PROPOSED BIOMASS WASTE WOOD PROCESSING PLANT, POLLINGTON AIRFIELD, NORTH YORKSHIRE & EAST RIDING OF YORKSHIRE:



a desk-based assessment of archaeology and cultural heritage

Prepared by: HUMBER FIELD ARCHAEOLOGY

The Old School

Northumberland Avenue KINGSTON UPON HULL

HU2 0LN

Prepared for: DALKIA BIOENERGY LTD, through their agents

ethical partnership 28 Windsor Terrace South Gosforth

NEWCASTLE UPON TYNE

NE3 1YL

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K. Steedman 17/12/2008

1 **SUMMARY**

An archaeological desk-based assessment was undertaken by Humber Field Archaeology on behalf of Dalkia Bioenergy Ltd, through their agents ethical partnership, in advance of proposals for the construction of a Biomass Waste Wood Processing Plant at Pollington Airfield, North Yorkshire & East Riding of Yorkshire. The archaeological context of the development area has been assessed through examination of available published or unpublished records, to identify key archaeological features and identify any risks or constraints associated with the construction project, allowing identification of mitigation measures which might be required to safeguard archaeological remains during construction. A geophysical survey carried out as an initial evaluation of the Proposal Site is also discussed.

A Study Area was defined which encompassed the Proposal Area and a significant area bordering it. An area of 9km² was involved, including land within the parish of Heck in North Yorkshire and the parishes of Gowdall, Pollington and Balne in the East Riding of Yorkshire.

The assessment identified 51 archaeological monuments or find-spots, assigned varying grades of importance: no sites of the national importance were identified, though a significant number of sites of regional or regional/local importance were, varying from Grade II listed buildings through to Iron Age and Romano-British settlement sites identified by geophysical survey or air photography. The potential effects of the development are discussed and mitigation to offset these effects is proposed.

2 INTRODUCTION

2.1 Background

The following assessment has been undertaken by Humber Field Archaeology in advance of the proposed construction by Dalkia Bioenergy Ltd. of a Biomass Waste Wood Processing Plant on land at the former Pollington Airfield, North Yorkshire & East Riding of Yorkshire (approximate central NGR SE 6017 2089; see Figure 1). The site lies within an important archaeological landscape where late prehistoric, Romano-British and later settlement has been recorded

The proposed development lies entirely within Selby District Council, the development of which will not require an Environmental Impact Assessment, while a further area of land reserved for possible long term expansion lies within both Selby DC and the East Riding of Yorkshire (ERYC) and will require submission of an EIA. Planning applications have not yet been submitted for the proposed development, though pre-application meetings have been held with Selby DC and ERYC regarding the proposal and the need for archaeological evaluation has been recommended. The evaluation is to be undertaken to establish the presence and extent of archaeological remains so that, if necessary, mitigation measures can be explored to achieve their physical or *in situ* preservation or, if destruction is unavoidable, for an appropriate record to be made of any such remains through further archaeological work undertaken in advance of, or during, development.

The Humber Sites and Monuments Record Office (HSMR), archaeological advisors to East Riding of Yorkshire Council (ERYC) requested that evaluation by geophysical survey took place, the results of which would be interpreted in conjunction with the results of a Desk-based Assessment of the proposal area and the immediate area surrounding it.

Humber Field Archaeology (HFA) were approached by *ethical partnership*, acting on behalf of the developers, Dalkia Bioenergy Ltd., to submit a quotation for undertaking the geophysical survey and the production of the desk-based assessment. HFA were subsequently appointed and the geophysical survey took place in late November and early December 2008, the results of which have been incorporated below (full report is Appendix 2).

As part of the feasibility study, an archaeological desk-based assessment has been undertaken of the archaeological context of the development area, to identify key archaeological features and identify any risks or constraints associated with the construction project. This will allow identification of any mitigation measures which may be required to safeguard archaeological remains during construction.

The desk-based assessment has involved the collation and evaluation of existing information, including: records of previous discoveries; historic map and documentary evidence, within a study area surrounding the area potentially affected by the proposed construction. This is intended to assist in identifying the likely character, extent and relative quality of the actual and potential archaeological resource, as well as the potential or need, if any, for further archaeological fieldwork.

2.2 Definition of the Study Area

Fig. 1

The proposed development comprises construction of a wood biomass processing facility, with associated storage areas; an additional area of land has also been reserved for possible long term expansion. A single study area has been defined which encompasses the development area and the land for potential expansion, plus a significant area surrounding them. An study area of 9km² is involved, including land within the parish of Heck in North Yorkshire and the parishes of Gowdall, Pollington and Balne in the East Riding of Yorkshire. Most of the land within the Study Area is currently farmland.

2.3 Aims and objectives

The principal objectives of the assessment will be as follows:

- identify known archaeological sites within or immediately adjacent to the proposal site;
- identify areas with the potential to contain any unrecorded archaeological remains;
- assess the effects of any proposed development upon archaeological sites;
- propose archaeological measures which could be built into the development proposals to avoid, reduce or remedy any potential adverse effects identified.

Planning Policy Guidance Note 16, 'Archaeology and Planning', issued by the Department of the Environment in November 1990 sets out the Secretary of State's policy on land-based archaeological remains, how they should be preserved or recorded. Where archaeological remains can be demonstrated through research and/or evaluation, a mitigation strategy should be prepared in consultation with the Local Planning Authority. The presumption is in favour of preservation *in situ* through the modification of a proposed development, and only where this is not possible, detailed excavation and recording ('preservation by record') is acceptable as a last resort.

3 METHODOLOGY AND SOURCES

3.1 Introduction

The information upon which this study is based was collated from existing written, published, graphic and unpublished information, directly or indirectly relating to archaeological remains or features of historical interest within the Study Area. The sources of information consulted are noted below and the data derived from them are presented in the gazetteer of archaeological remains in tabulated format in Appendix 1 of this study; gazetteer numbers are also given at appropriate points in the text. Additional published and unpublished sources are quoted in the report text and their details are noted in the bibliography. The location of the various archaeological sites or find-spots are shown on Figure 1.

To aid in the definition of the archaeological context of the Study Area, some archaeological sites from the area immediately surrounding have also been discussed.

3.2 Sources

Various cultural heritage research sources were used during this assessment:

- Humber Sites and Monuments Record
- North Yorkshire Historic Environment Record
- National Monuments Record: Archaeology
- Listed Buildings Online
- published and unpublished historical and archaeological studies
- cartographic sources (including historic Ordnance Survey maps)

3.3 Assessment of the significance of cultural heritage sites in the Study Area

The effects of a development proposal will depend upon the adequate prior assessment of the significance of the archaeological sites and features which will potentially be affected and the degree of impact of the proposals. There are occasions when insufficient is known to make informed judgements and an assessment of risk is all that can be offered. In assessing the effects of the proposals upon cultural heritage resources, it is necessary to consider the importance of the resources, as well as the magnitude of impact. Professional judgement and a degree of flexibility need to be applied.

Importance is based on statutory designations (e.g. Scheduled Monuments, Listed Building grades, neither of which actually apply here) as well as on the following generally accepted criteria:

- Period
- Rarity
- Group Value
- Condition

The criteria of importance set out in Annexe 4 of PPG 16, modified to take account of the whole range of site values, not just scheduled monuments, is used as a guide for judgements

of importance used in cultural heritage studies. The following categories are used in this report, with codes used in the gazetteers (in brackets):

- National (A): the highest status of cultural heritage site: e.g. scheduled monuments, listed buildings (Grade I & II*), well-preserved historic landscapes;
- (County)/Regional (B): includes the bulk of cultural heritage sites with reasonable evidence of occupation, ritual, industry etc, listed buildings Grade II; reasonably preserved historic landscapes;
- Local (C): cultural heritage sites with some evidence of human activity, but in a fragmentary or poor state, buildings of local importance, dispersed elements of historic landscapes.
- Unknown/Unimportant (N): insufficient evidence or data to make an informed judgement of importance, where a building, site or finds spot is considered to have no significance, or represents a monument or find known only from documentary sources with no specific identifiable location.

Where a decision is borderline or where an entry potentially applies to a range of different sites of differing perceived importance (e.g. a cropmark complex, mixed finds assemblage), then "mixed" gradings such as B/C have been used.

3.4 The geophysical survey

Following pre-application meetings held with Selby DC and ERYC regarding the proposal, the need for archaeological evaluation was recommended. The Humber Sites and Monuments Record Office (HSMR), archaeological advisors to ERYC, requested that evaluation by geophysical survey took place, the results of which would be interpreted in conjunction with the results of the Desk-based Assessment of the proposal area and the immediate area surrounding it.

HFA were appointed by *ethical partnership*, on behalf of Dalkia Bioenergy Ltd., to undertake the survey and a Project Design for the work was prepared and submitted to both NYCC Heritage and Environment Section and HSMR for their approval, which was subsequently granted (on 19/11 and 21/11 respectively).

Results

The survey was carried out by GeoQuest Associates, sub-contract specialists in geophysics, between 26th November and 2nd December 2008. Approximately 50% of the area available was surveyed, with five survey blocks, totalling 13.14ha in size, being subject to survey; information allowing the survey blocks to be relocated on the ground is contained in the GeoQuest report (Appendix 2).

Measurements of vertical geomagnetic field gradient were recorded over the surveyed areas using a Geoscan FM36 fluxgate gradiometer recording at 0.05nT/m resolution. A zig-zag traverse scheme was employed and data were logged at 1.0x0.0.25m intervals, in grid units of 20m x 20m, thus providing 1600 measurements per hectare. The full results of the survey can be found in Appendix 2, though an interpretative description adapted from the report follows below. Where particular anomalies are referred to, the feature numbers used in the original report are quoted.

Geomagnetic anomalies throughout the survey area were found to be extremely weak; however, with the exception of a few areas, the survey blocks were found to contain very low densities of surface iron litter, a factor which fortuitously improved the detection of minor geophysical anomalies of archaeological interest.

Areas 1 & 2: Areas of intense magnetic dipolar anomalies were detected along the southern boundaries of both blocks in areas adjacent to the former airfield runways and where straw bales were being stored; they are considered to represent the presence of hardcore from the runway edges and potentially demolished structures, as well as iron litter from machinery. Nothing of archaeological significance was noted in Area 2, but a north/south linear anomaly (f2) in Area 1 may be a wide boundary ditch or a silted stream channel, while a smaller, rectilinear anomaly just to the east may represent an associated ditched enclosure.

Area 3: A pattern of weak linear anomalies (f3) at the eastern end of the survey block may represent three or more parallel soil-filled ditches. Further west, a weak positive north/south linear anomaly (f4) crosses the survey block, suggesting the presence of a soil-filled ditch at least 135m long. The feature runs towards a mobile phone mast to the north, so could represent a faint trace of a former service trench for this facility.

Area 4: Two intersecting linear anomalies (f5 and f6) could represent parts of ditched trackways, ditches or enclosures; feature f6 could continue south to connect with feature f9 in Area 5.

Area 5: This was the largest survey block (6.18ha), having been positioned to investigate a ditched trackway mapped by aerial photography. The known trackway was detected (as f7), comprising a pair of linear anomalies which could be traced for about 255m; the variable appearance of the anomalies may indicate variable preservation, actual gaps in the boundary ditches or changing magnetic contrast of the ditch fills relative to the surrounding subsoil.

In the south-eastern corner of the survey block, relatively strong linear anomalies (f8) provide convincing evidence for two sides of a ditched enclosure, possible with an entrance gap on the west side. Also in the eastern half of the block, one or more faint north/south linear anomalies (f9) have been detected, which may represent further sections of soil-filled ditches.

At the north-western end of the detected trackway, there appears to be a complex pattern of linear and rectilinear magnetic anomalies (f10 and f11) indicating one or more rectangular ditched enclosures astride the trackway; of particular note is the possible presence of 10m-square ditched feature within the enclosure(s). South-west of the trackway, a number of minor linear anomalies have been detected, the most prominent of which (f12) can be traced running south-east for about 100m; this may represent a boundary ditch or part of an enclosure, but the weakness and diffuse nature of the anomalies make a more certain interpretation less possible.

An alignment of strong magnetic dipoles (f13) alongside the timber storage area on the former runway on the western edge of the survey area suggest the presence there of a modern buried iron pipe or cable duct.

Conclusions

The survey has confirmed the existence of the ditched trackway previously seen as cropmarks on aerial photographs. A number of other magnetic anomalies were detected, either in close

proximity to the trackway, or further afield, the character, plan or alignment of which strongly suggest the presence of archaeological settlement features, principally soil-filled ditches taken to represent ditches and enclosures.

A recent date for some of the features is possible, though the layout of the fields in the farmland prior to construction of the WWII airfield has been compared with the geophysical survey and there was only one possible correspondence (f3 in Area 3). It might be also possible that some of the linear anomalies represent service trenches, cable ducts and drains connected with the former airfield or subsequent development. On morphological grounds, however, the enclosures, trackway and ditches are considered most likely to be of late prehistoric or Romano-British date, being similar in form to cropmarks from the surrounding area which have been interpreted as representing settlement of that date.

Only further archaeological intervention, involving limited trial excavation or the stripping and examination of larger areas, would firmly establish the archaeological origin of these features. In the meantime, their likely interpretation as archaeological features has allowed their consideration as part of the desk-based assessment of the proposal area.

4 ARCHAEOLOGICAL POTENTIAL OF THE STUDY AREA

Archaeological and historic sites recorded within the Study Area (or close by) are listed in the gazetteer (Appendix 1). The sites are given a gazetteer reference (eg. Gaz.00), which is correlated where applicable with the numbers assigned by Humber SMR, North Yorkshire HER, the National Monuments Record and the Listed Buildings register. The results of the recent geophysical survey are also considered and sites have been assigned gazetteer entries where appropriate.

A central grid reference, suggested classification and date are provided for each site, which are graded in archaeological significance as either: A (national), B (regional), C (local) or N (unknown/unimportant); see 3.3, above. The locations of the sites are shown on Fig. 1.

4.1 Site topography and geology

The overall proposal area – the combined area of the two phases of the development – occupies two blocks of land: a large, roughly triangular area directly adjoining the southern side of the M62 motorway, comprising parcels of arable land within the former Pollington Airfield and adjoined by an extensive gravel works to the west; and, a roughly rectangular area to the south between Heck and Pollington Lane and the Aire and Calder Navigation canal. The land is at its highest along the low ridge upon which sit the villages of Pollington and Great Heck, dropping south from here onto the lower-lying land of Balne Moor and north, more gradually, towards the valley of the River Aire, being generally level (at between 8 and 9m OD) in the area of the former airfield.

The underlying geology within the Study Area varies. The low east-west ridge already mentioned comprises sand and gravel, considered to be lacustrine beach deposits associated with the former Lake Humber. South of this lie silt and clay glaciolacustrine deposits of the 25-Foot Drift (deposits also associated with the former Lake Humber), while to the north the ridge flanks a narrow outcrop of Bunter (Sherwood) sandstone, which curves northwards to the north-east corner of the Study Area – the village of Gowdall sits upon it. The sandstone gives way to further glaciolacustrine deposits of the 25-Foot Drift over much of the northern part of the Study Area, some of which at least may be sands rather than silts and clays (BGS data from Envirocheck; British Geological Survey 1:50 000 Sheet 79, Drift edition).

Most of the Study Area is covered by well-drained, sandy and coarse loamy soils that developed on the underlying sand and gravel drift and sandstone outcrops, classified as 551d Newport 1 by the Soil Survey of England and Wales (1983). To the south – roughly corresponding to the area south of the Aire and Calder Navigation and below 5m OD – the soils are poorly drained over glaciolacustrine silts and clay (classified as 712i Foggathorpe 2), while in the area between Gowdall, Little Heck and north of the M62, also below the 5m contour, there are loamy permeable soils affected by groundwater (classified as 831b Sessay) over glaciolacustrine drift.

4.2 Earlier prehistoric activity

There are only two records of discoveries of earlier prehistoric date from within the Study Area. A number of possible Bronze Age round barrows (Gaz.40) were reportedly noted on the north side of Pollington village, in an area which has now been quarried, while a polished flint adze of Neolithic or Bronze Age date (Gaz.33) was found in the same area during

quarrying in the 1950s – it is tempting to suggest that the flint adze came from one of the former burial mounds.

The paucity of evidence for early prehistoric activity in the Study Area is not unexpected, however, given the lack of systematic archaeological fieldwork to date. In the wider area, a recent review of the archaeology of the Humberhead Levels (Van de Noort and Fenwick 1997, 222-223), an area encompassing the flood plains of a number of rivers which feed the Humber, including the Aire to the north of the Study Area and the Went to the south, did not list more than a few early prehistoric finds, with Mesolithic and early Neolithic finds being restricted to a couple of key sites (Sutton Common, South Yorkshire and Misterton, Nottinghamshire) and a few smaller find-spots in proximity to rivers and palaeochannels. Later Neolithic and Bronze Age finds were also sparse, comprising mostly flint, stone or metal axes or axe-hammers; in fact, compared to other parts of the Yorkshire region, the density of flint and stone axe-heads in the Humberhead Levels was considered very low.

Given the presence of probable Iron Age and Romano-British settlement remains within the Study Area (see below), however, the likelihood is that evidence of earlier settlement would be present in the same areas. Even the less well-drained, lower-lying areas would have been exploited due to their proximity to wetland resources for hunting, fishing and raw materials.

4.3 Iron Age and Romano-British activity

Aerial photographic research (and more recent geophysical survey) have uncovered evidence of extensive early settlement remains within the Study Area (Gaz. 1, 2, 3, 11, 13, 16, 17, 20, 21, 23, 25, 26 and 27), much of which, on morphological grounds, would appear to be of Iron Age and/or Romano-British date; further cropmark sites of similar form also lie just outside the area to the north-west, east and south-east, the latter in the area of the Manor House, south of Pollington village. Without the presence of chronologically distinctive features in a cropmark complex – such as Iron Age roundhouse or Roman rectangular buildings – it is not possible to assign a definite Iron Age or Romano-British date to a particular settlement represented by cropmarks; it is quite likely, in fact, that occupation would have continued from one period into the next.

The settlement remains recorded suggest a rural landscape in the Iron Age and Romano-British period of small enclosed farmsteads with associated fields and stock compounds, connected by ditched trackways. Particularly pertinent to the current development is the trackway (Gaz.20), recorded by both aerial photography and geophysics, which crosses the proposal area from north-west to south-east. A number of possible enclosures and ditches (Gaz.16, 21) were detected in close proximity to the trackway, presumed to represent contemporary settlement, and the trackway is probably the continuation of a similarly-aligned trackway further to the north-west (Gaz.1), where it is also associated with cropmarks of enclosures and/or field ditches. To the south-east, the trackway heads towards the village of Pollington, where a number of discoveries of Roman finds, most made during 20th-century sand and gravel quarrying in the area south of Heck and Pollington Lane, suggest the presence of a Romano-British settlement site on this part of the sand and gravel ridge.

Of particular significance is the discovery of a large gritstone coffin (Gaz.32) containing the body of a woman sealed below plaster (known as a gypsum burial), dated to the late 4th/early 5th century AD. A mid 4th century cremation urn was found close by, and a short distance further east was discovered the burial of a child (Gaz.31), in a pottery vessel of 2nd-/3rd-

century date. The same quarry was reported to have produced a quantity of Roman material during its operation in the mid 20th century, including samian pottery (imported Roman fineware). A 1st-century Roman coin of the Emperor Vespasian (Gaz.51) was found in the village at around the same time and may be from the same area as the other finds. This concentration of finds would suggest that whatever settlement had lain here, its occupation continued throughout the Roman period. There was also sufficient wealth here to afford the production and transport to the site of a stone coffin, itself an uncommon find in Britain, normally associated with relatively high status settlement; on the strength of this it has even been suggested that a Roman villa may have been present (Van de Noort and Fenwick 1997, 224).

The nearest site of this period to have been properly investigated archaeologically was at Topham Farm, Sykehouse, South Yorkshire, around 2.5km south of the Study Area (Roberts 2003). Here a late Iron Age/Romano-British settlement comprising enclosures and roundhouses was examined in 2002. The site was probably occupied from the 1st century BC through to the early 2nd century AD and as well as the structural remains, a significant assemblage of Late Iron Age and Roman pottery was recovered, including samian. What is significant about the discovery of the site at Sykehouse is that it lies in an area where the lowlying clay and silt subsoils have not traditionally been responsive to aerial reconnaissance, meaning that settlement remains have, in effect, been invisible in such areas and they have been assumed to have been largely devoid of early settlement. Low-lying areas were extensively settled elsewhere in the region in the Iron Age and Roman period, however, due to the lower groundwater levels which prevailed at the time, and there is no reason to suppose that these areas would be any different. Within the Study Area, the cropmarks indicating settlement were in all cases on the well-drained, sandy and coarse loamy soils which were better at producing cropmarks, though the lack of crop marks, soilmarks or earthworks in other parts of the Study Area should not necessarily be interpreted as the absence of archaeology, merely gaps in the available information.

4.4 Medieval activity

Evidence of medieval settlement within the Study Area is largely restricted to the settlements of Great Heck, Pollington and Gowdall, and the remains of ridge and furrow cultivation of the large common fields which had surrounded the settlements prior to their enclosure in the late 18th centuries, though there are also a small number of isolated features of this date.

The settlement of Great Heck (Gaz.19), in Heck parish, is not mentioned in Domesday, being first recorded in 12th-century charters, as Hech, Heccha or Hecca, and later in the 13th century as Heck(e) or Hek(k); the place-name itself derives from Middle English hæcc, meaning a 'hatch' or 'gate' (Smith 1961, 18). The village is essentially a linear settlement, with croft enclosures extending back from the main thoroughfare to north and south. Many of the croft boundaries remain, particularly on the south side of Main Street, many having been sliced through by the construction of the Aire and Calder Navigation (see below); the cropmarks (Gaz.26) of a small number of ditches on the southern side of the canal may represent the rear parts of former closes.

Traces of former ridge and furrow cultivation (Gaz. 7 and 8) have been recorded as cropmarks on air photographs in Heck parish, some of which lie within a number of ditched enclosures (Gaz.7) in the area east of the hamlet of Little Heck, north of Great Heck, which may represent an early area of enclosed fields. Within these enclosures, some cropmarks

(Gaz.5) have been interpreted as representing a moated site with a nearby ornamental pond, which could suggest the site of a former medieval farm, manor house or grange, no further details of which are currently known. Some of the enclosures in the same complex may, however, have a post-Enclosure origin.

Pollington (Gaz.47) is also first mentioned in 12th-century records, as *Poullgleton*, Pouelington(a), Polington(a) or Polyngton(a). Despite not being mentioned in Domesday, it is reckoned that the place-name probably derives from an earlier Old English form Pofelingtun, the -tun element meaning 'farmstead', the pofel perhaps connected with Old English popel, meaning 'pebble', with the whole meaning 'a farmstead associated with a piece of ground called *Pofel*', the latter perhaps denoting a plot of sandy or gravelly soil (op. cit., 21); it is certainly the case that Pollington sits on sand and gravel subsoil. Former medieval ridge and furrow cultivation (Gaz.43 and 50) has been recorded by aerial photography as both earthworks and cropmarks. Within the village, archaeological monitoring of development in 2002 on a site in Pinfold Lane (Gaz.42) recovered sherds of medieval pottery, including one sherd of 11th-century date, confirming that settlement here pre-dated it first recorded mention.

North of Pollington, the course of a former track (Gaz.24) has been recorded as a sinuous cropmark of parallel ditches. It is considered to be of medieval date given its continuation of the line of an equally sinuous track further to the north, shown on the OS first edition map (of 1853). The route of the cropmark track is now partially followed by a straighter public footpath which was presumably its successor post-enclosure.

The settlement of Gowdall, some of which lies in the north-eastern corner of the Study Area, is first recorded in the 13th century as Goldale or Goldale, derived from the Middle English words golde and halh, and meaning 'nook of land where marigolds grow', the 'nook' being a piece of ground within one of the loops of the River Aire (op.cit., 17). Earthworks of medieval ridge and furrow (Gaz.6) have been recorded through aerial photography to the south of the village.

4.5 Post-medieval to early modern activity

The open fields and common lands surrounding the medieval settlements were enclosed in the late 18th century through Parliamentary Enclosure Acts, being enclosed and allocated to a number of private landholders, removing the rights that people once held to graze animals on these areas: Pollington was enclosed in 1772, Gowdall in 1773 and Great and Little Heck in 1775. The main pattern of field boundaries and drains established then has continued virtually unchanged until relatively recently, though much amalgamation of smaller into larger fields has clearly taken place in recent years as agricultural practices have changed.

While many of the present farms would have been established at the time of Enclosure, following the radical reorganisation of the landscape, others would have pre-dated this, particularly those in villages which had essentially expanded from medieval village crofts. In Pollington village there are three Grade II Listed former farm buildings which have elements which pre-date late 18th-century enclosure: Pollington Hall (Gaz.37), which is of mid 18thcentury date; Dovehouse Farmhouse (Gaz.38) of a 17th-century or earlier date; and, Bridge Farmhouse (Gaz.46), which is of mid 18th-century date. In Gowdall, Lodge Farm (Gaz.9), which lies at the southern end of the former village street, is of an early 18th-century date. In Gowdall parish, outside of the village, there are a number of enclosure-period farm buildings with Grade II Listed status: a stable/pigeoncote (Gaz.10) at Hill Farm; Gowdall Broach Farmhouse (Gaz.15); and, a threshing barn (Gaz.14) at Gowdall Broach Farm.

A windmill (Gaz.29) for the grinding of corn was present in Pollington in the mid 19th century, at the northern end of Pinfold Lane; it was presumably built in the late 18th/early 19th century as a response to the increasing arable production in the area following enclosure, though it could well have had an medieval predecessor. The eminence upon which the windmill once stood has now been quarried away (see below).

The southern edge of the Study Area is crossed by the Aire and Calder Navigation (Gaz.36), the Knottingley to Goole section of the canal having been constructed in the early 19th century to link the Ouse at Goole with a series of waterways further west. Completed in 1826, the canal carried millions of tons of coal from the Yorkshire mines to Goole for national distribution and export, as well as providing transport for local produce to markets.

The railways later became the main mode of transport for coal and a number of branch-lines were constructed in the area during the 19th century, not only to serve the coal industry and the transport of other commodities, but also a burgeoning number of rail passengers. Parts of three lines cross the Study Area: the Wakefield, Pontefract and Goole Railway (Gaz.4), opened in 1848 and still part of the public railway network; the Hull and Doncaster Railway (Gaz.12), opened in 1885 and dismantled in the late 1960s; and, the Great Northern Railway (Gaz.28), which opened in 1871 and now carries the main East Coast passenger line.

4.6 **Modern activity**

The extraction of sand and gravel at Pollington had already begun in the 19th century – a small 'sand pit' (Gaz.30) is marked on the 1853 OS map – but it was at its height in the 20th century, involving extraction of areas both sides of Pinfold Lane (Gaz.34) and westwards along the ridge on the south side of Heck and Pollington Lane; mid 20th-century extraction at Pollington resulted in the discovery of a number of important prehistoric and Roman finds (see above). Extraction at Pollington has ceased, with the former quarries now partially restored or used as the site of works producing concrete products. Extraction also took place at Great Heck, the quarry there directly adjoining the proposal area; this is also now the site of works producing concrete products.

The former airfield at Pollington (Gaz.22) was constructed during World War II as a bomber base. Construction of the airfield commenced in 1940 and it was in operation until 1945. Three intersecting runways were constructed, traces of which still remain today, and some of the associated buildings still remain to the south of the runways, having been re-used as commercial premises. The positions of searchlight batteries and anti-aircraft guns are discernible from air photographs as a series of circular installations connected by roads along the northern edge of the airfield and to the south-east; a searchlight battery and associated buildings (Gaz.35) were also noted on air photographs to the south, near Pollington Hall. A number of camps (Gaz.39, 41, 44, 45 and 48) were constructed to the south-east of the airfield to house base personnel, the buildings, blast-walls and roads of the camps having been mapped from air photographs in the area of Pollington village. A total of 205 bombers were lost from Snaith, 57 being Wellingtons of No. 150 Squadron; a memorial garden to the 265 airmen who lost their lives flying Wellingtons and the 687 airmen who lost their lives flying Halifax bombers from Snaith between 1941 and 1945 lies just south of the industrial estate which occupies part of the former airfield. Much of the area between an around the

runways has reverted to agriculture and the M62 motorway cut across the northern edge of the former airfield in the 1970s.

4.7 **Information gaps**

Readily available documentary sources were consulted. There may be other sources held in repositories which have not been consulted as part of this assessment; however it is considered unlikely that further consultation of such sources would alter the conclusions reached by this assessment.

5 ENVIRONMENTAL EFFECTS

5.1 **Introduction**

The magnitude of effects on archaeological sites is categorised using the criteria given below:

High

Direct physical effect on monuments or archaeological sites, fundamentally changing their baseline condition, leading to their total destruction or major alterations to their character or setting; includes the subsequent major degradation of their preservational regime as a result of the development.

Medium

Direct physical effect on monuments or archaeological sites, materially, but not fundamentally, changing their baseline condition, leading to their partial destruction or a partial alteration of their character or setting; includes some subsequent degradation of their preservational regime as a result of the development.

Low

Minor physical effects which do not materially alter the baseline condition of the archaeological site or its setting.

Neutral

No identified beneficial or adverse changes to the condition of the archaeological site or its setting.

The significance of an effect is then determined as a function of the importance of the archaeological site and the magnitude of the effect; the method of ranking of archaeological sites is described above (see 3.3) and the ranking of individual sites is listed in the Gazetteer (Appendix 1) A matrix showing how these factors are combined to attribute significance is provided below.

	Leve	Level of Archaeological Importance									
Magnitude of Effects	National (A)	Regional (B)	Local (C)	Unknown (N)							
High	Major	Major- Moderate	Moderate	Minor							
Medium	Major- Moderate	Moderate	Minor	Minor							
Low	Moderate- Minor	Minor	Minor	None							
Neutral	None	None	None	None							

Where the boxes in the matrix contain a range of values, professional judgement is used to assign a value within the range given. An effect of moderate significance or greater (shaded grey in the matrix) is considered to be significant in terms of the EIA Regulations. Further explanation of the levels of mitigation attendant to these effects follows below:

Major These effects are likely to be associated with sites and features of national or county/regional importance. Mitigation measures and/or detailed design work

(including re-siting of elements and/or foundation design) may remove all of the effects upon the affected archaeological sites.

Moderate These effects are likely to be associated with sites and features of local or

county/regional importance. Mitigation measures and detailed design work

would ameliorate/enhance some of the consequences upon affected sites.

Minor Effects associated with sites and features of local or unknown importance.

Mitigation measures, where deemed necessary, will remove these effects.

No effects or those which are beneath levels of perception, within normal None

bounds of variation or within the margin of forecasting error.

Potential effects of the development on archaeology and cultural heritage

The proposed key elements of the development are not listed in detail, though the following discusses what are perceived to be the likely effects of particular elements of the development on archaeological sites, known or unknown. The demolition/clearance of existing buildings and structures on the site and the construction of certain key elements of the development could potentially affect below-ground archaeological remains where any are present. Most of the archaeological remains identified, or potentially surviving, within the proposal area are expected to lie relatively close to the surface, at the base of topsoil or hard surfaces; previous landscaping and/or development - and before that agriculture - will have disturbed most of which once lay above this.

The demolition and/or clearance of any existing structures has the potential to disturb surviving archaeological remains to varying degrees, depending on the current depth of foundations and slabs which are to be removed, and the degree of excavation needed to remove them. Movement of heavy plant over exposed, unsurfaced soils during the demolition and/or clearance could also effect any archaeological remains which are present.

The construction of the buildings and associated structures will involve excavation for foundations, to varying depths - as such they have the potential to affect below-ground archaeological deposits. Creation of parking areas, infrastructure and attendant landscaping will also have the potential to disturb surviving remains.

The formation of temporary works compounds, lay-down areas or crane hardstandings will also potentially involve disturbance to archaeological remains.

Trenches excavated for mains services, particularly drainage or sewerage, have the potential to be amongst the deepest groundworks; there is clear potential, therefore, for this activity to disturb surviving archaeological deposits.

Given the assessment of known and potential archaeological sites discussed above, much of the proposal area could contain archaeological sites of Local, Local/Regional or Regional importance. Therefore any of the below-ground construction works associated with the proposed development, likely to be effects of **High** or **Medium** magnitude, would potentially affect such sites to **Moderate** or **Major/Moderate** adverse significance.

5.3 Formulation of mitigation proposals through archaeological evaluation

The preferred mitigation to protect significant archaeological remains is to allow their preservation *in situ*, and it is this principle which guides national archaeological planning policies such as PPG16. This is usually achieved through design solutions such as changes to foundation design or the re-siting of elements of a development, though where a design solution is not possible to enable archaeological remains to be preserved *in situ*, the next best solution is *preservation by record*; here the remains are subject to archaeological investigation and recording, the scope of such work being dependant on the extent and significance of the archaeological remains and the scale of the development works which potentially affect them. Formulation of mitigation solutions of whatever form, however, relies on there having been a prior evaluation of the extent, date and degree of survival of archaeological remains, with an assessment of their significance.

Evaluation within the proposal area at Pollington has so far taken the form of geophysical survey which, although having proved relatively successful in identifying major features such as ditches and enclosure boundaries, would not be expected to detect minor features such as pits, postholes, burials or the foundations of timber buildings, especially given the particularly low magnetic response which prevailed. Where evaluation by geophysical survey produces results which suggest the presence of archaeological features, it is usually followed by further evaluation by trial excavation, the aim of this further evaluation being to test the results of the survey and to more fully characterise the nature, extent and condition of the archaeological remains, enabling the formulation of detailed mitigation proposals.

At Pollington, a suitable scheme of trial trenching in response to the geophysical survey results would involve the excavation of a number of linear trenches targeted on specific geophysical anomalies considered to have archaeological significance – such as possible boundary ditches, ditched settlement enclosures and trackways – as well as investigating so-called "blank" areas.

5.4 Potential mitigation

It is currently understood that the nature of the development precludes modifications to foundation design, and to some extent, location; with this being the case, archaeological investigation and recording (*preservation by record*) may be required. The results of evaluation will allow decisions to be made as to whether this takes the form of detailed archaeological excavation or a monitoring and recording exercise during construction.

Where archaeological excavation is required, it is anticipated that selection of areas for further investigation would rely on the results of evaluation. The recording works would commence with a monitored topsoil strip whereby the stripping of present surfaces down to subsoil would be monitored by an archaeologist, the stripping itself preferably being carried out using plant such as a tracked 360° excavator fitted with a wide, toothless, ditching bucket/blade, in a manner such that the underlying subsoil surface is not tracked over or overly compacted during the process. Stripping topsoil in this way results in a relatively "clean" subsoil surface which, when fresh and unweathered, will be able to be examined relatively rapidly, without the need for archaeological staff to carry out a great deal of time-consuming "cleaning" by hand to establish the presence or absence of archaeological features. Where significant archaeological features are encountered, they will be subject to

proper investigation, involving detailed hand-excavation and recording – adequate provision will be needed in terms of resources and time for this in the construction programme.

Where evaluation suggests the presence of archaeological remains of lesser significance, it may be that a programme of monitoring, investigation and recording ("a watching brief") carried out during construction is considered a suitable mitigation, commencing with monitoring of the soil strip (as described above).

The written, drawn, photographic, artefactual and ecofactual data generated by the fieldwork will be collated into a site archive, from which reports will be generated presenting the results; though these will in the first instance take the form of unpublished client reports, where the results are of sufficient merit it may be appropriate that published accounts are produced, following any necessary post-fieldwork research or analysis. Upon completion of any such works, the site archive will ultimately be deposited in an appropriate local museum.

5.5 Residual effects

The potential effects which the construction of the development would have on any surviving archaeological remains have been already been described above, effects considered as having Moderate or Moderate/Major adverse significance. The proposed mitigation measures will ensure that any such remains, if encountered during construction, would be adequately recorded. The proposed programme of mitigation takes the form of recording prior to (or during) construction, proceeding (as necessary) through to off-site assessment, research and analysis, resulting in the production of appropriate reports (including publications) and the eventual deposition of a site archive in a local museum. This will not only ensure the "preservation by record" of any archaeological remains which cannot be preserved in situ, but the knowledge gained will increase archaeological knowledge and understanding of the area.

It is considered, therefore, that the effective implementation of such mitigation measures will potentially result in a residual effect from development of Minor beneficial significance in the medium and long term.

6 CONCLUSIONS

The desk-based assessment resulted in the identification of 51 archaeological sites of varying grades of importance within the Study Area, a 9km² area surrounding the Proposal Area. The totals of sites accorded grades were as follows:

$$A - 0$$

 $B - 14$
 $B/C - 11$
 $C - 23$
 $N - 3$

As can be seen, no sites of the highest grade of importance (A – national importance, equivalent to Scheduled Monuments and Grade I or II* Listed Buildings) were identified within the Study Area, though a significant number of sites of regional (B) or regional/local (B/C) importance were, varying from Grade II listed buildings through to Iron Age and Romano-British settlement sites identified by geophysical survey or air photography. Within the Proposal Area itself, sites of **Local**, **Local/Regional** or **Regional** importance were recorded, most of which were thought to represent late prehistoric or Romano-British settlement remains, including a ditched trackway and a number of associated ditched enclosures, though remains associated with the former WWII airfield might also be expected. The expectation is that other sites, hitherto undetected, could also lie within the Proposal Area.

The below-ground elements of the development, whether clearance of existing buildings and structures on the site, or construction, landscaping and infrastructure, could potentially affect archaeological remains and would have an effect of **Moderate** or **Major/Moderate** adverse significance.

Effective mitigation is proposed to enable the proper recording of any affected remains immediately prior to or during construction, with the added benefit this will bring of the recovery of new archaeological information about the area. It is considered that the implementation of such mitigation measures will result in a residual effect from development of **Minor** beneficial significance.

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BIBLIOGRAPHY

Roberts, I. 2003

Excavations at Topham Farm, Sykehouse, South Yorkshire. A Late Iron Age and Romano-British Settlement in the Humberhead Levels. Archaeological Services (WYAS) Publications 5

Smith, A.H 1961

The Place-Names of the West Riding of Yorkshire: Part II Osgoldcross and Agbrigg Wapentakes, English Place-Name Society vol XXXI (Cambridge)

Van de Noort, R. and Ellis, S. (eds) 1997

Wetland Heritage of the Humberhead Levels: an Archaeological Survey, Humber Wetlands Project (Hull)

Van de Noort, R. and Fenwick, H. 1997

Introduction to the archaeological survey, in Van de Noort and Ellis 1997, 219-226

APPENDIX 1: GAZETTEER

Abbreviations

PRE – prehistoric MESO – mesolithic NEO – neolithic
BA – Bronze Age IA – Iron Age RB – Romano-British
AS – Anglo-Saxon/early medieval MED – medieval PMED – post-medieval
MOD – modern UNK – Uncertain NAT – natural

N - north; E - east; S - south; W - west

EH – English Heritage

HFA – Humber Field Archaeology

HWP – Humber Wetlands Project

NYHER – North Yorkshire Historic Environment Record

HSMR – Humber Sites and Monuments Record

GA – GeoQuest Associates

LBO – Listed Buildings Online NMR – National Monuments Record

OS – Ordnance Survey VoYNMP/MLNMP – Vale of York/Magnesian Limestone National Mapping Projects (EH air photograph interpretation project)

Importance ranking: A – national; B – regional; C – local; N – unknown/unimportant

Gaz Ref	Name	PARISH	Record Type	Summary	Period	Easting	Northing	SMRUID	NMR UID	Other Refs	Importance	Sources
1	DITCHED TRACKWAY, DITCHES AND ENCLOSURES	HECK		The trackway was not contemporary with the (now removed) Little Heck wood, since it is not shown as one of the tracks through the wood on OS 2nd edition 25" map. Other cropmarks around it make it likely to be of IA or RB date, continuing the line of a similar trackway (Gaz.20) further SE. As well as the trackway there are boundary ditches and rectilinear enclosures, which are probably part of a field system. A group of rectilinear enclosures lie to the north, but the relationship between the features is uncertain.	IA, RB	459250	422510	MNY9854	1315636		B/C	NYHER, NMR, VoYNMP
2	DITCHED ENCLOSURES	HECK AND HENSALL		Some of these enclosure boundaries seen as cropmarks were still present and in use in 1984, but had been removed by 1987. The only exception is an H-shaped enclosure (centred at 4596 4226) which did not appear on the 1907 OS map. Also some Iron Age or Roman rectilinear enclosures in the same area recorded by VoyNMP.	IA, RB, PMED	459600	422500	MNY9855	1315360		B/C	NYHER, NMR, VoYNMP
3	DITCHED ENCLOSURES	GOWDALL	Monument	Iron Age or Roman fragmentary ditched enclosures are visible as cropmarks on air photographs.	IA, RB	461980	422470		1303967			NMR, VoYNMP
4	WAKEFIELD, PONTEFRACT AND GOOLE RAILWAY	GOWDALL	Monument	The Wakefield, Pontefract and Goole Railway was authorised in 1845 and opened in 1848.	MOD	461530	422340		1373613		В	NMR
5	MOAT AND POND	HECK		Medieval or post medieval moat and pond are visible as cropmarks on air photographs. The moat (at 45986 42221) is 63m x 50m and to the east is a rectangular pond (45993 42214) 40m x 6m, which has a semicircular extension on its southern side, suggesting it may be an ornamental pond of a formal garden. However there is no evidence for these features, or a country house, on the first edition or later maps.	MED, PMED	459910	422160		1317451		В	NMR, VoYNMP
6	RIDGE AND FURROW	GOWDALL		Medieval and post medieval field system of ridge and furrow in the parish of Gowdall is visible as earthworks on air photographs taken 1948, but no longer extant on later photographs.	MED, PMED	462000	422100		1303317		С	NMR, VoYNMP
-	MEDIEVAL/POST-MEDIEVAL DITCHED ENCLOSURES, RIDGE AND FURROW	HECK		Medieval field system of ditched enclosures is visible as cropmarks on air photographs. It is fairly extensive, extending NW to SE for at least 912m, stopping on county boundary at E end. Some ditches overlap, suggesting there is more than one phase, and the date of some elements is therefore uncertain. Some of the long enclosures contain ploughed level ridge and furrow. Many of the cropmark ditches are marked as extant boundaries on the OS second edition 25" sheet so some at least, may date to Parliamentary Enclosure. (Riley APs)	MED, PMED	460190	422020	MNY9880	1303488		B/C	NMR, VoYNMP, NYHER
8	RIDGE AND FURROW	HECK		Medieval and post-medieval field system of ridge and furrow in the parish of Heck is visible as earthworks on air photographs taken in 1947. Later photographs taken in the 1970s show it is no longer extant and some is visible as cropmarks.	MED, PMED	459000	422000		1303304		С	NMR, VoYNMP
9	LODGE FARMHOUSE	GOWDALL	Monument	Post-medieval farmhouse, early 18th century, with later additions. L-shaped plan. Derelict. Grade II Listed.	PMED	461669	421800	MHU4730		LBS 164874	В	HSMR, LBO
10	STABLE/PIGEONCOTE	GOWDALL		Late 18th-century stable/pigeoncote, brown brick with Yorkshire slate roof to pigeoncote, pantile roof to lower stable section. Rectangular, forming north side of fold-yard. Grade II Listed.	PMED	462031	421678	MHU9370		LBS 164871	В	HSMR, LBO
11	DITCHED ENCLOSURES	GOWDALL		Iron Age or Roman rectilinear ditched enclosures, possibly part of a larger field system, are visible as cropmarks on air photographs. Some ditches overlap and there appears to be more than one phase. To the west (Gaz.13) are fragmentary enclosures, but the relationship between the two groups is uncertain.	IA, RB	461520	421450	MHU8078				NMR, VoYNMP, HSMR
12	HULL AND DONCASTER RAILWAY	HECK AND GOWDALL		The Hull and Doncaster Railway, which formed part of the Hull and Barnsley Railway, was an independent railway opened in 1885 between Cudworth and Hull (Alexandra Dock). Closed to passenger traffic in 1955, goods traffic ceased between Hull and Wrangbook in 1959, and between Wrangbrook and Cudworth in 1967, after which the whole line was dismantled.	MOD	459200	421435		1374644		В	NMR

Gaz Ref	Name	PARISH	Record Type	Summary	Period	Easting	Northing	SMRUID	NMR UID	Other Refs	Importance	Sources
13	DITCHED ENCLOSURES	GOWDALL	Monument	Iron Age or Roman fragmentary ditched enclosures are visible as cropmarks on air photographs. There are more enclosures to the east (see Gaz.11), but the relationship between the two groups of enclosures is uncertain.	IA, RB	461200	421410		1303960		B/C	NMR, VoYNMP
14	BARN W OF GOWDALL BROACH FARMHOUSE	GOWDALL	Monument	Threshing barn, late 18th/early 19th century. Brick with pantile and Yorkshire slate roof. Rectangular with pair of opposing entrances, forms west side of fold-yard. Grade II listed.	PMED	461688	421156	MHU9372		LBS 164873	В	HSMR, LBO
15	GOWDALL BROACH FARMHOUSE	GOWDALL	Monument	Post-medieval farmhouse, late 18th/early 19th century. Brown brick with Yorkshire slate roof. Grade II Listed.	PMED	461720	421144	MHU9371		LBS 164872	В	HSMR, LBO
16	POSSIBLE DITCHES	POLLINGTON	Monument	Geophysical survey (November/December 2008) detected two intersecting linear anomalies which could represent early boundary or field ditches, perhaps associated with the trackway and enclosure (Gaz.20) to SW. Association with use of airfield cannot be discounted.	?IA, ?RB, ?MOD	460440	421120				С	HFA/GA
17	POSSIBLE DITCH OR STREAM CHANNEL AND ENCLOSURE	POLLINGTON	Monument	Geophysical survey (November/December 2008) detected anomalies which could represent a 4m-wide ditch or stream channel, running N/S, with a small rectangular enclosure close to its east side. May be of IA/RB date, though association with use of airfield cannot be discounted.	?NAT, ?IA ?RB, ?MOD	460990	421090				С	HFA/GA
18	CHAPEL OF EASE	HECK	Monument	Built in 1895 by Temple Moore, the nave and chancel are in one tiled roof. A square bellcote stands on the junction of the nave and chancel.	MOD	459290	421010	MNY9845			С	NYHER
19	GREAT HECK MED/PM SETTLEMENT	HECK	Monument	MED/PMED settlement of Great Heck, formerly in Snaith parish in the wapentake of Osgoldcross, liberty of Cowick and Snaith. Linear village.	MED, PMED	459100	421000	MNY9844			С	NYHER
20	DITCHED TRACKWAY AND POSSIBLE ENCLOSURE	POLLINGTON	Monument	Possible Iron Age/ Roman double-ditched trackway is visible as cropmarks on air photographs, within the area of a disused World War II airfield. It extends for 650 metres and is aligned NW-SE, but is not continuous. It may be associated with Iron Age or Roman settlement, as there is a trackway to the NW (Gaz.1) which appears to continue the same line and ditches on a similar alignment to the south (Gaz.25), both of which are associated with settlement enclosures. The feature was detected on a geophysical survey carried out in November/December 2008. The survey also detected at least one enclosure (at 460325 421080) in close association with it. The enclosure, around 45m square, appears to sit astride the trackway, suggesting it is either earlier or later than it. Within the enclosure, a square anomaly could represent a building. A further ditch may mark redefinition of the enclosure.	IA, RB	460390	420980	MHU13329	1303928		B/C	NMR, VoYNMP, HSMR, HFA/GA
	POSSIBLE ENCLOSURE AND DITCHES	POLLINGTON		Geophysical survey (November/December 2008) detected anomalies which could represent two sides of a possible rectangular enclosure with an entrance on its west side. A short distance to the NE another linear anomaly could represent an early N/S field or boundary ditch. Possibly IA or RB in date, though association with use of airfield cannot be discounted. A series of roughly parallel linears further east correspond with a field boundary depicted on the 1853 OD map.	?IA, ?RB	460590	420940				B/C	HFA/GA
22	SNAITH POLLINGTON AIRFIELD	POLLINGTON, HECK AND GOWDALL	Monument	Former WW II military airfield, opened in 1941 and closed in 1946. It was equipped with three tarmac runways and Type J and T2 design aircraft hangars. There was temporary accommodation for 2016 male and 394 female personnel. Its wartime role was an operational bomber station with 4 Group RAF Bomber Command. The airfield is visible on air photographs taken in 1947, but is now disused. A bomb store once lay to the west of the runways and the former positions of searchlight/gun emplacements have been plotted to north and south of the airfield. Most of the area has reverted back to agricultural use and structures no longer survive, whilst some buildings have been reused. The M62 cut across the airfield in the 1970s.	MOD	460900	420900	MHU11152	1304097		В	NMR, VoYNMP, HSMR
23	DITCHED ENCLOSURE	POLLINGTON	Monument	An Iron Age or Romano-British ditched enclosure is visible as cropmarks on air photographs. The form of the enclosure is unusual, as it broadens out at its southern end and has curved corners, in contrast to other rectilinear enclosures in the vicinity. A fragmentary ditch on its northern side may indicate a double-ditched element.	IA, RB	461470	420810		1303913		B/C	NMR, VoYNMP
24	MEDIEVAL DITCH TRACKWAY	POLLINGTON		Double ditched trackway or road of possible medieval date is visible as cropmarks on air photographs. It extends for 410 metres and continues a SW-NE alignment of an existing road to the north, which is marked on the Ordnance Survey map of 1953. On the southern side of the trackway/road there is an incomplete enclosure attached. The continuation may of course be a coincidence and the track could be earlier in date (IA/RB).	MED	462040	420780		1303805		С	NMR, VoYNMP
25	DITCHED ENCLOSURES AND TRACKWAY	POLLINGTON		Iron Age or Roman ditched enclosures and trackways are visible as cropmarks on air photographs. There appears to be more than one phase. One trackway is aligned NW-SE and may be associated with a trackway (Gaz.20) to the north aligned in the same orientation, while another runs NE-SW. Another angled section of ditch lies further north, within the area of the former airfield (Gaz.22).	IA, RB	460090	420460	MHU10926	1303937		B/C	NMR, VoYNMP
26	DITCHES	HECK		Fragmentary ditches, possibly part of a field system, are visible as cropmarks on air photographs next to Heck Hall Wood. The date of these features is uncertain, though other cropmarks to the east have been interpreted as IA/RB. The ditches could also be MED/PMED boundaries pre-dating the excavation of the Aire and Calder Navigation (Gaz. 36) and defining the rear parts of plots or fields running south from Great Heck.	IA, RB, MED, PMED	459200	420420		1315622		С	NMR, VoYNMP
27	CROPMARK OF DITCH	HECK	Monument	A length of straight ditch, aligned NW-SE, has short segments of ditch coming from it at right angles suggesting it to be part of a field system. It is possibly associated with the trackways and enclosures a short distance to the north (Gaz.25)	IA, RB	459920	420420	MNY9851			С	NEYHER
28	GREAT NORTHERN RAILWAY	HECK AND BALNE		Opened in 1871. The original Great Northern Railway ran as far as Doncaster, using running powers from there to York. In 1863 the North Eastern Railway obtained authorisation to build a new direct route from Shaftholme Junction (north of Doncaster) to Chaloner Whin Junction (south of York) via Selby. Two connecting spurs were also authorised, one at Heck with the Lancashire and Yorkshire Railway, and another at Joan Croft Junction and Applehurst Junction with the West Riding and Grimsby Railway.		459400			1375238		В	NMR
	POLLINGTON WINDMILL	POLLINGTON		Site of former Pollington Windmill used for grinding corn. Shown on 1853 OS map. No trace now, following quarrying of small hill upon which it stood.	PMED	461430					С	OS 1853
	SAND QUARRY	POLLINGTON		Former sand quarry shown as "Sand Pit" on 1853 OS map.	PMED	461360					N	OS 1853
31	RB INFANT BURIAL	POLLINGTON	Find Spot	An infant burial (?cremation) in a cinerary urn of 2nd to 3rd century date found during quarrying in 1962 to the NE of Pollington Hall.	RB	461300	420000	MHU1396	57846		С	NMR, HSMR

Gaz Ref	Name	PARISH	Record Type	Summary	Period	Easting	Northing	SMRUID	NMR UID	Other Refs	Importance	Sources
32	ROMAN STONE COFFIN AND CREMATION	POLLINGTON	Find spot	In 1949 a Roman millstone grit coffin of late 4th to early 5th century date, containing a woman's skeleton, was found lying east-west during quarrying. A cinerary urn of circa AD350 was also found in 1951, near to the head of the coffin. The finds are in Doncaster Museum. A quantity of Roman material was found in the same quarry over the years, including Samian pottery.	RB	460970	419990	MHU1337	57846		В	NMR, HSMR
33	FLINT ADZE	POLLINGTON	Find spot	A Neolithic/Bronze Age polished flint adze was found in 1953 at the Rainbow Sand and Tile Company's works at Pollington, near the 25 ft. contour. It is now in the museum of the Yorkshire Phil. Soc.	NEO, BA	461540	419910	MHU1338	57849		B/C	NMR, HSMR
34	SAND QUARRY	POLLINGTON	Monument	A sand pit is visible as an earthwork on air photographs to the north of Pollington, part of an area of extraction connected with concrete production. It is not shown on the 1950 OS map, suggesting it is of late 20th-century date; a flint tool was recovered from there in 1953 (Gaz.33). On the 1995 OS vertical photography, the feature has been partially levelled.	MOD	461500	419900		1449152		N	NMR, MLNMP
35	SEARCHLIGHT BATTERY AND ASSOCIATED BUILDINGS	POLLINGTON	Monument	A World War II searchlight battery and associated military buildings are visible as earthworks and structures on air photographs. The features described have been destroyed on the latest 1995 Ordnance Survey vertical photography.	MOD	460800	419890		1449154		С	NMR, MLNMP
36	AIRE AND CALDER NAVIGATION	HECK AND POLLINGTON	Monument	In 1699 authorisation was granted to make the Aire to Leeds and the Calder to Wakefield navigable. The Aire and Calder became very prosperous and from 1770 onwards major improvements were made. In 1799 the canal from Wakefield to Barnsley was completed and was extended to the Dearne and Dove Canal in 1804, while in 1826 a large canal (the Knottingley and Goole Canal) was built from Knottingley to the Ouse at Goole. This then became the main line of the canal.	PMED	460400	419850	MHU9486,	1340995		В	NMR, HSMR
37	POLLINGTON HALL	POLLINGTON	Monument	Mid 18th-century farmhouse, brown brick, Yorkshire slate roof, ashlar steps and entrance porch. Grade II Listed	PMED	460884	419813	MHU6442		LBS 164880	В	HSMR, LBO
38	DOVEHOUSE FARMHOUSE	POLLINGTON	Monument	A late 17th century farmhouse, probably with earlier origins. Perhaps originally timber framed. Red brick with pantile roof, L-shaped plan. Rebuilt front in the 19th to 20th century. Built of red brick with a pantile roof. Grade II Listed.	PMED	461000	419800	MHU9374	602225	LBS 164879	В	NMR, HSMR, LBO
39	WWII MILITARY CAMP	POLLINGTON	Monument	World War II military camp visible as a series of structures on air photographs to the south of Snaith Pollington airfield and consists of military buildings, blast walls and associated roads. The features described have been destroyed on the latest OS vertical photography due to the westward expansion of Pollington.	MOD	461200	419800		1449157		С	NMR, MLNMP
40	POSSIBLE BARROWS	POLLINGTON	Monument	Possible barrows were reported by Doncaster Museum in the angle between Balk Lane and Pinfold Lane, Pollington.	ВА	461500	419800	MHU1330			С	HSMR
41	WWII MILITARY CAMP	POLLINGTON	Monument	World War II military camp visible as a series of structures on air photographs to the south of Snaith Pollington airfield and consists of military buildings and associated roads. The features described lay within an area of industrial development and have been levelled on the latest OS vertical photography.	MOD	462000	419800		1449160		С	NMR, MLNMP
42	MEDIEVAL POTTERY, POST- MEDIEVAL WALLS	POLLINGTON	Find Spot	Eight sherds of medieval and early medieval pottery, including one sherd of 11th-century Pimplyware, were recovered from spoilheaps from site strip during watching brief by HFA at Glendene, Pinfold Lane, Pollington. Two 18th-century walls were also recorded.		461360	419750	MHU19889	1444445	EHU880	С	HSMR
43	RIDGE AND FURROW	POLLINGTON	Monument	Post medieval ridge and furrow is visible as cropmarks on air photographs in the parish of Pollington.	PMED	459700	419700		1410841		С	NMR, MLNMP
44	WWII MILITARY CAMP	POLLINGTON	Monument	World War II military camp visible as a series of structures on air photographs to the south of Snaith Pollington airfield and consists of military buildings, blast walls and associated roads. The features described have been levelled on the latest OS vertical photography.	MOD	461000	419700		1449156		С	NMR, MLNMP
45	WWII MILITARY CAMP	POLLINGTON	Monument	World War II military camp visible as a series of structures on air photographs to the south of Snaith Pollington airfield and consists of military buildings and associated roads. The features described lay within an area of industrial development and have been levelled on the latest OS vertical photography.	MOD	461700	419700		1449159		С	NMR, MLNMP
46	BRIDGE FARMHOUSE	POLLINGTON	Monument	Mid 18th-century farmhouse, with later 18th to early 19th-century wing. Red brick with pantile roof, L-shaped plan.	PMED	461408	419653	MHU4731		LBS 164878	В	HSMR, LBO
47	POLLINGTON MED/PMED SETTLEMENT	POLLINGTON	Monument	MED/PMED settlement of Pollington, formerly in Snaith parish in the wapentake of Osgoldcross, liberty of Cowick and Snaith.	MED, PMED	461200	419500	MHU9741			B/C	HSMR
48	WWII MILITARY CAMP	POLLINGTON	Monument	World War II military camp visible as a series of structures on air photographs to the south of Snaith Pollington airfield and consists of military buildings, blast walls and associated roads. The features described have been destroyed on the latest OS vertical photography due to the southward expansion of Pollington.	MOD	461300	419500		1449158		С	NMR, MLNMP
49	CLAY PITS	BALNE	Monument	The earthworks of clay pits are visible as earthworks on air photographs and ponds/waterbodies are shown here on 20th-century OS maps. The 1853 OS map shows Balne Moor Brick Yard and Brick Kiln here.	PMED, MOD	459310	419460		1410797		N	NMR, MLNMP
50	RIDGE AND FURROW	POLLINGTON	Monument	Medieval ridge and furrow is visible as earthworks and cropmarks on air photographs in the parish of Pollington. Most is no longer extant.	MED	462200	419400		1449134		С	NMR, MLNMP
51	ROMAN COIN	POLLINGTON	Find spot	A Roman coin, a sestersius of Vespasian (AD69-79), was found at Pollington in 1951; now in Doncaster Museum (Acc. no. 67.51). NGR is centre of 1km square of approximate area of find.	RB	461500	419500	MHU1331	57875		С	NMR, HSMR

