19<sup>th</sup> century mapping, although a limited number may be earlier and represent medieval/post-medieval field systems.

The survey also identified a small number of anomalies that may suggest previously unrecorded archaeological features. These include a possible enclosure at the proposed Converter Station site (AECOM015), as well as a possible feature in Field 215 (AECOM016). The size and form of this latter site might suggest a moated manor house or similar, of which a number have been recorded in the surrounding area.

A programme of archaeological geophysical survey was also undertaken as part of the CCS scheme, and data published as part of the DCO application was reviewed due to sections of the CCS route and SEGL2 route overlapping (Ref 9-36). This survey also recorded a number of former field boundaries that are visible on the First Edition OS mapping of the area, as well as field drains and post-medieval plough marks, and also confirmed the presence of a number of previously recorded heritage assets. These included possible fishponds near Drax Priory (CCS Asset Reference Number CT25), although these fall outside of the current study area. In broad terms, geophysical overview of the study area around Drax mirrored agricultural boundaries seen in the historical mapping, and represents a landscape dominated by arable agriculture.

The full geophysical survey report can be found in **Appendix 9D**.

### 9.5.4.8 Assessment of Baseline

This section presents an assessment of the heritage value and the contribution of setting of designated and non-designated assets within the study area. It also presents an assessment of the archaeological potential of the area within the planning application boundary. This section identifies whether there is the potential for impact as a result of the proposed development and identifies which assets are subject to assessment in Section 9.6 of this chapter.

#### 9.5.4.8.1 Designated Heritage Assets

##### *Scheduled Monuments*

There are no designated assets within the study area, although a limited number of designated assets have been recorded immediately outside of the study area. These are largely medieval in date and are focused to the south near the settlement of Drax. Scheduled monuments include the remains of Castle Hill (1017455) and Scurff Hall (1017485), while the remains of Drax Priory are located to the north of the proposed converter station site (1016857).

The scheduled remains of Drax Priory are located just over 1 km north of the planning application boundary, adjacent to the site of Drax Abbey Farm (1016857). The Augustinian priory was founded in the 12<sup>th</sup> century, and operated until the Dissolution of the Monasteries in 1535, although it was noted as being a relatively poor establishment due to flooding and poor land next to the River Ouse (Ref 9-71). Above ground remains of the priory have not been recorded, although traces of features have been noted as earthworks, while geophysical survey undertaken as part of the CCS project identified possible fishponds (Ref 9-36). The remains have archaeological and historic interest as they could provide information on the community who lived and operated the complex, as well as the development of the site. It is considered to be of high value. The current scheme will, however, not result in physical impacts on the complex, which screening from existing tree cover, as well as the distance between the converter station and the asset will limit any impacts on setting. As a result the asset will not be taken forward to the impact assessment.

##### *Listed Buildings*

There are no listed buildings within the formal study area for Section 4, however, the scale of the proposed converter station at Drax dictates that assets outside the formal study area, but in proximity to the proposed converter station site, should be considered in the ES. This flexible approach takes

account of the Scoping Opinion received from Selby Borough Council. The settlement of Drax to the south of the proposed converter station site contains two listed buildings; the Grade I listed Church of St Peter and St Paul (NHLE 1148397) which has a Grade II listed cross base in its churchyard (NHLE 1174116).

The Grade I listed Church of St Peter and St Paul (NHLE 1148397) is located 600 m south of the planning application boundary at its closest extent. The church has its origins in the 12th century with alterations of the 13th, 14th, 15th, 16th and 19th century alterations. It is constructed of limestone ashlar with a slate and lead roof. It comprises an aisled nave with a south porch and north chapel, and a three-stage west tower with an octagonal spire. Internally, there are fragments of 12th and 13th century sculpture and a 12th century font, as well as several 18th century memorial slabs also present.

The church's heritage value is drawn from its architectural, artistic, historic and archaeological interest in its style, development sequence and medieval origins, and illustrative and communal historical interest in its demonstration of the central place of the church in people's lives, and settlements. There is also associative historical interest in the work of the 1230s which were for Leticia, Baroness of Drax.

The church is located within its churchyard accessed on Main Road in Drax village where it is enclosed by a low brick retaining wall. The churchyard contains upstanding grave memorials and mature trees that enclose the west north and east boundaries of the churchyard, leaving the south relatively open to allow key views of the church from the road. The churchyard is still in active use and a small extension to the graveyard has been provided to the north of the churchyard. It is not enclosed by boundary planting in the same way and has open views north that feature the existing Drax Power Station. The setting of the asset is informed by its village location and its central position contributes to understanding of its communal importance. The churchyard contributes to the architectural and historical interest of the asset by providing an element of its functional context and pleasant green backdrop to the building. It also provides the setting for the Grade II listed medieval cross base (NHLE 1174116) which has historical and artistic interest as an element of the medieval rural landscape and its association with medieval ritual and religious practices. It is located to the south of the church and comprises the square limestone plinth tapering to an octagonal base with deep rectangular mortice for the shaft and the remains of the chamfered shaft located to the side. The setting of the cross base is very much tied to the village location and its place within the churchyard and in association with the church building. Its setting does not extend to the planning application boundary.

Due to the proximity of the proposed converter station site to the Church of St Peter and Paul (NHLE 1148397), there is the potential for impact as a result of the proposed development and the asset is assessed in Section 9.6 of this ES chapter. The setting of the cross base (NHLE 1174116) is not considered to have the capacity to be impacted by the scheme and it is therefore not considered further in this ES chapter.

#### 9.5.4.8.2 Non-designated Heritage Assets

There are five non-designated farms throughout the study area which are shown on the first edition 6" OS map of 1855. The most common arrangement comprising a farmhouse forming the long axis of a planned courtyard farm. The farmsteads generally have gardens to the front of the farmhouse's principal frontage which look out over farmland with the rear of the house facing to the yard. The farms have heritage value as examples of 19<sup>th</sup> century farms, several of which are still in operation and which retain the majority of their historic farmstead ranges and the farmhouse alongside more modern agricultural buildings. Their settings are informed by their location within farmland which contributes to their historic interest by providing their functional setting and aiding understanding of the asset. Views from the farmhouses over farmland also contribute to understanding of the assets and their aesthetic qualities.

A description of these farms and their settings is contained within **Appendix 9F**. The following assets may be affected and have been taken forward for assessment: Nelly Field (AECOM105), Baxter Hall (AECOM106), Wren Hall (AECOM108), and Drax Abbey Farm (AECOM109).

Read School (formerly Drax Free School) (AECOM110) is located approximately 180m south of the planning application boundary. The school traces its history to 1667 when it was established by an endowment in the will of Charles Read, a wealthy lawyer, for the poor boys of the parish. The core of the present building was erected in 1812 and its extent is shown on the 6" OS map of 1855, with almshouses shown to the south of the building. The school was significantly extended in 1859 and the

extent of the new building is shown on the 25" OS map of 1890. This phase included the chapel. A boarding house was added to the north in 1905 and shortly thereafter the almshouses were demolished. The main school building is of three storeys in red brick in a neo gothic style. The chapel added to the complex in 1859 is of grey/buff brick with a slate roof and is purposefully contrasting the main building. It has an open belfry and wall clock to the east. The school has architectural and historical value as an example of a successful free school that demonstrates several phases of development throughout the Victorian period. The development can be linked to both changing fortunes and changing attitudes to the standards of school buildings. The school has continued in use throughout the 20<sup>th</sup> and into the 21<sup>st</sup> century and as a result has continued to develop and the use of buildings has been adapted and changed as a result. Whilst this has probably impacted upon the historic integrity of the building and fabric, it also forms part of its historical interest.

The setting of the historic school buildings has been changed significantly through the school's continued development. Further school buildings and playing fields now occupy the land to the west of the building that formerly farmland. The principal elevation of the school faces onto the road to the east where the small grounds to the front of the school are planted with mature trees, grass and low hedges. The rural location and its proximity to the settlement of Drax to the south is also an aspect of its setting as a rural school. Key views of the building are achieved from the road where its architectural and historic interest can be appreciated within the attractive grounds. These views on approach to the building also feature views of the existing Drax Power Station located approximately 1.2km to the west. This is a detracting feature of the asset's setting as it is out of scale and character with the building and has an urbanising effect.

Due to the capacity for the proposed converter station to add to the urbanising effect of the existing power station, the impact of the proposed development upon this asset is assessed in Section 9.6 of this ES chapter.

Old Lodge (AECOM111) is located approximately 780m north of the planning application boundary. It is outside the formal study area for assessment, but is included due to its proximity to the proposed converter station and in response to the Scoping Opinion received from Selby Borough Council. The building is shown on the 6" OS map of 1855, but only labelled as Old Lodge for the first time on the 25" OS map of 1890. It comprises a single-storey lodge building in red brick with a replacement pantile roof and replaced uPVC windows throughout. There was an enclosed rear yard with a brick boundary wall and this has been infilled with a lean-to style extension. The lodge building is associated with the post-medieval development of the site of Drax Priory and Drax Abbey Farm (AECOM109). It is located on Pear Tree Avenue, which on the 1855 map is named Ave Maria Lane, denoting its association with the priory and by the 25" OS map of 1890 the avenue is formally planted trees either side lining the route between the lodge and Drax Abbey Farm. The building has historic interest as a lodge associated with the Victorian development of the priory site. It also has architectural interest, but this has been significantly diminished by the replacement of all windows in the building which has affected its architectural composition and erodes understanding of the asset a historic building. The setting of the lodge is its roadside location and its proximity to the site of Drax Priory and Drax Abbey Farm. The tree-lined avenue depicted on the 1890 OS map is still readily discernible on the lane running west of the asset. As a single-story structure views from the asset are of limited importance, but views of the asset in the rural landscape contribute to its understanding as a lodge. These views feature the existing Drax Power Station which is a detracting feature of the asset's setting as it is out of scale and character with the building and has an urbanising effect.

Due to the capacity for the proposed converter station to add to the urbanising effect of the existing power station, the impact of the proposed development upon this asset is assessed in Section 9.6 of this ES chapter.

Norwoods (AECOM112) is located approximately 240 m north-east of the planning application boundary at its closest extent. It is not shown on the 6" OS map of 1855 and appears for the first time on early-20<sup>th</sup> century mapping. It likely dates to the late-19<sup>th</sup> century. It was located immediately to the east of the Hull, Barnsley and West Riding Junction Railway which has since been removed. An overbridge was provided to cross the lane adjacent to the asset. The proximity to the railway suggests a functional link between the two assets and the style of the building is of 19<sup>th</sup> century railway architecture. The building comprises a two-storey brick-built house with a cross-shaped plan. It has historic and architectural interest as a late-19<sup>th</sup> century house in a rural location. The setting of the asset is its garden and relationship to the road to its west side. The railway line has been removed, but it is discernible in

the landscape around the asset as a tree-lined path. Views from the asset feature the existing Drax Power Station which is a detracting feature of the asset's setting as it has an urbanising effect in this otherwise rural location.

Due to the capacity for the proposed converter station to add to the urbanising effect of the existing power station, the impact of the proposed development upon this asset is assessed in Section 9.6 of this ES chapter.

Only a limited number of non-designated assets have been recorded within the planning application boundary. As with previous sections, the majority of these have been recorded as cropmarks through aerial photography, or as buried remains identified through geophysical survey. Most of these features appear to represent the remains of field systems and enclosures. They are considered to have archaeological and historic interest as they could provide information linked to the development of settlement, as well as the past populations who lived in the area. In general, they are considered to be of low value, and as they are within the planning application boundary there is the potential for physical impacts on the assets. Assets within Section 4 that have been taken forward for assessment are AECOM016 and AECOM015.

Areas of ploughed out ridge and furrow, as well as former field boundaries recorded through geophysical survey and evident on 19<sup>th</sup> century historic mapping and a former railway line, are considered to be of negligible value and have not been taken forward to assessment.

#### **9.5.4.8.3 Previous Ground Disturbance**

The planning application boundary within Section 4, as with other section, is limited to agricultural land, with the settlement of Drax and other farmsteads falling outside of the planning application boundary. As a result, large scale development and ground disturbance within the planning application boundary is limited to agricultural practices with arable cultivation being the most common form of agriculture taking place. This form of agriculture has resulted in the loss of earthwork remains since the Second World War, with features such as ridge and furrow now largely levelled within the study area. This intensive ploughing has also potentially had an impact on buried remains, including the Iron Age and Romano-British field systems that are prevalent throughout the region, although the geophysical survey undertaken as part of the scheme has identified buried features surviving within the converter station site.

Previously archaeological work has been limited within the study area, with most work being restricted to non-intrusive surveys or episodes of archaeological monitoring or watching briefs. The Asselby to Pannal pipeline passes approximately 1.3 km to the south of the planning application boundary, and works undertaken as part of this scheme confirmed that the geophysical survey data was relatively accurate in providing details of buried remains (Ref 9-53).

#### **9.5.4.8.4 Potential Archaeological Remains**

##### *Palaeoenvironmental Remains*

Previous works undertaken with the landscape around the River Ouse, as well as to the south west around Hatfield, have identified remains of palaeochannels and former river channels, as well as waterlogged remains (Ref 9-72). The low-lying nature of the study area, as well as the relatively high water table and the deliberate deposition of deposits through warping, means that there is the potential for waterlogged and palaeoenvironmental deposits to survive through most areas of the Section 4 planning application boundary. The potential is assessed to be medium.

##### *Early Prehistoric and Bronze Age Remains*

Remains dating to the early prehistoric period (Mesolithic through to the Bronze Age) are limited within the planning application boundary, as well as the study area, although previous archaeological investigations within the study area have been limited. Many of the remains from these periods, with the exception of burial mounds/cairns, are relatively ephemeral and are not easily identified through geophysical survey or aerial photography with most settlement sites identified through flint scatters. Furthermore, there is the potential for earlier remains to have been buried beneath masking layers deposited as a result of post-medieval warping, as well as periods of flooding. However, due to the relatively small area covered by Section 4, the potential for the discovery of previously unrecorded assets dating to this period is considered to be low.

### *Iron Age*

There is limited evidence dating to the Iron Age within the planning application boundary, as well as the study area, although in some areas the geophysical survey has identified assets not previously recorded through aerial photography that might date to this period. The potential for encountering further remains dating to this period is considered to be low.

### *Roman*

A continuation of the type/form of settlement activity from the Iron Age into the Roman period means that differentiating between sites can be difficult, however, as with earlier periods the evidence for Roman activity is very limited. As a result, the potential for encountering further remains dating to this period is considered to be low.

### *Early Medieval*

Evidence for early medieval activity within the planning application boundary, as well as the study area, is limited, and it is assumed that most activity dating to this period is focused within the settlements that still exist, with the planning application boundary passing through the field systems that surrounded the settlements. Geophysical survey has not identified any features suggestive of early medieval activity, while the metal detector survey failed to identify any concentrations of early medieval finds/objects. As a result, the potential for encountering previously unrecorded early medieval remains is considered to be low.

### *Medieval*

As with the early medieval period, evidence of medieval activity is also limited within the planning application boundary as well as the study area. This is again due to the planning application boundary passing around the main settlement of Drax and instead running through the field systems that surrounded it. Furthermore, the planning application boundary avoids the former abbey located to the north-west. As a result, the potential for encountering previously unrecorded medieval settlement remains is considered to be low, although the potential for encountering further agricultural remains such as ridge and furrow or field boundaries is considered to be medium.

### *Post-Medieval*

Drax represents the main focus of settlement throughout the post-medieval period, and the planning application boundary passes through the agricultural land that surrounded the village. Remains encountered within the study area and largely associated with agriculture and included ridge and furrow and field boundaries which have been identified within the planning application boundary through aerial photography and geophysical survey. As a result, the potential for encountering previously unrecorded post-medieval settlement remains is considered to be low.

## **9.6 Potential Impacts**

### **9.6.1 Introduction**

There is potential for impacts to occur to the cultural heritage resource as a result of the installation of the underground DC cables, as well as the construction of the converter station and other associated infrastructure and temporary works of the English Onshore Scheme, further potential impacts may occur through the operation of the converter station.

#### **9.6.1.1 Construction**

Temporary construction impacts lasting for all or part of the construction phase of the English Onshore Scheme potentially include the following:

- The presence and movement of construction plant and equipment, which may impact on the significance of heritage assets caused by changes to their setting;
- The siting of construction compounds and activities within working areas, including associated construction noise and lighting, which may impact on the significance of heritage assets caused by changes to their setting; and

- The use of traffic management and increased volumes of traffic travelling on the local road network, which may impact on the significance of heritage assets caused by changes to their setting.

Permanent construction impacts lasting beyond the construction phase potentially include the following:

- Physical impacts on known heritage assets arising from construction activities such as earthworks excavation, the formation of construction compounds and the installation of drainage infrastructure;
- Physical impacts on landscapes of historical, cultural or archaeological significance as a consequence of construction, such as the loss of important elements of the landscape as a result of site clearance; and
- The disturbance, compaction or removal of previously unrecorded subsurface archaeological deposits through construction activities.

### 9.6.1.2 Operation

Due to the nature of the English Onshore Scheme, operational impacts are largely limited to the impacts resulting from the converter station located near Drax, and include:

- Impacts resulting from the presence of the new converter station within the setting of heritage assets.
- Impacts resulting from lighting around the new converter station.
- Impacts resulting from noise generated by the new converter station.

### 9.6.1.3 Decommissioning

The scale and nature of activities undertaken during decommissioning would be similar to those described previously for construction, and they would be temporary during the period of decommissioning activities on site. Following the removal of the structures and the reinstatement of the land there would be no further potential effects on archaeology and heritage receptors. The potential effects from decommissioning should therefore be regarded as the same as construction as described in greater detail below.

## 9.6.2 Embedded Mitigation

Through the design-development process, the English Onshore Scheme has been designed, as far as possible, to avoid effects on cultural heritage through option identification, appraisal, selection and refinement, as described in **Chapter 2: Project Development and Alternatives**.

Mitigation measures have been embedded into the English Onshore Scheme with the purpose of minimising effects on cultural heritage. These measures include:

- Careful routing of the proposed cable trench to avoid designated heritage assets and, where possible, non-designated assets;
- Limiting land take within the planning application boundary to only that required to construct, operate and maintain the English Onshore Scheme – to minimise disturbance to buried archaeology;
- Limiting stripping for construction compounds, haul roads, and other associated works in areas where archaeology is recorded to avoid disturbance, and instead using geotextile and stone over topsoil;
- Siting the proposed converter station adjacent to the existing Drax Power Station to help the site integrate with the existing industrial landscape. Visually, whilst locating the converter station adjacent to existing development results in a concentration of this type of development in one place, it also focuses impacts in that one place. This limits the potential for new impacts through change to the setting of heritage assets in the local area that may currently be unaffected by the existing power station development; and
- Planting (once established) to visually screen elements of the English Onshore Scheme, for example the converter station, to reduce adverse effects on the setting of heritage assets.

Based on the review of the geophysical surveys and archaeological evaluation, the following modifications were made to components of the English Onshore Scheme and the planning application boundary to avoid potential impacts on buried archaeology and to preserve features of potential interest:

- Reductions in land within the planning application boundary to avoid known heritage assets such as Field 38 where there is a possible Civil War Redoubt (MHU4084), and Field 127 where a scheduled barrow is recorded (1012203);
- Using HDD technology to avoid physical impacts on heritage assets. This includes possible remains of medieval settlement activity and ridge and furrow in Field 238 (); and
- Fencing off areas to avoid effects on known archaeology.

### 9.6.3 Construction Impacts

The prediction of impacts and the assessment of effects (and their significance) on cultural heritage associated with construction of the English Onshore Scheme has taken account of the effectiveness of the embedded mitigation summarised in Section 9.6.2.

The assessment reports the temporary and permanent impacts and effects on those heritage assets that would be directly or indirectly affected by the English Onshore Scheme by virtue of their proximity to the works, or through a shared relationship or setting.

The assessment of a number of non-designated assets within the planning application boundary has determined there would be no effect as a result of construction of the Scheme, while impacts on other assets are considered to be negligible due to the low value of the assets. These include areas of ploughed out ridge and furrow, field boundaries depicted on historic mapping, chalk pits, military remains that have been removed, and find spots that represent objects have been recovered. While these asset are depicted on Figure 3 as they fall within the English Onshore Scheme, they are not discussed in the impacts section below.

The impact assessment set out below is divided into four sections according to the English Onshore Scheme design, as reflected in the baseline. It begins with assets where physical impacts are predicted within the planning application boundary, and takes into account the effectiveness of embedded mitigation summarised in Section 9.6.2. It proceeds to assess the impact of the English Onshore Scheme on assets outside the planning application boundary through change to their settings.

All impacts presented are adverse impacts unless otherwise stated. This section is supported by **Figure 3: Areas of Heritage Impacts on Known Heritage Assets**.

#### 9.6.3.1 Section 1 Landfall to Bainton

##### 9.6.3.1.1 Field 1/Beach

###### *MHU21031 Anti-tank block*

A small grouping of Second World War anti-tank blocks have been recorded on the beach in the area of the landfall. These form part of more extensive coastal defences in this area, with other sites including search light bases (MHU21032) and pillboxes (MHU21034), although both of these latter sites fall outside the planning application boundary. While the anti-tank blocks were put on the beach to repel enemy invasion during the Second World War, they have been moved and are no longer in their original position as they are now aligned at right angles to the sea. The features have historic interest linked to the part they played in the military defence of the coastline in the Second World War, as well as some limited architectural interest associated with their unique form. They are, however, a relatively common feature on the coastline. As a result, they are considered to be of negligible heritage value.

The short stretch of anti-tank defences run from the bank of the low cliff to the area just below the high-water mark, running at right angles to the cliff, and lie within the planning application boundary. Although unlikely, the scheme could potentially result in the blocks being moved slightly. Taking the low probability of this into consideration, along with the fact that they have already been moved once, the magnitude of impact would be **negligible**. On an asset of negligible heritage value this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

###### *MHU21026 Second World War weapons pit*

A possible weapons pit is recorded of the East Yorkshire HER within the planning application boundary on top of the low cliffs to the west of the landfall site. The feature was recorded through a review of historic aerial photography, and formed part of a larger network of defences constructed during the Second World War. No trace of the site was observed during the walkover survey and it is likely to have been lost to coastal erosion. If the feature does survive as a subsurface feature it will have archaeological and historic interest as its study could provide information regarding the military structures and defences constructed along the coastline during the Second World War. However, as it is a common form of site, it is considered to be of negligible heritage value.

The possible weapons pit recorded through historic aerial photography formed part of a large network of coastal defences constructed during the Second World War to help repel enemy invasion. Weapons pits were generally small structures cut into the ground, or formed above ground with sandbag breastwork, and were designed to protect a small number of people manning a machine gun or similar, although variations in design are common. The asset is located on the northern limit of the planning application boundary, and is likely to be avoided through micro-siting of the DC cable route or by limiting the working area associated with installation activities. As a result, the magnitude of impact is considered to be **negligible**. On an asset of negligible heritage value this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.2 Fields 2 and 3

##### *MHU330 Ditched enclosure*

The site of a ditched enclosure is recorded on the East Yorkshire HER at a point immediately to the south of the planning application boundary, and geophysical survey and an aerial photographic assessment undertaken as part of the current scheme suggest that remains of the site continue into the planning application boundary. The anomalies comprise a number of linear and curvilinear features which form a possible enclosure and field system that extends through parts of Fields 2 and 3. Although remains have not been formally dated, their form would suggest that they are of late prehistoric/Romano-British date, and represent part of a field system. The features have the potential to possess archaeological and historic interest as study of the features may provide information linked to their date and use, as well as activity in the landscape. The exact nature of the features is unknown but they are thought to be of low heritage value.

The features are located within an agricultural field located within the planning application boundary. Both HER data and aerial photographic data would suggest that the features continue outside of the planning application boundary and form part of a much larger complex. The construction of the English Onshore Scheme would therefore remove a section of these features, causing a **medium** magnitude of impact, due to the partial loss of the possible field system. On an asset of low heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.3 Field 8

##### *AECOM115 Possible square barrow and linear features*

Remains of a possible Iron Age square barrow and a number of linear features have been identified in Field 8 through a review of aerial photographs. While not previously recorded on the HER, possible remains of an Iron Age/Romano-British field system have been recorded in the wider area, and as a result the remains are assumed to date to the Iron Age/Romano-British period. The features have the potential to possess archaeological and historic interest as studying the remains may provide information linked to their date and use, as well as enhance our understanding of the late prehistoric period in the area. If the square feature is found to be a square barrow, excavation may also provide additional information of our understanding of burial practices during the Iron Age. The exact nature of the features is unknown, but they are assumed to be of medium heritage value if they represent a square barrow.

While the full extent of the square feature, assumed to be a square barrow, lie within the planning application boundary, the associated linear features continue outside the planning application boundary. The construction of the English Onshore Scheme therefore has the potential to remove all of the possible square barrow, and elements of the linear features assumed to represent traces of field systems, causing a **high** magnitude of impact. On an asset of medium heritage value, this would result



in a **major adverse** significance of effect. This permanent effect is **considered to be significant and permanent**.

#### 9.6.3.1.4 Fields 18

##### *AECOM056 Linear features – possible Iron Age field system*

A number of linear features have been identified as part of the geophysical survey and aerial photographic review undertaken as part of the scheme within Field 18. While undated, their form would suggest they date to the Iron Age/Romano-British period, and other similar assets in the wider area have also been dated to this period. The features have the potential to possess archaeological and historic interest as the study of the remain may provide information linked to their date and use. The exact nature of the features is unknown, but they are assumed to be of low heritage value.

While the full extent of the features is not known, they can be observed continuing outside the planning application boundary on aerial photographs. The construction of the English Onshore Scheme therefore has the potential to remove an element of the linear features, assumed to represent traces of field systems, causing a **medium** magnitude of impact. On an asset of low heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.5 Field 22

##### *MHU7586 Ditch/linear feature*

A possible ditch and Iron Age square barrow have been recorded on the HER approximately 40 m to the south of the planning application boundary. Geophysical survey and a review of aerial photography has identified a linear feature continuing into the planning application boundary. Although undated, the complex is assumed to be Iron Age/Romano-British, with the linear feature within the planning application boundary being part of a more extensive field system. The possible square barrow is located outside of the planning application boundary, with remains inside being limited to possible field boundaries. The features have the potential to possess archaeological and historic interest as investigation and study may provide information linked to their date and use. The exact nature of the features is unknown, but they are assumed to be of low heritage value.

While the full extent of the features is not known, they can be observed continuing outside the planning application boundary on aerial photographs. The construction of the English Onshore Scheme therefore has the potential to remove an element of the linear features, assumed to represent traces of field systems, causing a **medium** magnitude of impact. On an asset of low heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.6 Field 225

##### *AECOM060 Earthwork ridge and furrow near Gransmoor shrunken medieval village (MHU3255)*

Earthwork remains of ridge and furrow cultivation have been recorded within the planning application boundary to the north of Gransmoor shrunken medieval village (MHU3255). These remains represent a key component of the agricultural field systems which surrounded the settlement and would have been worked by the inhabitants of the village prior to its reduction in size. They are assumed to date to the medieval or post-medieval period as it is unclear when the settlement reduced in size and arable agriculture stopped being practiced. Geophysical survey undertaken does not suggest earlier settlement remains are located beneath the ridge and furrow. They have some archaeological interest as investigation could provide some information relating to their date and the abandonment of the associated village, as well as historic interest linked to the part they played in the history and development of the settlement. Most ridge and furrow cultivation along the planning application boundary survives as cropmark features on aerial photographs, although earthwork ridge and furrow is still relatively common within the wider East Riding landscape. As a result, the remains are assumed to be of low heritage value.

The earthwork remains of the ridge and furrow survive throughout Field 225, as well as in the adjacent fields to the north and south, and continue outside the planning application boundary. The construction of the English Onshore Scheme would therefore only result in a physical impact on a limited area of the ridge and furrow remains causing a **medium** magnitude of impact due to the partial loss of the

earthworks. On an asset of low heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.7 Field 234

##### *AECOM116 Geophysical anomalies – possible medieval field boundaries*

A number of linear features were identified through geophysical survey in Field 234. Although undated, their positioning to the east of the shrunken medieval village of Kelk would suggest they are associated with the medieval field systems, although a number of Iron Age and Roman sites have been recorded in the wider area. They have some archaeological interest as investigation could provide information relating to their date and use, as well as historic interest linked to the part they played in the history and development of the field systems if they do prove to be medieval (or earlier) field boundaries. They are assumed to be of negligible heritage value.

The concentration of geophysical anomalies in Field 225 and undated, and their purpose is not fully understood, although they might be linked to the nearby shrunken medieval village of Kelk. The construction of the English Onshore Scheme would result in a physical impact on all features in the planning application boundary, and it is not currently known if the site extends outside of the works area. As a result, it is assumed all remains will be lost causing a **high** magnitude of impact due to the loss of the features. On an asset of negligible heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.8 Field 238

##### *MHU8066 Great Kelk shrunken medieval village*

Remains of the shrunken medieval village of Great Kelk have previously been recorded on the HER. However, geophysical survey and aerial photography reviewed as part of the current scheme enhanced the record for the asset. This included potential settlement remains and ridge and furrow (geophysical survey site AAA4). The features have the potential to possess archaeological and historic interest as the study of the remains may provide information linked to their origins and partial abandonment of the site. The exact nature of the features is unknown, but they are assumed to be of medium heritage value.

The earthwork remains of the ridge and furrow and possible settlement remains survive throughout Field 238, with better preservation in the north half of the field outside of the planning application boundary. Any construction works linked to the English Onshore Scheme would result in a physical impact on a limited area of the earthwork remains causing a **medium** magnitude of impact due to the partial loss of the earthworks. On an asset of medium heritage value, this would result in a **moderate adverse** significance of effect. This permanent effect is **considered to be significant**. However, the design will see the cable in this area will be installed through HDD with starter pits/reception pits to the east and west, and as a result there will be no physical impacts within Field 238. As a result, there will be **no change**.

#### 9.6.3.1.9 Field 35

##### *MHU15523 Rectilinear enclosure and square barrow*

Remains of a rectilinear enclosure and possible square barrow had previously been recorded on the HER. Geophysical survey and a review of aerial photography has enhanced knowledge of this site and recorded remains of a possible enclosure and field system extending within the planning application boundary, although the majority of the site appears to be located to the north, outside of the planning application boundary. While undated, the remains are assumed to date to the late Iron Age/Romano-British due to their form, and are of a type common throughout the East Riding of Yorkshire. The features have the potential to possess archaeological and historic interest as the study of the features could provide information regarding the dating and purpose of the site. The exact nature of the features is unknown, but they are assumed to be of medium heritage value. This is because they are or a form relatively common in the area, but the remains may represent settlement activity as well as agricultural activity.

The remains of late a prehistoric/Romano-British field system and possible settlement site survive throughout Field 35, with more extensive remains appearing to survive to the north outside of the planning application boundary. The construction of the English Onshore Scheme would result in a

physical impact on a limited area of the agricultural remains rather than the possible square barrow causing a **low** magnitude of impact due to the partial loss of the complex. On an asset of medium heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.10 Field 38

##### *MHU4084 Possible Civil War redoubt*

A possible Civil War redoubt had previously been recorded on the HER. Cropmark features were recorded on a review of historic aerial photographs, although geophysical survey did not identify any remains surviving as subsurface features. This could be as a result of the banks and ditches that would form such as site being infilled very soon after abandonment, therefore removing the magnetic enhancement that would be identified through geophysical survey. Alternatively, this could be a result of geological anomalies being misidentified on aerial photographs/remains being totally ploughed out. If remains of a possible Civil War redoubt do survive as buried remains, they have the potential to possess archaeological and historic interest as the study of the feature has the potential to provide information regarding the date of the site and the role it played in the Civil War. While the exact nature of the features are unknown, they are assumed to be of medium heritage value if they do represent a Civil War redoubt.

The majority of the possible Civil War redoubt lies outside of the planning application boundary following realignment of the DC cable route after the feature was identified, with only the south-eastern corner falling within the site boundary. The construction of the English Onshore Scheme would result in a physical impact on a limited area of the remains, should any remains survive, causing a **low** magnitude of impact. On an asset of medium heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.11 Fields 39, 40, 41, & 42

##### *MHU4112 Iron Age to Roman rectilinear enclosure, ditches, trackway, and possible settlement*

An extensive site extending throughout Fields 39-42 had been recorded on the HER. Geophysical survey as well as a review of aerial photography confirmed the presence of remains, and suggested that they survive within the planning application boundary as sub-surface features. The form of the features would suggest they date to the late Iron Age/Roman period, and include a number of possible round houses and associated enclosures, as well as associated field systems and trackways. The features have the potential to possess archaeological and historic interest as the study of the features could provide information regarding the dating of the site, as well as the people who were living there. While the remains are of a form that are relatively common throughout the East Riding, they are assumed to be of medium heritage value as they appear to represent settlement remains rather than simply field systems.

The remains of late prehistoric/Roman field system and possible settlement site survive throughout Fields 39-42, with extensive remains appearing to survive to outside of the planning application boundary. That being said, the construction of the English Onshore Scheme would result in a physical impact on a number of features including a number of possible round houses and associated enclosures, causing a **high** magnitude of impact due to the partial loss of the complex. On an asset of medium heritage value, this would result in a **major adverse** significance of effect. This permanent effect is **considered to be significant**.

#### 9.6.3.1.12 Field 59

##### *MHU8204 Rectilinear enclosure, field system, and possible trackway*

A complex consisting of possible enclosures, field systems, and trackways was recorded on the HER, with a review of historic aerial photography confirming cropmark remains. Geophysical survey, however, failed to identify any sub-surface features other than ploughed out ridge and furrow in the planning application boundary. Based on the form of the cropmark evidence, the features recorded through aerial photography are assumed to represent part of an extensive late Iron Age/Romano-British field system which is associated with possible settlement remains located approximately 300 m to the north-west. The features have the potential to possess archaeological and historic interest as investigating the features could provide information regarding the dating of the site, as well as the development of the

field systems. Remains of this form are relatively common throughout the East Riding landscape, and they are assumed to be of low heritage value as the features that have been recorded within the planning application boundary appear to represent the outer extent of an agricultural field systems and not settlement remains.

The remains of late prehistoric/Roman field system survive throughout Field 59, with more extensive remains also recorded outside of the planning application boundary. The construction of the English Onshore Scheme would result in a physical impact on elements of at least one enclosure causing a **medium** magnitude of impact due to the partial loss of the complex. On an asset of low heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.13 Field 62

##### *MHU22361 Field boundary, field system, and rectilinear enclosure*

Remains of a possible field system and associated enclosure had been previously recorded on the HER, and a review of aerial photography increased the extent of the area covered by the site. Geophysical survey did not identify any traces of the possible site which is assumed to date to the Iron Age/Roman period based on its form and other remains recorded in the wider area. The features have the potential to possess archaeological and historic interest as investigations could provide information regarding the dating of the site, as well as the development of the field systems. Remains of this form are relatively common throughout the East Riding landscape, and they are assumed to be of low heritage value as the features that have been recorded within the planning application boundary appear to represent the outer extent of an agricultural field system, and not settlement remains.

Remains of a late prehistoric/Roman field system survive in Field 62, and extend outside the planning application boundary to the north. The construction of the English Onshore Scheme would result in a physical impact on part of one possible enclosure causing a **low** magnitude of impact. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.14 Field 65

##### *MHU8208 Skerne shrunken medieval village*

The HER records possible remains linked to the shrunken medieval village of Skerne as extending into the planning application boundary to the north of the existing village. Geophysical survey only recorded traces of ploughed out ridge and furrow; however, a review of aerial photographs suggest that settlement remains may encroach into the planning application boundary. The features have the potential to possess archaeological and historic interest as investigation of the features may provide information linked to their origins and partial abandonment of the site. The exact nature of the features is unknown, but they are assumed to be of low heritage value as they are assumed to be largely linked to arable agriculture, although traces of settlement activity might also survive.

The ploughed-out ridge and furrow extends throughout Field 65, with possible settlement remains in the very southern limit of the planning application boundary. The construction of the English Onshore Scheme would result in a physical impact on a very small area of possible settlement remains causing a **medium** magnitude of impact. On an asset of low heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.15 Field 91

##### *AECOM055 Linear features recorded through geophysical survey*

A small area of linear features was recorded through geophysical survey near the northern edge of the planning application boundary. These may be agricultural in origin, although they appear to be on a different alignment to ploughed out ridge and furrow in the area, so may be earlier or relate to something else. They are undated as their fragmentary nature makes them hard to categorise. The features have the potential to possess archaeological and historic interest as the study of the features may provide information linked to their purpose and date which is currently unknown. As they appear to be fragmentary remains linked to agriculture, they are assumed to be of negligible heritage value.

The fragmentary remains of possible linear features have been recorded within the planning application boundary, and continue outside the application limits. The construction of the English Onshore Scheme would result in a physical impact on a very small area of the possible site causing a **low** magnitude of impact due to the partial loss of the feature. On an asset of negligible heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.16 Field 92

##### *MHU8124 ring ditch*

A possible ring ditch was recorded on the HER north of Bustard Nest Farm. The feature was also recorded as a slight earthwork through a review of LiDAR data reviewed as part of this assessment, but was not identified as part of the geophysical survey which only noted ploughed out ridge and furrow in the area. Measuring approximately 25 m across, the feature may represent a ploughed out prehistoric burial, although remains are fragmentary making identification and dating difficult. The site has archaeological and historic interest as they may provide information linked to its purpose and date. If found to be a burial mound excavation might also provide information relating to funerary practices. If the asset is a prehistoric barrow it would be considered to be of medium heritage value.

The fragmentary remains of circular feature that might represent a prehistoric barrow lie wholly within the planning application boundary. The construction of the English Onshore Scheme would result in the complete removal of the asset causing a **high** magnitude of impact. On an asset of medium heritage value, this would result in a **major adverse** significance of effect. This permanent effect **is considered to be significant**.

#### 9.6.3.1.17 Field 98

##### *AECOM050 Remains of a possible trackway and enclosure recorded through geophysical survey*

Remains of a possible enclosure and trackway have been recorded by the geophysical survey (AAA7). Remains had not been previously recorded in this area, and were not noted during the review of aerial photographs. However, extensive remains of a late Iron Age/Roman field system have been recorded 650 m to the north-west (MHU281), and it is possible that the features recorded within Field 98 may be a continuation of this field system. As a result, the remains within the planning application boundary in Field 98 are assumed to be part of a late prehistoric/Roman period field system. The features have the potential to possess archaeological and historic interest as they may provide information linked to their date and purpose which is currently not clear. As they appear to be linked to late prehistoric/Roman field systems which are common within the East Riding landscape they are assumed to be of low heritage value.

Linear features recorded within the planning application boundary in Field 98 possibly relate to a much larger field system recorded through aerial photography to the north-west. The construction of the English Onshore Scheme would result in a physical impact on the features recorded within the planning application boundary, although these appear to represent a small element of a much larger site resulting in a **low** magnitude of impact. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.1.18 Assets Outside the Planning Application Boundary

##### *1083850 Grade II listed Manor Farmhouse*

Manor Farmhouse is a Grade II listed building in Fraisthorpe located approximately 470m east of the planning application boundary. It is an asset of medium value. The setting assessment in Section 9.5.1.9 noted that the construction of the English Onshore Scheme will take place within a view from the farmhouse over the surrounding farmland which provides the functional context of the asset contributing to its historic interest. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise. These temporary construction activities will remove part of the farmland setting of the asset in views of and from the asset, however this will have little effect on the ability to understand its heritage value. This is assessed as a **negligible** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

##### *1161973 Grade II listed Outgates Farmhouse*

Outgates Farmhouse is a Grade II listed building located approximately 380 m north of the planning application boundary. It is an asset of medium value. The setting assessment in Section 9.5.1.9 noted that the construction of the English Onshore Scheme will take place within a view from the farmhouse over the surrounding farmland which provides the functional context of the asset contributing to its historic interest. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise. These temporary construction activities will remove part of the farmland setting of the asset in views of and from the asset, however this will have little effect on the ability to understand its heritage value. This is assessed as a **negligible** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

#### *10841440 Grade II listed Pleasant Wood Farmhouse*

Pleasant Wood Farmhouse is a Grade II listed building located approximately 150 m south of the planning application boundary. It is an asset of medium value. The setting assessment in Section 9.5.1.9 noted that the construction of the English Onshore Scheme will take place within views towards the farmhouse from the south and from the east running through the farmland landscape to the north and west of the asset. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise, as well as the establishment of a secondary construction compound approximately 650 m to the south-west. These temporary construction activities will remove part of the farmland setting of the asset in views of and from the asset slightly changing the ability to understand its heritage value. This is assessed as a **low** magnitude of impact, resulting in a **minor adverse** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

#### *1162211 Grade II\* Church of St Mary the Virgin, 1084139 Grade II listed Old Vicarage, and 1309733 Grade II listed Old School and Master's House*

The group of listed assets in Wansford comprising the Grade II\* listed church, and the Grade II listed vicarage and school are located approximately 450 m east of the planning application boundary. They are assets of high value and medium value, respectively. The setting assessment in Section 9.5.1.9 noted that construction of the English Onshore Scheme will take place within key views on approach to the asset grouping from the north and south-west. Construction of the English Onshore Scheme in this location will comprise an open cut trench, as a wraparound feature to the west and north of the assets, and the establishment of a secondary construction compound approximately 415 m to the south-west of the settlement. These temporary construction activities will be a detracting feature present in key views towards the asset grouping, affecting appreciation of their designed rural aesthetic and architectural interest. The worst-case assessment of the combined presence of the construction compound, with the construction activities related to the open cut trench as a wraparound feature to the north and west of the settlement is assessed as a **medium** magnitude of impact. This results in a **major adverse** effect on the Grade II\* listed Church of St Mary the Virgin and a **moderate adverse** effect on the Grade II listed Old Vicarage and Old School and Master's House. These temporary effects **are considered to be significant**. Since the open-cut trench is unlikely to be in place for the full duration of the construction period, the impact of the construction activities would reduce as construction progresses, leaving only the construction compound likely to be present for the full duration of the construction period.

#### *Hutton Conservation Area*

Hutton conservation area is located approximately 180m east of the planning application boundary. It is an asset of medium value. The setting assessment in Section 9.5.1.9 noted that the construction of the English Onshore Scheme will take place within a key view of the conservation area from the A164 Beverley Road to the west of the asset, where its rural character and topographical siting can be appreciated. Construction of the English Onshore Scheme in this location will comprise an open cut trench, as a wraparound feature to the north and west of the settlement, and the establishment of a secondary construction compound in fields approximately 300 m to the west of the asset. These temporary construction activities will obscure an identified key view towards the conservation area from the west eroding understanding of the asset's heritage value. This is assessed as a **medium** magnitude of impact, resulting in a **moderate adverse** effect of temporary duration during the construction period. This temporary effect is **considered to be significant**.

### *1161006 Grade II\* listed Church of St Peter*

The Church of St Peter in Hutton is a Grade II\* listed building located approximately 395 m east of the planning application boundary. It is an asset of high value. The setting assessment in Section 9.5.1.9 noted that the construction of the English Onshore Scheme will take place within a view of the church tower from the A164 Beverley Road to the west of the asset, where its architectural and historical interest can be appreciated. Construction of the English Onshore Scheme in this location will comprise an open cut trench, as a wraparound feature to the north and west of the settlement, and the establishment of a secondary construction compound in fields to the west of the settlement, approximately 475 m west of the asset. These temporary construction activities will obscure a view towards the asset slightly effecting the ability to understand an aspect of the asset's heritage value, although its setting within the village will be unaltered. This is assessed as a **low** magnitude of impact, resulting in a **moderate adverse** effect of temporary duration during the construction period. This temporary effect **is considered to be significant**.

### *1346482 Grade II listed Pit Top Farmhouse and 1161022 Grade II listed windmill*

The two Grade II listed buildings at Pit Top Farm comprise its farmhouse and windmill located approximately 325 m east of the planning application boundary. Both are assets of medium value. The setting assessment in Section 9.5.1.9 noted that the construction of the English Onshore Scheme will take place within a view of the windmill and within the farmland setting surrounding the listed farmhouse and non-designated farmstead ranges. Construction of the English Onshore Scheme in this location will comprise HDD under Hutton Bank and the A164 closest to the asset and open cut trench elsewhere to the north-west and south-west of the asset. The establishment of a secondary construction compound is located in fields approximately 415 m to the north-west of the asset, however the planning application boundary extends into the fields to the approximately 325 m west of the asset, south of Hutton Bank. These temporary construction activities have the capacity to obscure a view towards the windmill and temporarily develop the farmland setting of the farmhouse. This will slightly affect the ability to understand an aspect of the assets' heritage value, although their setting within the village will be unaltered. This is assessed as a **low** magnitude of impact, resulting in a **minor adverse** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

### *MHU14977 Millingdale House Farm and AECOM074 Old Gawdy Hole Farm*

The two non-designated farms at Millingdale House and Old Gawdy Hole are located approximately 100m east and 190 m west of the planning application boundary respectively. They are assets of low value. The setting assessment for these assets in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within a view from the farmhouse over the surrounding farmland which provides the functional context of the asset contributing to its historic interest. Construction of the English Onshore Scheme within the settings of these farms will comprise an open cut trench and associated construction traffic movement and noise. These temporary construction activities will remove part of the farmland setting of the assets in views of and from the asset, however this will have little effect on the ability to understand their heritage value. This is assessed as a **negligible** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect **is not considered to be significant**.

## **9.6.3.2 Section 2 Bainton to Market Weighton**

### **9.6.3.2.1 Fields 100, 101, and 102**

#### *MHU22106 Multi-period site including field systems, enclosures, and trackways*

Extensive remains linked to possible field systems, as well as enclosures and trackways, were recorded on the HER within Fields 100, 101, and 102, with the main focus in Field 102. This site has been tentatively dated to the medieval period. However, remains that appear to be a continuation of the field system in Field 100 have been dated to the Iron Age/Roman period, resulting in some uncertainty. Geophysical survey and a review of aerial photographs undertaken as part of this assessment both confirmed the features recorded on the HER, and provided further details about the extent of remains, with at least three enclosures recorded in the northern half of Field 102 (geophysical survey sites AAA8 and 9). While dating is difficult as intrusive investigation has not yet been undertaken, the form of the remains would suggest the features represent a continuation of the late prehistoric/Roman field systems

that have been recorded in the surrounding landscape. The features have the potential to possess archaeological and historic interest as they may provide information linked to their date and purpose. As they appear to be linked to late prehistoric/Roman field systems, which are common within the East Riding landscape, they are assumed to be of low heritage value.

The linear features recorded within the planning application boundary appear to relate to a much larger field system recorded through aerial photography in the wider landscape. The construction of the English Onshore Scheme would result in a physical impact on the features recorded within the planning application boundary, although these appear to represent a small element of a much larger site resulting in a **medium** magnitude of impact. On an asset of low heritage value, this would result in a **minor adverse** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.2.2 Fields 111, 113, and 114

##### *MHU22143 Iron Age/Roman field system, enclosure, and trackway*

Remains of a field system and associated features including possible enclosures and trackways dating to the Iron Age and Roman period has been recorded on the HER within Fields 111, 113, and 114. Geophysical survey (AAA10) and a review of aerial photography undertaken as part of this assessment has confirmed the HER data as well as identifying other features including additional boundaries and possible enclosures. The features have the potential to possess archaeological and historic interest as investigation of the features may provide information linked to the date and development of the site, as well as the people who lived in the settlement as the features appear to represent settlement activity as well as agricultural remains. As the remains appear to be linked to late prehistoric/Roman settlement remains and associated field systems, they are assumed to be of medium heritage value.

The settlement remains and enclosures recorded within the planning application boundary represent part of a more extensive site largely consisting of field systems and trackways. The construction of the English Onshore Scheme would result in a physical impact on the features recorded within the planning application boundary. While it is clear that the remains within the planning application boundary represent part of a much larger agricultural landscape, and the loss of these remains would result in a **medium** magnitude of impact as it would result in the loss of some enclosures/sections of trackway. On an asset of medium heritage value, this would result in a **moderate adverse** significance of effect. This permanent effect is **considered to be significant**.

#### 9.6.3.2.3 Field 120

##### *AECOM057 Aircraft crash site*

Documentary sources record the crash site of a wartime Halifax bomber within the area of Field 120. Traces of this have not been recorded through geophysical survey, although fragments of aluminium and other metal possibly from the aircraft were recovered as part of the metal detector survey, and the remains might represent the wreckage spread rather than the point of impact. Remains of the crashed aircraft have archaeological interest as investigation of the remains may provide information linked to the loss of the aircraft. The site also has historic interest as the study of the incident, as well as the crew and female civilian involved, could provide information regarding the incident, as well as the impacts of the Second World War on the local community. The wreckage is assumed to be of medium heritage value.

The exact site of the crashed Halifax bomber in Field 120 is not confirmed, and the impact caused by the aircraft hitting the ground at speed, but a shallow angle, is likely to have resulted on wreckage being spread over a large area rather than being buried in a deep crater. Furthermore, most of the wreckage is thought to have been cleared at the time of the crash leaving only small fragments. As a result, the English Onshore Scheme is likely to have an impact on the wreckage trail, although this is assumed to be limited, resulting in a **medium** magnitude of impact. On an asset of medium heritage value, this would result in a **moderate adverse** significance of effect. This permanent effect is **considered to be significant**.

#### 9.6.3.2.4 Field 122

##### *MHU6567 Iron Age/Roman enclosures, ring ditches, and field systems*



Remains of a field system and associated features including possible enclosures and trackways tentatively dated to the Iron Age and Roman period has been recorded on the HER within Field 122. Geophysical survey was not able to be undertaken in this field, but a review of aerial photography undertaken as part of this assessment has confirmed the HER data as well as identifying other features including additional boundaries and possible enclosures. The features have the potential to possess archaeological and historic interest as investigation of the features may provide information linked to the date and development of the site, as well as the people who lived in the settlement, as the features appear to represent settlement activity as well as agricultural remains. As the remains appear to be linked to late prehistoric/Roman settlement and associated field systems, they are assumed to be of medium heritage value.

The settlement remains and enclosures recorded within the planning application boundary represent part of a more extensive site largely consisting of field systems and trackways. The construction of the English Onshore Scheme would result in a physical impact on the features recorded within the planning application boundary. While it is clear that the remains within the planning application boundary represent part of a much larger agricultural landscape, and the loss of these remains would result in a **medium** magnitude of impact as it would result in the loss of some enclosures that seem to form the central part of the site. On an asset of medium heritage value, this would result in a **moderate adverse** significance of effect. This permanent effect **is considered to be significant**.

#### 9.6.3.2.5 Field 127

##### *MHU4435/AECOM044 Wolds Entrenchment*

The linear feature known as the Wolds Entrenchment is a long linear feature running through sections of the Yorkshire Wolds in East Riding. Formed from parallel lines of banks and ditches, the feature survives as a mixture of earthworks and cropmarks, and has been tentatively dated to the Bronze Age. Although its purpose is not known, it is assumed to have been constructed as some form of boundary. The feature has archaeological and historic interest as investigation may provide information linked to the date and purpose of the site, as well as the people who built the monument. It assumed to be of medium heritage value.

The Wolds Entrenchment is a long linear feature, and only a short section falls within the planning application boundary. The construction of the English Onshore Scheme should avoid physical impacts on the asset as the cable in this area will be installed by Horizontal Directional Drilling (HDD) under the feature. However, the upgrade of an existing access track may result in physical impacts. This will result in a **low** magnitude of impact as only a very small section of the asset might be impacted. On an asset of medium heritage value, this would result in a **minor adverse** significance of effect. This permanent effect **is not considered to be significant** and permanent.

#### 9.6.3.2.6 Field 129

##### *MHU10895 Ladder settlement and square barrows*

An extensive ladder settlement with associated features dating to the Iron Age and Roman period has been recorded on the HER within Field 129. Geophysical survey (AAA11) and a review of aerial photography undertaken as part of this assessment has confirmed the HER data as well as identifying other features including divisions within some of the enclosures and additional boundaries and possible enclosures.

The section of the ladder settlement which lies within the planning application boundary appears to be the northern limits of an extensive settlement which continues for approximately 1.2 km to the south-east, while a number of possible square barrows have been recorded to the north of the planning application boundary, with one possible square barrow within the site limits. The features have the potential to possess archaeological and historic interest as investigation of the features may provide information linked to the date and development of the site, as well as the people who lived in the settlement as the features appear to represent settlement activity as well as agricultural remains. As the remains appear to be linked to late prehistoric/Roman settlement and associated field systems, they are assumed to be of medium heritage value.

The settlement remains and enclosures recorded within the planning application boundary represent the northern limits of an extensive Iron Age/Roman ladder settlement with associated features including

possible square barrows. The construction of the English Onshore Scheme would result in a physical impact on the features recorded within the planning application boundary. While it is clear that the remains within the planning application boundary represent the northern limits of a much larger settlement, the loss of these remains would result in a **medium** magnitude of impact as it would result in the loss of some full enclosures and possible square barrows. On an asset of medium heritage value, this would result in a **moderate adverse** significance of effect. This permanent effect **is considered to be significant**.

#### 9.6.3.2.7 Field 130

##### *AECOM006 Geophysical survey site AAA12 – possible round barrow*

Geophysical survey identified a circular anomaly partially falling within the northern edge of the planning application boundary at the eastern end of Field 130. The size of the feature would suggest it might represent a prehistoric barrow, or burial, and a number of similar features have been recorded in the surrounding landscape. If the asset is found to be a barrow it would have archaeological and historic interest as they may provide information linked to the date and function of the feature, as well as burial rites if the asset was found to be a burial mound. As the remains appear to be linked to prehistoric funerary activities it is assumed to be of medium heritage value.

The circular feature recorded through geophysical survey, and thought to be a prehistoric barrow, lies partially within the northern limits of the planning application boundary at the eastern end of Field 130. As a result, the construction of the English Onshore Scheme would result in a direct physical impact, although a narrowing of the working corridor in this area might result in physical impacts being removed. If the working corridor could not be narrowed, the construction of the English Onshore Scheme would result in the loss of remains within the planning application boundary, and this would result in a **high** magnitude of impact. On an asset of medium heritage value, this would result in a **major adverse** significance of effect. This permanent effect **is considered to be significant**.

#### 9.6.3.2.8 Field 130

##### *AECOM058 Geophysical Survey Site AAA130 – small enclosure and ditch*

A small square enclosure and associated linear feature/ditch was recorded through geophysical survey at the western end of Field 130. While the features are undated, extensive remains dating to the Iron Age and Romano-British period have been recorded in the surrounding area, and as a result it is assumed the remains at the western end of Field 130 also date to this period. The remains have archaeological and historic interest as the remains may provide information linked to the date and function of the feature. Although the purpose of the remains are not clear, they are assumed to be agricultural and part of a larger field system that extended across Weighton Wold, although they do not appear to be directly attached the field system. Agricultural remains of this type would not normally be considered to be more than low heritage value. However, as the small square enclosure could represent a small square barrow, they should be considered to be of medium heritage value.

The features recorded through geophysical survey, and thought to represent a possible square barrow, or agricultural remains, lie within the planning application boundary at the western end of Field 130. As a result, the construction of the English Onshore Scheme would result in direct physical impacts on the features within the planning application boundary. This would result in a **high** magnitude of impact due to mitigation. On an asset of medium heritage value, this would result in a **major adverse** significance of effect. This permanent effect **is considered to be significant**.

#### 9.6.3.2.9 Field 135 & 136

##### *AECOM007, AECOM008, AECOM059 Geophysical survey site AAA14 – Roman roadside settlement and Roman road (MHU4164)*

The remains of what is assumed to be a Roman roadside settlement has been identified through geophysical survey in Field 135 near the area where the projected line of a Roman road running north-south passes through the field. The anomalies include what appear to be a series of small enclosures fronting on to the projected Roman road, although some may represent structural remains. While the clearest evidence is in Field 135, aerial photographic analysis, as well as geophysical survey data published as part of the CCS project (Ref 9-36), suggests that the remains might continue to the west

and into Field 136 which lies on the western side of the current A1034, running for approximately 900 m from the planning application boundary. The site has archaeological and historic interest as the remains may provide information linked to the date and function of the site, as well as its ultimate abandonment. It is not clear if the remains represent settlement activity, or a series of small fields and enclosures flanking the projected line of the Roman road, and it should be noted that the alignment of the road was not recorded through geophysical survey or aerial photography. As a result, site is considered to be of medium heritage value.

The features recorded through geophysical survey and aerial photography, and thought to represent a Roman roadside settlement or field system flanking the projected alignment of a Roman road, lie within the planning application boundary in Fields 135 and 136. As a result, the construction of the English Onshore Scheme would result in the loss of remains within the planning application boundary. However, remains are believed to extend outside the planning application boundary to both the north and south, and therefore only a section of the site would be lost. As only a percentage of the asset will be lost, a **high** magnitude of impact is predicted. On an asset of medium heritage value, this would result in a **major adverse** significance of effect. This permanent effect is **considered to be significant**.

### 9.6.3.2.10 Assets Outside the Planning Application Boundary

#### *MHU12455 East Field Farm (formerly Middleton Ings)*

East Field Farm is a non-designated asset located approximately 275 m east of the planning application boundary. It is an asset of low value. The setting assessment in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within views from the farmhouse running through the farmland landscape to the west of the asset. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise, as well as the establishment of a tertiary construction compound approximately 360 m to the north-west. These temporary construction activities will remove part of the farmland setting of the asset in views of and from the asset slightly changing the ability to understand its heritage value. This is assessed as a **low** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

#### *1346961 Moneypot Hill Farmhouse*

Moneypot Hill Farmhouse is a Grade II listed building located approximately 280 m east of the planning application boundary. It is an asset of medium value. The setting assessment in Section 9.2.5.9 noted that the construction of the English Onshore Scheme will take place within a key view towards the farmhouse from the south and within views south-west from the farmhouse where the route runs through the farmland landscape to the west of the asset. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise. These temporary construction activities will remove part of the farmland setting of the asset in views of and from the asset slightly changing the ability to understand its heritage value. This is assessed as a **low** magnitude of impact, resulting in a **minor adverse** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

#### *AECOM080 Vicarage Farm, AECOM081 Lund Wold House, MHU13289 Cotegarh Walk Farm, and AECOM083 High Wold (named on the first edition OS map as Craven Wold or Mount Ararat)*

The four non-designated farms at Vicarage Farm, Lund Wold House, Cotegarh Walk and High Wold are located between 300 m and 400 m from the planning application boundary. They are assets of low value. The setting assessment for these assets in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within views to and from the assets over the surrounding farmland which provides the functional context of the assets, contributing to their historic interest. Construction of the English Onshore Scheme in within the settings of these farms will comprise an open cut trench and associated construction traffic movement and noise. These temporary construction activities will remove part of the farmland setting of the assets in views of and from the asset, however this will have little effect on the ability to understand their heritage value. This is assessed as a **negligible** magnitude of impact, resulting in a **negligible adverse** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

### 9.6.3.3 Section 3 Market Weighton to River Ouse

#### 9.6.3.3.1 Fields 142 to 145

*MHU63, MHU7347, MHU10864, AECOM032, and AECOM033 Roman road and multiphase settlement site with field system*

Remains of an extensive settlement site has been recorded through aerial photography and geophysical survey through Fields 142 to 145 which lie to the south of Common Farm, Compact Farm, and Manor Farm. These remains include the projected line of a Roman road (MHU63) as well as remains thought to represent an Iron Age/Romano-British settlement (MHU7347 and MHU10864). The settlement and field system have been tentatively dated by form and their relationship with the projected line of the Roman road, supported by a small number of stray finds recorded on the HER. The site has archaeological and historic interest as the remains may provide information linked to the date and function of the site, as well as its ultimate abandonment. The site is considered to be of medium heritage value.

Part of the within the planning application boundary in Fields 142 to 145 will be physically impacted. The remains are visible as cropmarks extending outside the planning application boundary and covering an extensive area. Therefore, while there will be a direct physical impact on remains within the planning application boundary, these physical impacts will represent a relatively small percentage of the overall site. As only a small percentage of the asset will be lost, a **medium** magnitude of impact is predicted. On an asset of medium heritage value, this would result in a **moderate adverse** significance of effect. This permanent effect **is considered to be significant**.

#### 9.6.3.3.2 Field 146 and Field 149

*MHU8009 Field systems and enclosures*

Fragmentary remains of a possible field system have been recorded through aerial photography in Fields 146 and 149, with cropmarks also suggesting at least one hut circle. While the remains have not been dated, their form would suggest they date to the Iron Age/Roman period. Some of the remains might also be associated with the water course (which is also a parish boundary) known as Beals Beck that runs along the southern side of Field 146, and which was formalised/straightened in the post-medieval period. The site has archaeological and historic interest as it may provide information linked to the date and function of the remains. The site is considered to be of low heritage value.

Partial remains of a possible field system and at least one round house have been recorded within the planning application boundary within Fields 146 and 149. The remains within the planning application boundary appear to represent the southern limits of a more extensive site that continues to the north and may ultimately join with the cropmark site in Fields 142-145; however, the fragmentary nature means it is difficult to determine the full extent of the remains. They are assumed to date to the Iron Age/Romano-British period, although the majority of cropmarks within the planning application boundary might be linked to the former alignment of the Beals Beck, with the main focus of human activity being outside the planning application boundary. Therefore, while there will be a direct physical impact on remains within the planning application boundary, these physical impacts will represent a relatively small percentage of the overall site. As only a small percentage of the asset will be lost, a **low** magnitude of impact is predicted. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect **is not considered to be significant**.

#### 9.6.3.3.3 Fields 153 and 154

*MHU10836 Iron Age and Romano-British enclosures and trackways*

A series of possible trackways, enclosures, and field systems have been recorded through aerial photography in Fields 153 and 154, although some of the anomalies in Field 154 have been interpreted as geological in origin (see **Appendix 9D**). These remains represent a continuation of Iron Age and Roman-British settlement activity and associated field systems which have been recorded throughout the study area, as well as within the East Riding of Yorkshire. The remains have archaeological and historic interest as they may provide information linked to the date and function of the features. The site is considered to be of low heritage value as it is thought to represent field systems and enclosures rather than settlement activity.

Partial remains of a possible field system and enclosures have been recorded within the planning application boundary within Fields 153 and 154. The remains within the planning application boundary appear to represent part of a more extensive field system of a type recorded throughout the study area as well as the wider landscape. Therefore, there will be a direct physical impact on a limited area of the large complex. As only a small section of the asset will be lost, a **low** magnitude of impact is predicted. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.3.4 Field 155

##### *MHU22633 Field system and enclosure*

Fragmentary remains of a square enclosure and possible field system have been recorded through aerial photography and geophysical survey in Field 155. Similar remains have been recorded in the surrounding area, and the features in Field 155 are assumed to form part of the Iron Age/Romano-British field systems that exist throughout large areas of the East Riding of Yorkshire. The remains have archaeological and historic interest as they may provide information linked to the date and function of the features. The site is considered to be of low heritage value as it is through to represent field systems and enclosures rather than settlement activity.

Partial remains of a possible field system and small enclosure have been recorded within the planning application boundary in Fields 155. The remains within the planning application boundary appear to represent part of a more extensive field system of a type recorded throughout the study area, with remains noted to the south on aerial photographs. As only a small section of the asset will be lost, a **low** magnitude of impact is predicted. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.3.5 Fields 158, 159, 161, 162

##### *MHU1128, MHU1125 & MHU1161 Enclosures, field systems, iron working, and pottery production site*

An extensive area of remains dating to the Iron Age and Roman period have been recorded near Tollingham, with geophysical survey and a review of aerial photographs showing traces of remains through Fields 158, 159, 161, and 162. These remains form part of the industrial centre that developed around Tollingham and included pottery production and metal working. Areas of high response on the geophysical survey are suggestive of burning, which suggests that pottery kilns might exist within the planning application boundary. Other anomalies appear to represent elements of an extensive field system with some possible circular structures. The remains have archaeological and historic interest as they may provide information linked to the date and function of the features, as well as industrial activities taking place in the area. The site is considered to be of medium value as it represents a significant industrial centre with pottery and iron production taking place.

The remains of an extensive Iron Age/Roman site near Tollingham have been recorded within the planning application boundary through geophysical survey and aerial photography. While the remains within the planning application boundary appear to represent part of a more extensive site, they appear to include possible kilns and structures as well as enclosures and field systems. Direct physical impacts will result in the loss of remains associated with this extensive site, and as a result a **high** magnitude of impact is predicted. On an asset of medium heritage value, this would result in a **major adverse** significance of effect. This permanent effect is **considered to be significant**.

#### 9.6.3.3.6 Field 164

##### *MHU21676 Iron Age and Roman enclosure/boundary ditches*

Fragmentary remains of a series of enclosures have been recorded through geophysical survey and aerial photography in Field 164, with the main concentration near the central and western end of the field. The remains within the planning application boundary appear to be part of a more extensive site that has been recorded to the south-east, with the remains within the application boundary representing field boundaries. The remains have archaeological and historic interest as they may provide information linked to the date and function of the features. The site is considered to be of low heritage value as it is through to represent field systems and enclosures rather than settlement activity, and the remains appear fragmentary.

Partial remains of a possible field system and small enclosure have been recorded within the planning application boundary in Field 164. The remains within the planning application boundary appear to represent part of a more extensive field system of a type recorded throughout the study area, with remains noted to the south on aerial photographs. As only a small section of the asset will be lost, a **low** magnitude of impact is predicted. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.3.7 Fields 169 and 170

##### *AECOM031 Possible remains of an Iron Age/Roman field system*

A number of features assumed to represent part of a field system have been recorded through geophysical survey on the boundary of Field 169 and 170, although the review of aerial photographs did not identify remains in this area. These do not follow the same alignment as the field boundaries depicted on historic mapping from the post-medieval period onwards, and their form is suggestive of Iron Age and Roman field systems recorded throughout the study area, although the remains in Fields 169/170 seems very fragmentary. The remains have archaeological and historic interest as the study of the features may provide information linked to the date and function of the remains. The site is considered to be of low heritage value as it is thought to represent part of a field systems rather than settlement activity, and the remains appear fragmentary.

Partial remains of a possible field system have been recorded within the planning application boundary in Fields 169/170. The remains within the planning application boundary appear to represent part of a field system, or possibly the corner of an enclosure, and while it is assumed that remains extend outside the planning application boundary, aerial photographs have failed to show further remains. As only a small section of what is assumed to be a larger asset will be lost, a **low** magnitude of impact is predicted. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.3.8 Field 179 and Field 180

##### *MHU3198/AECOM026 Iron Age and Roman rectangular enclosure and settlement*

An extensive settlement, including enclosures and trackways was recorded in the western half of Field 179 through aerial photography, with HER data suggesting the site may extend into Field 180. Geophysical survey covering the planning application boundary confirmed the presence of sub-surface remains (AAA15), although the ditches were not clear, suggesting some features may have been heavily truncated through ploughing. Two additional areas of geophysical survey were undertaken to the north and south of the planning application boundary in the areas of the settlement/enclosures in an attempt to define the limits of the site. This work again confirmed the aerial photographic data with the anomalies continuing in both directions, but especially to the north, although it again confirmed that buried remains may have been damaged by ploughing. The form of the remains suggest that the cropmarks relate to an Iron Age/Roman settlement and enclosure system, with pottery collected during the metal detector survey also suggesting a Roman date. The remains have archaeological and historic interest as they provide information linked to the date and function of the features. The site is considered to be of medium heritage value as it represents a settlement site.

The remains of an extensive Iron Age/Roman site have been recorded within the planning application boundary through geophysical survey and aerial photography. While the remains within the planning application boundary appear to represent part of a more extensive site, they do appear to include smaller enclosures suggestive of settlement remains rather than agricultural field systems. Direct physical impacts will result in the loss of remains associated with this extensive site, and as a result a **high** magnitude of impact is predicted. On an asset of medium heritage value, this would result in a **major adverse** significance of effect. This permanent effect is **considered to be significant**.

#### 9.6.3.3.9 Field 182

##### *MHU22505 Earthwork ridge and furrow*

Earthwork remains of ridge and furrow cultivation have been recorded within the planning application boundary to the north of Howden Station. While undated, the straight nature of the earthworks suggests a more recent date, and at least some of the remains appear to respect a shallow embankment that

carried a rail link from the main line in the south to a brick works in the north. They have some archaeological interest as they may provide some information relating to their date and abandonment, as well as historic interest linked to the part they played in the history and development of the settlement. Most ridge and furrow cultivation along the planning application boundary survives as cropmark features on aerial photographs; however, earthwork ridge and furrow is still relatively common within the wider East Riding of Yorkshire landscape and these remains are assumed to be quite late in date. As a result, the remains are assumed to be of low heritage value.

The earthwork remains of the ridge and furrow survive throughout Field 182, as well as in the adjacent fields to the north and south, and continue outside of the planning application boundary. The construction of the English Onshore Scheme would therefore only result in a physical impact on a limited area of the ridge and furrow remains causing a **low** magnitude of impact due to the partial loss of the earthworks. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.3.10 Field 185

##### *AECOM022 Park boundary*

A large linear feature has been recorded in Field 185 as part of the aerial photographic review. The first edition Ordnance Survey mapping of the area suggest that this represents the northern boundary of Howden Park, although all trees have been removed, with the land turned over to arable agriculture. Any sub-surface remains that survive have some archaeological interest as the features might provide information relating to the form of the parkland boundary, as well as historic interest linked to the part the parkland played in the development of the landscape. The boundary does, however, appear to have been almost completely ploughed out in this area, with better examples surviving to the south. As a result, the remains are assumed to be of low heritage value.

The cropmark of the northern limits of the former Howden Park parkland has been recorded through aerial photography, with a very small element falling within the planning application boundary. The majority of the boundary survives as an extant feature to the south, and it is possible that construction works will avoid the small section that is thought to survive within the planning application boundary. The construction of the English Onshore Scheme would therefore only result in a physical impact on a limited section of the boundary, if any, resulting in a **negligible** magnitude of impact. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.3.11 Field 188

##### *MHU9207 Park Pale Deer Park*

Documentary evidence suggests that a deer park existed in the area of Field 188 during the medieval and post-medieval period, although the land appears to have been used for agriculture from at least the late 18<sup>th</sup> century, and it is currently used for biomass crops. No remains have been recorded through a review of aerial photographs or LiDAR data, and as a result it is believed that no physical remains survive within the planning application boundary or associated study area, and the site is considered to have negligible heritage value, and no impacts are predicted.

#### 9.6.3.3.12 Fields 201 and 203

##### *MHU8805 Hull to Barnsley Railway*

Remains of the Hull to Barnsley Railway survive as an earthwork within Fields 201 and 203 where traces of a slight embankment have been recorded. The remains have some historical interest as they tell the story of the rail infrastructure that developed in the 19<sup>th</sup> and 20<sup>th</sup> century. However, the remains are considered to have negligible heritage value as better-preserved sections of line survive in other areas.

The planning application boundary crosses a very small section of the railway line, and the DC cables in this section will be installed under the asset using HDD. As a result, there will be no impacts.

### 9.6.3.3.13 Fields 206 and 207

#### *AECOM019 Linear features*

A number of features assumed to represent part of a field system have been recorded through the review of aerial photographs in Fields 206 and 207, although anomalies identified by geophysical survey in the area were limited to geology features and more recent agriculture. These do not follow the same alignment as the field boundaries depicted on historic mapping from post-medieval period onwards, so could be earlier, although the remains noted are very fragmentary. The remains have some limited archaeological and historic interest as the features might provide information linked to the date and function of the remains. The site is considered to be of low heritage value as it is thought to represent part of a field systems rather than settlement activity, and the remains appear fragmentary.

Partial remains of a possible field system have been recorded within the planning application boundary in Fields 206 and 207. The remains within the planning application boundary appear to represent a small section of a field system, with more extensive remains extending outside of the planning application boundary. As only a small section of the asset will be lost, a low magnitude of impact is predicted. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

### 9.6.3.3.14 Assets Outside the Planning Application Boundary

#### *1031352 Common Farmhouse and 1083339 Barn at Common Farm*

The Grade II listed farmhouse and barn at Common Farm are located approximately 46 m north of the planning application boundary. They are assets of medium value. The setting assessment in Section 9.5.3.9 noted that the construction of the English Onshore Scheme will take place within views of and from the asset over the surrounding farmland which provides its functional context, contributing to its historic interest. Construction of the English Onshore Scheme in this location will comprise the establishment of a secondary construction compound and access approximately 130 m to the south of the assets. An open cut trench and associated construction traffic movement and noise will also be present approximately 885 m south-east of the assets, but this aspect of the construction is not considered to result in any impact to their heritage value. These temporary construction compound will remove part of the farmland setting of the assets in close proximity views of and from the asset, affecting the ability to understand its heritage value. This is assessed as a **medium** magnitude of impact, resulting in a **moderate adverse** effect of temporary duration during the construction period. This temporary effect is **considered to be significant**.

#### *AECOM086 High Common Farm, AECOM100 Warp Farm, and AECOM101 Beechtree Farm*

The three non-designated farms at High Common Farm, Warp Farm and Beechtree Farm are located between 95 m and 120 m from the planning application boundary. They are assets of low value. The setting assessment for these assets in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within views to and from the assets over the surrounding farmland which provides the functional context of the assets, contributing to their historic interest. Construction of the English Onshore Scheme within the settings of these farms will comprise an open cut trench and associated construction traffic movement and noise, at distances of between 60 m and 120 m from the assets. These temporary construction activities will remove part of the farmland setting of the assets in views of and from the assets, slightly affecting the ability to understand their heritage value. This is assessed as a **low** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

#### *AECOM092 Duck Nest Farm*

The non-designated farm at Duck Nest is located approximately 350 m north of the planning application boundary. It is an asset of low value. The setting assessment in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within views from the asset over the surrounding farmland which provides its functional context, contributing to its historic interest. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise, as well as the establishment of a tertiary construction compound approximately 450 m to the south-east of the asset. These temporary construction activities will remove part of the farmland setting of the asset in views of and from the



asset, slightly affecting the ability to understand its heritage value. This is assessed as a **low** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**

#### *AECOM090 Skiff Farm*

The non-designated farm at Skiff is located approximately 17 m north of the planning application boundary. It is an asset of low value. The setting assessment in **Appendix 9F** noted that the construction of the proposed development will take place within views of and from the asset over the surrounding farmland which provides its functional context, contributing to its historic interest. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise, as well as the establishment of a secondary construction compound and access approximately 17 m to the south-east of the asset. These temporary construction activities will remove part of the farmland setting of the asset in close proximity views of and from the asset, affecting the ability to understand its heritage value. This is assessed as a **medium** magnitude of impact, resulting in a **minor adverse** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

#### *AECOM104 Sleights Cottage (Poplar Farm)*

Sleights Cottage is located approximately 55 m west of the planning application boundary. It is a non-designated asset of low value. The setting assessment in Section 9.5.3.9 noted that the construction of the English Onshore Scheme will take place within views from the asset over the surrounding farmland which provides the rural context of the cottage, contributing to its historic interest. Construction of the English Onshore Scheme within the setting of these cottage will comprise an open cut trench and associated construction traffic movement and noise approximately 55 m from the asset. These temporary construction activities will remove part of the farmland setting of the assets in views of and from the asset, however this will have little effect on the ability to understand its heritage value. This is assessed as a **negligible** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

#### *AECOM101 Park House Farm*

The non-designated farm at Park House is located approximately 385 m south-west of the planning application boundary. It is an asset of low value. The setting assessment in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within views to and from the asset over the surrounding farmland which provides its functional context, contributing to its historic interest. Construction of the English Onshore Scheme in this location will comprise an open cut trench and associated construction traffic movement and noise. These temporary construction activities will remove part of the farmland setting of the asset in views of and from the asset, however this will have little effect on the ability to understand its heritage value. This is assessed as a **negligible** magnitude of impact, resulting in a **negligible** effect of temporary duration during the construction period. This temporary effect is **not considered to be significant**.

### **9.6.3.4 Section 4 River Ouse to Drax Substation**

#### **9.6.3.4.1 Field 214**

##### *AECOM016 Geophysical anomaly*

A five-to-six-sided feature was recorded during the geophysical survey which appears to front onto Redhouse Lane. This has been identified as a possible moated site. The feature is located within the site of the secondary construction compound south of Red House Lane. The feature possesses archaeological and historic interest for the information it may possess on past activity in the landscape, and excavation may reveal the origin and nature of the feature. The feature is of low heritage value.

The feature lies within the proposed construction compound area and as a result the feature may be removed during construction. This would have a **high** magnitude of impact, which on an asset of low heritage value would result in a **moderate** adverse significance of effect. This permanent effect is **considered to be significant**.

#### 9.6.3.4.2 Field 219

##### *AECOM013 Former Hull, Barnsley, and West Riding Junction Railway*

The former railway line passes through the planning application boundary at Drax, aligned north-east to south-west. The railway line was opened in the late 19<sup>th</sup> century and ran from Cudworth to Hull, connecting a number of villages and collieries to the Alexandra Dock in Hull. The railway was in operation until it closed in 1932, with remains of the track removed in the area of the English Onshore Scheme, although traces remain visible on geophysical survey data and remains of the railway embankments are still extant. The former railway line possesses archaeological and historic interest as the remains of post-medieval industrial and transportation developments of the area. The former line is of low heritage value.

The English Onshore Scheme would pass through a small section of the former railway line to the north-west of Drax. The construction of the English Onshore Scheme would remove any embankment remains and any surviving buried remains of the tracks within the planning application boundary, which would have a **low** magnitude of impact, due to the overall length of the railway and the small area affected. On an asset of low heritage value, this would result in a **negligible** significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.4.3 Field 220

##### *AECOM015 Geophysical anomalies – Linear features (Geophysical survey site AAA16)*

A series of geophysical anomalies were recorded in the area of the proposed converter station. The anomalies comprise a number of linear features which form a possible rectilinear enclosure. The features are of unknown date but may represent a late prehistoric enclosure. The linear features possess archaeological and historic interest for the information excavation may provide on late prehistoric activity in the landscape. The exact nature of the features is unknown but they are thought to be of low heritage value.

The features are located within an agricultural field within the proposed converter station, and the northern section of the features lies within the DC cable route corridor. The construction of the English Onshore Scheme would therefore remove a section of these features, causing a **medium** adverse magnitude of impact. On an asset of low heritage value, this would result in a **minor** adverse significance of effect. This permanent effect is **not considered to be significant**.

#### 9.6.3.4.4 Assets Outside the Planning Application Boundary

##### *AECOM105 Nelly Field and AECOM106 Baxter Hall Farm*

The two non-designated farms at Nelly Field and Baxter Hall are located approximately 200 m north of the planning application boundary respectively. They are assets of low value. The setting assessment in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within views to and from the assets within their surrounding rural farmland landscape, where the existing Drax Power Station is a detracting feature of the landscape having an urbanising effect on its rural character. Temporary construction activities will include an open cut trench and associated construction traffic movement and noise, as well as the establishment of a secondary construction compound which is located approximately 220 m south of Nelly Field and approximately 270 m east of Baxter Hall, as well as the converter station (primary) construction compound located approximately 550 m west of Baxter Hall. These activities take place within the rural farmland setting of the assets, slightly affecting the ability to understand their heritage value. This is assessed as having a temporary low magnitude of impact, resulting in a **negligible** significance of effect of temporary duration during construction. This temporary effect is **not considered to be significant**.

##### *1148397 Church of St Peter and St Paul*

The Grade I listed Church of St Peter and St Paul in Drax is located 600 m south of the planning application boundary. It is an asset of high value. The setting assessment in Section 9.5.4.8 noted that the church's setting is defined by its place within the streetscape of the settlement of Drax and by its churchyard with upstanding memorials and mature tree planting. The existing Drax Power Station is visible in places from within the village, but it is surprisingly well-screened and this is true of views from

within the village looking towards the church in the direction of the power station, where the existing structures are not visible behind the mature boundary planting. The power station has an urbanising effect on the understanding of the siting of the village and its rural location when moving through the landscape outside the settlement, and this does form part of the setting of the church, detracting from understanding of its rural context and historic interest. The English Onshore Scheme in the vicinity of the church includes associated with the HDD in the fields to the north of the settlement and the establishment of a construction compound with associated construction traffic movements and noise approximately 890 m north of the asset, within the rural setting of the village of Drax. This is assessed as having a temporary negligible magnitude of impact, resulting in a **minor adverse** effect of temporary duration during construction. This temporary effect is **not considered to be significant**.

#### *AECOM108 Wren Hall Farm*

Wren Hall Farm is located immediately to the south, west and north of the planning application boundary as it wraps around the asset. It is a non-designated asset of low value. The setting assessment in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place in close proximity to the asset within views to and from the asset and within its surrounding rural farmland landscape. Here the existing Drax Power Station is a detracting feature of the landscape having an urbanising effect on its rural character. The English Onshore Scheme in this location includes temporary construction activities comprising an open-cut trench in the field in the field immediately to the south of the asset and in the field further to the east of the asset, together with associated construction traffic movement and noise. The converter station construction compound would also be established in the field immediately to the west of Wren Hall Lane, north-west of the asset. The construction activities will take place immediately around the asset on three sides, and in view from the farmhouse's principal elevation, This will temporarily remove elements of its farmland setting, affecting the ability to understand the asset's heritage value. This is assessed as having a temporary medium magnitude of impact, resulting in a **minor adverse** significance of effect of temporary duration during construction. This temporary effect is **not considered to be significant**.

**Appendix 9A** summary of the potential significant effects on known heritage assets arising from construction of the English Onshore Scheme is presented in **Table 9-10**.

**Table 9-10: Summary of the potential significant effects on known heritage assets before project specific mitigation.**

Asset ID	Description	Heritage Value	Magnitude of Impact	Significance of Effect
AECOM113	Field 8. Possible square barrow.	Medium	High	Major Adverse
MHU4112	Fields 39-42. Iron Age/Roman enclosure, trackways, and possible settlement.	Medium	High	Major Adverse
MHU8124	Field 92. Ring ditch. Possible burial mound.	Medium	High	Major Adverse
MHU22143	Fields 111, 113, and 114. Iron Age field systems, enclosures, and trackways.	Medium	Medium	Moderate Adverse
AECOM057	Field 120. Aircraft crash site.	Medium	Medium	Moderate Adverse
MHU6567	Field 122. Iron Age/Roman field systems/settlement.	Medium	Medium	Moderate Adverse
MHU10895	Field 129. Iron Age/Roman ladder settlement.	Medium	Medium	Moderate Adverse
AECOM006	Field 130. Possible Bronze Age round barrow.	Medium	High	Major Adverse
AECOM058	Field 130. Possible square barrow and ditch.	Medium	High	Major Adverse
AECOM007	Fields 135 & 136. Roman road and roadside settlement.	Medium	High	Major Adverse
MHU63, MHU7347, MHU10864,	Fields 142-145. Roman road and settlement with associated field system.	Medium	Medium	Moderate Adverse

Asset ID	Description	Heritage Value	Magnitude of Impact	Significance of Effect
& AECOM032				
MHU1128 & MHU1161	Fields 158, 159, 161, & 162. Iron Age and Roman enclosures, field systems, pottery production, and possible iron working.	Medium	High	Major Adverse
MHU3198	Field 179 and 180. Iron Age and Roman settlement and enclosures.	Medium	High	Major Adverse
AECOM016	Field 214. Possible enclosure.	Low	High	Moderate Adverse
-	Hutton Conservation Area	Medium	Medium	Moderate Adverse (temporary)
1161006	Church of St Peter	High	Low	Moderate Adverse (temporary)
1162211	Church of St Mary & the Virgin	High	Medium	Major Adverse (temporary)
1084139	Old Vicarage	Medium	Medium	Moderate Adverse (temporary)
1309733	Old School and Master's House	Medium	Medium	Moderate Adverse (temporary)
1031352	Common Farmhouse	Medium	Medium	Moderate Adverse (temporary)
1083339	Barn at Common Farm	Medium	Medium	Moderate Adverse (temporary)

The construction assessment on buried archaeology has concluded that without additional mitigation, there would be a major adverse effect on eight assets or groups of assets (AECOM113; MHU4112; MHU8124; AECOM006; AECOM058; AECOM007; MHU1128/MHU1161; MHU3198), and a moderate adverse effect on six assets or groups of assets (MHU22143; AECOM057; MHU6567; MHU10895; MHU63/MHU7347/MHU10864/AECOM032; AECOM016). All other construction impacts would be minor or less.

The construction assessment has concluded that the effects of the English Onshore Scheme due to change to the setting of designated and non-designated include significant effects to seven assets, the majority of which do not exceed moderate adverse. One major adverse effect is identified at the Grade II\* listed Church of St Mary & the Virgin as result of the combination of the construction of the open cut trench to the west and north of the settlement and the presence of a tertiary construction compound to the south-west of the asset. This effect is not considered to last for the full duration of the construction period, as it will reduce as construction progresses leaving only the construction compound likely to be in place for the full duration of the construction period. All of the significant effects identified through change to setting will be of a temporary nature, lasting for the duration of the construction period, or for the duration of the open cut trench being present in the setting of assets. No permanent significant effects have been identified in relation to the setting of heritage assets for the construction phase.

### 9.6.4 Operation Impacts

During operation of the English Onshore Scheme, there will be no additional physical impacts to below ground archaeological remains that could result in effects beyond those that have been assessed for construction impacts.

Potential impacts related to operation of the English Onshore Scheme in the setting of heritage assets include the presence of the permanent converter station within the setting of heritage assets, together with the potential for operational noise, lighting, and vehicle movements for staff access associated with the permanent converter station. These have the potential to impact upon designated and non-designated heritage assets identified in Section 4 of the Scheme through change to their setting.

No significant residual operational noise effects are identified as a result of operation of the converter station (see **Chapter 13: Noise and Vibration**) and no significant effects to traffic are identified due to the addition of site workers travelling to the converter station (see **Chapter 14: Traffic and Transport**). External lighting of the converter station will default to off during the hours of darkness unless otherwise needed (see **Chapter 3: Description of the English Onshore Scheme**). Due To the result of these assessments, the only impacts to heritage assets resulting from the converter station are considered to be due to its physical presence, scale and massing. This is assessed in the following paragraphs.

This section is supported by **Figure 3: Areas of Heritage Impacts on Known Heritage Assets**.

#### 9.6.4.1.1 Assets Outside the Planning Application Boundary

##### *AECOM105 Nelly Field and AECOM106 Baxter Hall Farm*

The two non-designated farms at Nelly Field and Baxter Hall are located approximately 200 m north of the planning application boundary respectively. They are assets of low value. The setting assessment in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place within views to and from the assets within their surrounding rural farmland landscape, where the existing Drax Power Station is a detracting feature of the landscape having an urbanising effect on its rural character. The English Onshore Scheme in the vicinity of these assets includes the erection of the permanent above-ground converter station, which would be located the east side of Drax Power Station. The permanent converter station will be of a lower elevation than the existing Drax Power Station and will appear in views as an extension to the existing detracting site. Whilst this will have an impact on the rural farmland setting of the assets, it is considered that the location of the proposed converter station minimises the impact due to its proximity to the existing power station and smaller scale. The permanent impact of the construction of the converter station is therefore assessed as having a negligible magnitude of impact, resulting in a **negligible** effect. This permanent effect is **not considered to be significant**.

##### *AECOM110 Read School*

Read School is a non-designated asset located approximately 180 m south of the planning application boundary. It is an asset of low value. The setting assessment in Section 9.5.4.8 noted that the school's setting is defined by its roadside location on the outskirts of the rural settlement at Drax where key views of the building are achieved from the road. It noted that views on approach to the building also feature the existing Drax Power Station which detracts from the asset's setting due to its out of scale development and urbanising effect. The English Onshore Scheme in the vicinity of the school includes the erection of the permanent above-ground converter station, which would be located approximately 730 m to the north-east of the asset in the field adjacent to the east side of Drax Power Station. The permanent converter station will be of a lower elevation than the existing Drax Power Station and will appear in views as an extension to the existing detracting site. Whilst the construction of the converter station will have an impact on the rural setting of the village, it is considered that the location of the proposed converter station minimises the impact due to its proximity to the existing station and smaller scale. It will be a minimal addition to the power station in key views on approach to the asset. The permanent impact from the erection of the converter station is therefore assessed as having a negligible magnitude of impact, resulting in a **negligible** effect. This permanent effect is **not considered to be significant**.

##### *AECOM112 Norwoods*

Norwoods is located approximately 240 m north-east of the planning application boundary. It is a non-designated house of low value. The setting assessment in Section 9.5.4.8 noted that the construction of the English Onshore Scheme will take place within views to and from the asset, where the existing Drax Power Station is a detracting feature of the landscape having an urbanising effect on its rural character. The English Onshore Scheme in the vicinity of these assets includes temporary construction activities and the erection of the permanent above-ground converter station, which would be located on the east side of Drax Power Station. The permanent converter station will be located approximately 600 m south-west of the asset at its closest extent. It will be of a lower elevation than the existing Drax Power Station and will appear in views as an extension to the existing detracting site. It will also be partially screen from the asset by existing mature trees immediately to the south-west of the house. It is considered that the location of the proposed converter station minimises the impact due to its proximity to the existing station and smaller scale. The permanent impact from the erection of the

converter station is therefore assessed as having a negligible magnitude of impact, resulting in a **negligible** effect. This permanent effect is **not considered to be significant**.

#### *1148397 Church of St Peter and St Paul*

The Grade I listed Church of St Peter and St Paul in Drax is located 600 m south of the planning application boundary. It is an asset of high value. The setting assessment in Section 9.5.4.8 noted that the church's setting is defined by its place within the streetscape of the settlement of Drax and by its churchyard with upstanding memorials and mature tree planting. The existing Drax Power Station is visible in places from within the village, but it is surprisingly well-screened and this is true of views from within the village looking towards the church in the direction of the power station, where the existing structures are not visible behind the mature boundary planting. The power station has an urbanising effect on the understanding of the siting of the village and its rural location when moving through the landscape outside the settlement, and this does form part of the setting of the church, detracting from understanding of its rural context and historic interest. The English Onshore Scheme in the vicinity of the asset includes the erection of the permanent above-ground converter station, which would be located approximately 900 m to the north-east of the asset in the field adjacent to the east side of Drax Power Station. The permanent converter station will be of a lower elevation than the existing Drax Power Station and will appear in views as an extension to the existing detracting site. Whilst this will have an impact on the rural setting of the village, it is considered that the location of the proposed converter station minimises the impact due to its proximity to the existing power station and smaller scale. It will not be visible in key views of the asset from within the settlement, as indicated from the Zone of Theoretical Visibility (see **Figure 9-4**) and confirmed through site visit. A visualisation has been produced to demonstrate the worst-case parameter for the converter station as it will appear in the landscape surrounding the settlement. This is taken looking north-west from fields to the north of the church (see VP11 in **Figure 8-3 of Chapter 8: Landscape and Visual Amenity**). The permanent impact of the construction of the converter station is assessed as having a negligible magnitude of impact, resulting in a **minor adverse** effect. This permanent effect is **not considered to be significant**.

#### *AECOM108 Wren Hall Farm*

Wren Hall Farm is located immediately to the south, west and north of the planning application boundary as it wraps around the asset. It is a non-designated asset of low value. The setting assessment in **Appendix 9F** noted that the construction of the English Onshore Scheme will take place in close proximity to the asset within views to and from the asset and within its surrounding rural farmland landscape. Here the existing Drax Power Station is a detracting feature of the landscape having an urbanising effect on its rural character. The English Onshore Scheme in this location includes the erection of the permanent above-ground converter station, which would be located the east side of Drax Power Station. The permanent converter station will be of a lower elevation than the existing Drax Power Station and will appear in views as an extension to the existing detracting site, although much closer to the asset than the existing station at approximately 200 m at its closest extent. A visualisation has been produced to demonstrate the worst-case parameter for the converter station looking west from Wren Hall (see VP10). The scale and appearance of the converter station will increase the urbanising and dominant effect of the power station in views of and from the asset, noticeably affecting its heritage value. Some mitigation of this impact is provided in form of additional boundary planting to the east of the proposed converter station. The permanent impact of the erection of the converter station is therefore assessed as having a medium magnitude of impact, resulting in a **minor adverse** effect. This permanent effect is **not considered to be significant**.

#### *AECOM 109 Drax Abbey Farm and AECOM111 Old Lodge*

Drax Abbey Farm and Old Lodge are non-designated assets of low value that have a historic association with each other as the old lodge was a former lodge building with a tree-lined avenue to its west side providing access to the 19th century Drax Abbey Farm. They are located approximately 890 m north of the planning application boundary. The setting assessment in **Appendix 9F** and Section 9.5.4.8 noted that the construction of the English Onshore Scheme will take place within the surrounding farmland setting of the assets, where the existing Drax Power Station is a detracting feature of the asset's setting. The proposed development in the vicinity of these assets includes the permanent above-ground converter station approximately 1 km to the south of the assets, to the east side of Drax Power Station. The permanent converter station will be located to the south of a narrow band of woodland planting

lining Carr Lane and the to the south of an existing field boundary containing mature trees. The latter boundary will be retained as part of the English Onshore Scheme. The trees will screen the lower levels of the structure, but it will be visible above. The converter station will be of a lower elevation than the existing Drax Power Station and will appear in views as an extension to the existing detracting site. A visualisation has been produced to demonstrate the worst-case parameter for the converter station looking south from the vicinity of the assets on Pear Tree Avenue (see VP12). The scale and appearance of the converter station will increase the urbanising effect of the power station in views within the assets' surroundings, slightly affecting their heritage value. The permanent impact from the construction of the converter station is therefore assessed as having a low magnitude of impact, resulting in a **negligible** effect. This permanent effect is **not considered to be significant**.

No significant effects have been identified in relation to operation of the English Onshore Scheme.

