

Archaeological Investigations at Hob Moor School Playing Field

By Tom Coates, Rebecca Wilson and Ben Reeves

YAT Watching Brief and Survey Report 2019/92 September 2019





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Abbreviations

- BGS British Geological Survey#
- CYC City of York Council
- GPS Global Positioning System
- HER Historic Environment Record
- NGR National Grid Reference
- OD Ordnance Datum
- WSI Written Scheme of Investigation
- YAT York Archaeological Trust

NON-TECHNICAL SUMMARY

A watching brief was undertaken by York Archaeological Trust from May 28th -July 26th on groundworks for the creation of the new area of playing fields, wetland areas and timber walkways at Hob Moor Community Primary Academy, Green Lane, Acomb, York, YO24 4PS (SE 5809 5063). On the 7th June 2019 a survey was undertaken of the ridge and furrow earthworks present within the development boundary.

The work was undertaken for Sewell Group to help inform a planning application that was under consideration by the City of York Council (18/01475/GRG3).

The works involved a survey of the extant ridge and furrow earthworks present within the development area, followed by a subsequent watching brief to monitor the ground works and record any archaeological finds or features that were discovered during the course of the works.

The earthwork survey identified 15 individual ridges with associated furrows within the development boundary.

The works were also subject to intermittent archaeological monitoring on excavation works. This included three investigation test pits for electrical mains and a large scale area strip of the topsoil for the creation of the new playing field. Nothing of archaeological significance was found during the monitoring.

KEY PROJECT INFORMATION

Project Name	Hob Moor Community Primary Academy, Green Lane, Acomb, York, YO24 4PS
YAT Project No.	6144
Document Number	2019/92
Type of Project	Watching Brief & Survey
Client	Sewell Group
Planning Application No.	18/01475/GRG3
NGR	SE 5809 5063
Museum Accession No.	N/A
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REPORT INFORMATION

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1 INTRODUCTION

A watching brief was undertaken by York Archaeological Trust from May 28th -July 26th on groundworks for the creation of the new area of playing fields, wetland areas and timber walkways at Hob Moor Community Primary Academy, Green Lane, Acomb, York, YO24 4PS (SE 5809 5063) (Figure 1, Site Location).

On the 7th June 2019 a survey was undertaken of the ridge and furrow earthworks present within the development boundary. This report presents the results of these works which were carried out on behalf of Sewell Group to fulfil a planning condition associated with planning application 18/01475/GRG3 approved by CYC (City of York Council).

2 **METHODOLOGY**

All watching brief and survey work was undertaken in accordance with the methodology set out in accordance with a brief provided by City of York Archaeologist, Claire MacRae, and as detailed in the approved YAT WSI (Appendix 3).

The brief specified a contour and photographic record of the ridge and furrow earthworks within the development boundary, as well as the monitoring of groundworks for the development of the new school playing field in the form of a watching brief.

The survey was carried out using a Leica Viva GNSS-GS18 GPS unit (accurate to 10mm). Spot heights were recorded at maximum of 20m intervals along the top of the ridges and the base of the furrows. These have been incorporated onto the site plan provided by the client (Figure 3).

A representative profile through a sequence of ridge and furrow was recorded at a scale of 1:50 (Figure 4).

3 **LOCATION, GEOLOGY & TOPOGRAPHY**

The site is in the field to the east of Hob Moor Community Primary Academy, Green Lane, Acomb, York, YO24 4PS (Figure 1). The proposed development is located to the north-west of Hob Moor and to the east of Hob

Moor Oaks School, approximately 2.7km west of York city centre. The site is rectangular in plan, covering an area of approximately 455 square metres.

The underlying bedrock is sandstone from the Sherwood group formed approximately 237 to 272 million years ago in the Triassic and Permian periods. Above this, superficial deposits of the Alne Glaciolacustrine Formation consisting of clays and silts from the Quaternary Period formed during and after the last ice age. (www.bgs.ac.uk – accessed 13/06/19).

The site is bounded by the Hob Moor School building to the west, a public footpath along Holgate Beck to the north and the fields of Hob Moor to the east and south (Illustration 2).

The proposed site is fairly flat at approximately 13.00m AOD with undulating earthwork features.

The site is presently occupied by the grounds of Hob Moor Oaks School.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

(Adapted from YAT desk-based assessment 2018/78)

4.1 Background

4.1.1 Prehistory

Very little is known of the immediate area surrounding the development boundary within the prehistoric period. Hob Moor is at least partially bounded to the north by Holgate Beck and Chaloner's Win to the east, and the eastern and northern extents of the area fall within York's flood zone.

The low-lying nature of the ancient pasture is likely to have limited settlement in prehistory, although the marshy landscape was likely exploited as a resource and the presence of hitherto undiscovered prehistoric sites cannot be discounted. Prehistoric finds including a stone axe head have been discovered in the locality (Evans 2005), although none has been found within the study area.

4.1.2 Roman

The area is situated between two major Roman roads leading into Eboracum (York). No. 9 ISVRIVM (Aldborough) approaches from the north-west and No. 10 CALCARIA (Tadcaster) approaches from the south-west (RCHMY1 1962).

Approximately 600 metres to the north-west of the site, two inhumations interred within stone coffins were discovered during antiquarian investigations (NGR SE 5837 5110) (Morris 2004, 5). This may have been an extension of the main Roman cemetery situated to the west and southwest of Eboracum (York).

Approximately 900 metres to the north, remnants of a Roman mosaic floor were also discovered by antiquarians, although the precise location is not known. (NGR SE 5738 5132) (RCHMY 1962, 64).

4.1.3 Medieval

Within the development area it is clear that the land has been used for arable farming, evidenced by surviving ridge and furrow, a pattern of ridges and troughs created by a system of ploughing that is typically seen throughout Europe during the medieval period. This would have been part of the open field systems surrounding the medieval villages of Acomb and Dringhouses up until the 18th-19th century (MacRae 2013, 2).

In the surrounding area, a medieval water mill is situated in the north-east of Hob Moor, though its location remains unknown. According to the City of York Historic Environment Record, it is mentioned in 1563 and later known as Folly Mill.

4.1.4 Post-Medieval

Although outside the 500 metre research area, it is worth noting that during the 16th and 17th centuries, plague victims were housed in 'lodges' on Hob Moor (Tillot 1961, 120). The exact location and extent of these buildings is unknown. The plague victims paid for food left for them by placing money in water or vinegar in the depression in the Plague Stone. This stone and the Hob Stone (Grade II listed), an early 14th century stone effigy of a knight of the De

Roos family, are situated on Little Hob Moor off Tadcaster Road, approximately 900m to the east.

Immediately to the east of the development area is the later phase of agricultural field system, which also include ridge and furrow but of a later type referred to as 'Napoleonic' ridge and furrow (SE 58388 50621). This ridge and furrow features a distinctively narrower gauge than its medieval predecessor and dates to a brief period of intensified food production during the Napoleonic Wars of the early 19th century (MacRae 2013, 2).

4.2 **Previous Investigations**

A small number of archaeological investigations have been carried out within 500 metres of the site, some of which are featured within the environs of the proposed extent of development.

On-Site Archaeology carried out an evaluation in December 2002-January 2003 for the construction of the new Hob Moor Junior School which currently exists as Hob Moor Oaks School (Bruce 2003a). The results showed a continued use of the extant ridge and furrow throughout the medieval period up until the 15th-16th century, when it is suspected it changed from arable farmland to pastureland. It also identified a limited amount of archaeology that predates the medieval agricultural phase in the form of drainage ditches that may be part of an earlier phase of farming and agriculture. Trench 4 was the only trench located within the proposed playing field relocation boundary and showed extensive remains of the extant ridge and furrow overlying an earlier linear feature dated to the medieval period. This demonstrates the presence of archaeological remains pre-dating the ridge and furrow, although little more can be inferred given the limited amount of excavation that has taken place thus far.

In 2003, On-Site Archaeology carried out an evaluation at the east side of Hob Moor situated within the 500m research area (Bruce 2003b). No finds of archaeological significance were discovered.

In 2004, MAP carried out an earthwork survey within the development boundary for the extant Hob Moor Oaks School (Morris 2004). Using a Leica TC600 Total Station Theodolite, it provides a detailed survey illustration that identifies 23 individual features consisting of 20 ridge and furrow features, the possible foundations of a raised building platform, most likely modern in nature and 2 linear features that resemble north/south field boundaries that correspond with the OS maps.

In 2008, Archaeological Services University of Durham carried out a geophysical survey at the north-east of Hob Moor comprising of a geomagnetic survey (Hale 2008). The purpose of this project was to identify a late-medieval mill that once stood in this region of the ancient common. No finds of archaeological significance were discovered during the course of these works.

5 **RESULTS**

5.1 Ridge and Furrow Earthwork Survey (Plates 1 & 2) (Figures 2 & 3)

A single area of ridge and furrow was recorded within the development boundary during the survey. The ridges are aligned west-north-west/east-south-east and are between 0.21m to 0.46m high, and up to 86.00m long. The ridges are straight in form, unevenly space between 5m to 8m apart from crown to crown. The soil ridges are each between 0.5m and 0.8m wide (Figures 3 and 4; Plate 2). This medieval form of ridges and furrows appear to extend into the field directly south of the playing field; those in the field to the east of the playing field appear to be of the narrower guage of 'Napoleonic' form agricultural system described by MacRae (2013, 2).

5.2 **Earthwork condition**

At the time of the survey the overall condition of the surveyed earthworks was relatively stable, primarily because it is part of the playing fields for the school grounds and is seasonally cut with a strimmer. Their condition is therefore good and there should be relatively little risk to the future survival of the ridge and furrow outside the area of the new playing field.

A portion of the survey located in the south west corner could not be surveyed due to overgrowth. A portion of the land to the north was unclear due to the mains electricity test pits which had already been carried out in this area prior to the survey.

5.3 **Watching Brief**

The first stage of the watching brief occurred during the excavation of three investigative test pits carried out by Sewell to locate the electricity main cable running east-west parallel to the northern boundary of the playing field (Figure 2). The test pits were carried out on 28th May without archaeological supervision but were recorded the following day.

In all three test pits, each of which was approximately 1m deep, there was a simple sequence of three broadly horizontal deposits. The deepest of the three layers was natural deposition, the top of which was at around 450mm BGL (below ground level). The natural consisted of approximately 600mm in depth of stiff, slightly blue-grey, silty clay with frequent dark orange sand flecks, moderate manganese flecks, becoming clearer towards the lower reaches of the deposit to become almost pure clay, mottled with blue grey and orange brown clay. The natural was overlain by a subsoil around 200mm in depth, the top of which was at around 250mm BGL, of moderately compact, but friable, dark grey-brown, slightly clayey sandy silt with moderate dark orange-brown sandy patches, occasional manganese and CBM fragments and flecks. The uppermost layer was a ploughsoil of around 250mm soft, dark grey-brown humic sandy silt with occasional clay blobs, frequent roots due to turf and various wild grasses growing above.

The second stage of watching brief was to monitor the stripping of ploughsoil across the area of the new playing field. The ploughsoil was stripped to a greater depth at the western side of the playing field so that the material removed could be used to level-up the eastern side, to create a level ground surface. A simple stratigraphic relationship, entirely cogent with that observed in the mains electric test pits, was identified during the stripping and landscaping process. However, the landscaping only impacted on ploughsoil and subsoil so the underlying natural deposition was not seen during this stage of the works. The earliest deposit encountered was the subsoil, a firm orange brown clayey silt. Sealing the subsoil was a friable mid brown sandy silt topsoil.

Ceramic field drains of likely 20th-century date were discovered in the south-east corner of the playing field aligned north-south and east-west. A large 10m by 10m area of disturbance was encountered in the north-west corner of the playing field and comprised of sand, brick rubble and crushed concrete. This is likely the remains of an extant modern building on the playing field.

6 CONCLUSION

The principal objective of the survey was to make a record of the extant ridge and furrow in the field to the east of the school using modern survey techniques and this has been carried out. A plan showing the line of ridges and furrows is presented in Figure 2 and 3, and a representative profile through them is given in Figure 4. The nature and dimensions of the ridge and furrow is comparable with similar ridge and furrow earthworks that date between the medieval to post-medieval (Historic England 2004, 2011).

In the 2018 YAT desk-based assessment (Coates 2018) it was suggested that the principal impact of landscaping would likely be on the ridge and furrow. The results of this watching brief show this to be the case. Only the three test pits that were dug to locate and access the electricity mains cables at the north end of the site penetrated deeply enough for natural deposition to be seen and in these trenches nothing of archaeological importance was observed. The lack of any other archaeological features within the area stripped for the new sports field suggests that this landscape has been used for little other than pasture since it ceased to be ploughed. A former field boundary, the only significant feature to be identified, was recorded in the historic maps of the area (Coates 2018, 14-18). This boundary is clearly on the line of one of the medieval selions (see Lidar Image Figure 6 and aerial photograph Figure 7) and is identifiable in the landscape as one the deepest of the furrows (see Plate 3).

No evidence was found for earlier features during these works, but cut features were identified by Graham Bruce in 2003 (Bruce 2003b) beneath the ploughsoil, so undisturbed archaeological remains could yet be discovered at the site and this should be considered if any future development is planned. The field appears to never have been subjected to deep modern ploughing and it was suggested in the DBA that should there be any archaeological remains surviving beneath the medieval ploughsoil, cut into the natural, may be well preserved.

LIST OF SOURCES

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For current Historic England guidance documents see:

https://historicengland.org.uk/advice/latest-guidance/

ACKNOWLEDGEMENTS

YAT thanks Sewell Group and Hob Moor Community Primary Academy for their cooperation during the course of these works.

APPENDIX 1 – INDEX TO ARCHIVE

Item	Number of items
Context sheets	0
Levels register	0
Photographic register	1
Sample register	0
Drawing register	1
Original drawings	3
B/W photographs (films/contact sheets)	0
Colour slides (films)	0
Digital photographs	15
Written Scheme of Investigation	1
Report	1

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APPENDIX 2 – WRITTEN SCHEME OF INVESTIGATION

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF AND EARTHWORK SURVEY

Site Location: Hob Moor Community Primary School, Green Lane, Acomb, York, YO24

4PS

NGR: SE 5809 5063

Proposal: Creation of new area of playing fields, wetland areas and timber

walkways, erection of fabric shelter over outdoor class space

Planning ref: 18/01475/GRG3

Prepared for: Sewell Group

Document Number: 2019/75

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1	EB	10/05/19	IDM/BR	14/05/19	BR	14/05/19
2	EB/IDM	17/05/19	IDM	17/05/19	IDM	17/05/19

1 SUMMARY

- 1.1 Sewell Group have received planning consent for the creation of new area of playing fields, wetland areas and timber walkways, erection of fabric shelter over outdoor class space at Hob Moor Community Primary School, Green Lane, Acomb, York, YO24 4PS (SE 5809 5063). The scheme will include a watching brief on all groundworks and earthwork survey, including a contour and photographic record.
- 1.2 The following archaeological condition has been imposed:

A programme of post-determination archaeological mitigation, specifically an Archaeological watching brief on all groundworks and a contour and photographic record of the ridge and furrow is required on this site.

The archaeological scheme comprises 3 stages of work. Each stage shall be completed and approved by the Local Planning Authority before it can be approved/discharged.

- A) No development shall take place/commence until a written scheme of investigation (WSI) has been submitted to and approved by the local planning authority in writing. The WSI should conform to standards set by the Chartered Institute for Archaeologists.
- B) The on-site site archaeological work and any post investigation assessment shall be completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition (A) and the provision made for analysis, publication and dissemination of results and archive deposition will be secured. This part of the condition shall not be discharged until these elements have been fulfilled in accordance with the programme set out in the WSI.
- C) A copy of a report (or publication if required) shall be deposited with City of York Historic Environment Record to allow public dissemination of results within six months of completion or
- such other period as may be agreed in writing with the Local Planning Authority.
- 1.3 This Written Scheme of Investigation (WSI) has been prepared in response to a Brief written by Claire MacRae, City of York Archaeologist. The work will be carried out in accordance with the Brief and this WSI, and with standards and guidelines approved by the Chartered Institute for Archaeology (CIfA).

2 SITE LOCATION & DESCRIPTION

- 2.1 The proposal site is at Hob Moor Community Primary School, Green Lane, Acomb, York, YO24 4PS (Illustration 1).
- 2.2 The proposed development is located to the north-west of Hob Moor and to the east of Hob Moor Oaks School, approximately 2.7km west of York city centre. The site is rectangular in plan, covering an area of approximately 455 square metres.
- 2.3 The underlying bedrock is sandstone from the Sherwood group formed approximately 237 to 272 million years ago in the Triassic and Permian periods. Above this, superficial deposits of the Alne Glaciolacustrine Formation consisting of clays and silts from the Quaternary Period formed during and after the last ice age. (www.bgs.ac.uk accessed 10/05/19).
- 2.4 The site is bounded by the Hob Moor School building to the west, a public footpath along Holgate Beck to the north and the fields of Hob Moor to the east and south (Illustration 2).
- 2.5 The proposed site is fairly flat at approximately 13.00m AOD with undulating earthwork features.

2.6 The site is presently occupied by the grounds of Hob Moor Oaks School.

3 DESIGNATIONS & CONSTRAINTS

- 3.1 The site is not situated within a conservation area and there are no designated heritage assets within the proposed development site.
- 3.2 The site is located within Area 25 Acomb South of the City of York Historic Environment Characterisation Project (YHECP). However, notable historical features visible within the development area extends into Area 29 Hob Moor.
- 3.3 The site is not within a Registered Historic Battleground site nor is it within the grounds of a Registered Historic Park and Gardens.
- 3.4 The proposed development site is not situated within a designated Area of Archaeological Importance (AAI), although it is within 870m of the Acomb AAI, 975m of the York City Centre AAI and 995m of the Dringhouses AAI.
- 3.5 There are no Scheduled Monuments within the 500m search radius of the study area.
- 3.6 There are no Listed Buildings within a 500m radius of the proposed development site.
- 3.7 The proposed development site is not within a designated conservation area, although it does lie within 1000m of the Central Historic Core, Tadcaster Road, Acomb and Holgate Road conservation areas.

4 ARCHAEOLOGICAL INTEREST

(Taken from Desk-based Assessment Coates, 2018/78)

4.1 Prehistory

Very little is known of the immediate area surrounding the development boundary within the prehistoric period. Hob Moor is at least partially bounded to the north by Holgate Beck and Chaloner's Win to the east, and the eastern and northern extents of the area fall within York's flood zone.

This may suggest that activity at the site was limited in prehistory by the risk of flooding, although the presence of hitherto undiscovered prehistoric sites cannot be discounted. Prehistoric finds including a stone axe head have been discovered in the locality (Evans 2005), although none has been found within the study area.

Roman

The area is situated between two major Roman roads leading into Eboracum (York). No. 9 ISVRIVM (Aldborough) approaches from the north-west and No. 10 CALCARIA (Tadcaster) approaches from the south-west (RCHMY1 1962). Approximately 600 metres to the north-west of the site, two inhumations interred within stone coffins were discovered during antiquarian investigations (NGR SE 5837 5110) (Morris 2004, 5). This may have been an extension of the main Roman cemetery situated to the west and southwest of Eboracum (York). Approximately 900 metres to the north, remnants of a Roman mosaic floor were also discovered by antiquarians, although the precise location is not known. (NGR SE 5738 5132) (RCHMY 1962, 64).

Medieval

Within the development area it is obvious that the land has been used for arable farming, evidenced by surviving ridge and furrow, a pattern of ridges and troughs created by a system of ploughing that is typically seen throughout Europe during the medieval period. This would have been part of the open field systems surrounding the medieval villages of Acomb and Dringhouses up until the 18th–19th century (MacRae 2013, 2). In the surrounding area, a

medieval water mill is situated in the north-east of Hob Moor, though its location remains unknown. According to the City of York Historic Environment Record, it is mentioned in 1563 and later known as Folly Mill.

Post-Medieval

It is worth noting, despite being outside the 500 metre research area, that during the 16th and 17th centuries plague victims were housed in wooden buildings somewhere within the northeast of Hob Moor. The exact location and extent of these buildings is unknown. The plague victims paid for food by placing money in water or vinegar in the depression in the Plague Stone. This stone and the Hob Stone (Grade II listed), an early 14th century stone effigy of a knight of the De Roos family, are situated on Little Hob Moor off Tadcaster Road, approximately 900m to the east.

Immediately to the east of the development area is the later phase of agricultural field system, which also include ridge and furrow but of a later type referred to as 'Napoleonic' ridge and furrow (SE 58388 50621). This ridge and furrow features a distinctively narrower gauge than its medieval predecessor and dates to a brief period of intensified food production during the Napoleonic Wars of the early 19th Century (MacRae 2013, 2).

4.2 Previous Investigations

A small number of archaeological investigations have been carried out within 500 metres of the site, some of which are featured within the environs of the proposed extent of development.

On-Site Archaeology carried out an evaluation in December 2002—January 2003 for the construction of the new Hob Moor Junior School which currently exists as Hob Moor Oaks School (Bruce 2003a). The results showed a continued use of the extant ridge and furrow throughout the medieval period up until the 15th-16th century, when it is suspected it changed from arable farmland to pastureland. It also identified a limited amount of archaeology that predates the medieval agricultural phase in the form of drainage ditches that may be part of an earlier phase of farming and agriculture. Trench 4 was the only trench located within the proposed playing field relocation boundary and showed extensive remains of the extant ridge and furrow overlying an earlier linear feature dated to the medieval period. This demonstrates the presence of archaeology pre-dating the ridge and furrow, although little more can be inferred given the limited amount of excavation that has taken place thus far.

In 2003, On-Site Archaeology carried out an evaluation at the east side of Hob Moor situated within the 500m research area (Bruce 2003b). No finds of archaeological significance were discovered.

In 2004, MAP carried out an earthwork survey within the development boundary for the extant Hob Moor Oaks School (Morris 2004). Using a Leica TC600 Total Station Theodolite, it provides a detailed survey illustration that identifies 23 individual features consisting of 20 ridge and furrow features, the possible foundations of a raised building platform, most likely modern in nature and 2 linear features that resemble north/south field boundaries that correspond with the OS maps.

In 2008, Archaeological Services University of Durham carried out a geophysical survey at the north-east of Hob Moor comprising of a geomagnetic survey (Hale 2008). The purpose of this project was to identify a late-medieval mill that once stood in this region of the ancient common. No finds of archaeological significance were discovered during the course of these works.

5 GROUNDWORKS TO BE MONITORED

- 5.1 The site work will commence with an earthwork survey of the extant ridge and furrow.
- 5.2 During development, work will comprise a **continuous** watching brief, on the excavation of all foundations, trenches services and any subsequent groundworks involving excavation. The watching brief may be stepped down **to intermittent monitoring**, depending on the results, and following agreement from the Development Control Archaeologist.

6 DELAYS TO THE DEVELOPMENT SCHEDULE

- 6.1 All earth-moving machinery must be operated at an appropriate speed to allow the archaeologist to recognise, record and retrieve any archaeological deposits and material.
- 6.2 It is not intended that the archaeological monitoring should unduly delay site works. However, the archaeologist on site should be given the opportunity to observe, clean, assess and, where appropriate hand excavate, sample and record any exposed features and finds. In order to fulfil the requirements of this WSI, it may be necessary to halt the earth-moving activity to enable the archaeology to be recorded properly.
- 6.3 Plant or excavators shall not be operated in the immediate vicinity of archaeological remains until the remains have been recorded and the archaeologist on site has given explicit permission for operations to recommence at that location.

7 WATCHING BRIEF RECORDING METHODOLOGY

- 7.1 If a base plan of intervention areas is available, the areas being monitored will be determined using this information. If a plan is not available, or the watching brief work involves monitoring of long linear works, interventions which are not mapped, or large open areas, the location of the monitoring will be determined using a hand-held GPS, which will provide accuracy to c.2m.
- 7.2 Unique context numbers will only be assigned if artefacts are retrieved, or stratigraphic relationships between archaeological deposits are discernable. In archaeologically 'sterile' areas, soil layers will be described, but no context numbers will be assigned. Where assigned, each context will be described in full on a pro forma context record sheet in accordance with the accepted context record conventions.
- 7.3 Archaeological deposits will be planned at a basic scale of 1:50, with individual features requiring greater detail being planned at a scale of 1:20. Larger scales will be utilised as appropriate. Cross-sections of features will be drawn to a basic scale of 1:10 or 1:20 depending on the size of the feature. All drawings will be related to Ordnance Datum. Where it aids interpretation, structural remains will also be recorded in elevation. All drawings will be drawn on inert materials. All drawings will adhere to accepted drawing conventions.
- 7.4 Photographs of archaeological deposits and features will be taken. This will include general views of entire features and of details such as sections as considered necessary. All site photography will adhere to accepted photographic record guidelines.
- 7.5 Areas which are inaccessible (e.g. for health and safety reasons) will be recorded as thoroughly as possible within the site constraints. In these instances, recording may be entirely photographic, with sketch drawings only.
- 7.6 All finds will be collected and handled following the guidance set out in the CIfA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds,

- and located on plans. Other finds, finds within the topsoil, and dense/discrete deposits of finds will be collected as Bulk Finds, from discrete contexts, bagged by material type. Any dense/discrete deposits will have their limits defined on the appropriate plan.
- 7.7 All artefacts and ecofacts will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication *First Aid for Finds*, and recording systems must be compatible with the recipient museum. All finds that fall within the purview of the Treasure Act (1996) will be reported to HM Coroner according to the procedures outlined in the Act, after discussion with the client and the local authority.
- 7.8 A soil sampling programme will be undertaken for the recovery and identification of charred and waterlogged remains where suitable deposits are identified. The collection and processing of environmental samples will be undertaken in accordance with Historic England guidelines (Campbell, Moffatt and Straker 2011). Environmental and soil specialists will be consulted during the course of the evaluation with regard to the implementation of this sampling programme. Soil samples of approximately 30 litres for flotation (or 100% of the features if less than this volume) will be removed from selected contexts, using a combination of the judgement and systematic methodologies.
 - Judgement sampling will involve the removal of samples from secure contexts
 which appear to present either good conditions for preservation (e.g. burning or
 waterlogging) or which are significant in terms of archaeological interpretation or
 stratigraphy. (Given the nature of an archaeological watching brief, it is anticipated
 that the implementation of a systematic sampling methodology will not be
 possible).
- 7.9 It is unlikely that industrial activity has taken place on this site. If industrial activity of any scale is detected, industrial samples and process residues will also be collected. Separate samples (c. 10ml) will be collected for micro-slags (hammer-scale and spherical droplets) (Historic England 2015).
- 7.10 Other samples will be taken, as appropriate, in consultation with YAT specialists and the Historic England Regional Science Advisor, as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc.). Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies. Material removed from site will be stored in appropriate controlled environments.
- 7.11 Should human remains be discovered they will be left *in-situ*, covered and protected pending notification of the discovery to the City Archaeologist and the submission to the Ministry of Justice of an application for excavation. Exhumation of human remains will take place in compliance with environmental health regulations and only with a valid licence from the Ministry of Justice. An osteoarchaeologist will be available to give advice on site.
 - **Disarticulated** human remains will be identified and quantified on site. If trenches are to be immediately backfilled the remains will be left in the ground. If the excavations are to remain open for any length of time disarticulated remains will be removed and boxed for later reburial in, or as close as possible to, the location of their discovery or an appropriate alternative location agreed with the City Archaeologist.
 - If **articulated** remains are encountered, these will be excavated in accordance with recognised guidelines (see 7.10) and retained for assessment.
 - Any grave goods or coffin furniture will be retained for further assessment.
- 7.12 Human remains will be removed in accordance with the Burial Act 1857 and the Ministry of Justice exhumation licence, and with the guidance of CIfA Technical Paper 13 (1993) and

8 EARTHWORK SURVEY

- 8.1 The earthwork survey shall be carried out in accordance with the City of York Archaeologist's *Minimum standards for archaeological survey of ridge and furrow earthworks* (https://www.york.gov.uk/downloads/file/17613/recording of randf accessed 17/05/19).
- 8.2 The survey will be conducted using GPS and, where required, A TST/EDM. The GPS system will provide positional data to an accuracy of +/- 100mm. In the event where GPS is not practical or possible, such as areas of dense vegetation and poor line of sight with the sky, a TST/EDM will be used. The TST/EDM will be located on the same survey grid as the GPS so that all information gathered is on a common coordinate system.
- 8.3 The coordinate system for the recording and presentation of all features will be the OS National Grid. Monuments/features will be located accurately on the OS 1:10,000 map, further maps will be produced at a scale that will best represent the form of the monument, typically 1:1,250. A descriptive and interpretive record will serve to provide an analysis of the archaeological features in relation to their landscape context and the development and use of identified sites.
- 8.4 Each identified feature will be recorded in the following way:
 - Location will be recorded with an NGR reference centred on the monument, along with the parish, district and county information
 - The monument/feature will be classified using the Historic England thesaurus of monument types
 - The extents of the monument/feature will be surveyed accurately on the OS National Grid, directional information will be recorded for ridge and furrow, track ways, and avenues
 - Photography of the monument/feature will be undertaken to complement the survey
 - Details of site ownership and current land use will be noted
 - Condition of the monument/feature will be investigated and noted
 - Consideration will be given to the topographical setting and relationship to other sites, landscapes and historic buildings in the area
 - Assessment will be made of the potential for further investigation and other forms of survey
 - Any local features that do not appear on the OS map will be recorded
 - If required, survey control will incorporate permanent features, to enable later revisions or to aid with grid re-establishment for any future survey work.
- 8.5 The research for the report will be supplemented by a search of available LIDAR and aerial photographic resources and the results used in the final report if appropriate.

9 REPORT & ARCHIVE PREPARATION

- 9.1 Upon completion of the groundworks, a report will be prepared to include the following:
 - a) A non-technical summary of the results of the work.
 - b) An introduction which will include the planning reference number, grid reference and dates when the fieldwork took place.
 - c) An account of the methodology and results of the operation, describing structural data, associated finds and environmental data. This will include relevant data and images from available LIDAR and aerial photographic sources.
 - d) A selection of photographs and drawings, including an overall plan of the site accurately identifying the areas monitored.
 - e) Specialist artefact and environmental reports as necessary.
 - f) Details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive.
 - g) A copy of the key OASIS form details
 - h) Copies of the Brief and WSI
 - i) Additional photographic images may be supplied on a CDROM appended to the report
- 9.2 Copies of the report will be submitted to the commissioning body and the HER/SMR (also in PDF format).
- 9.3 Archive preparation and deposition will be undertaken in accordance with the requirements of the recipient museum. In this instance the Yorkshire Museum is recommended and an agreed allowance should be made for the curation and storage of this material.
- 9.4 The brief for this project requires provision for the publication of the archaeological results of this project if required.
- 9.5 The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the County Council and the museum accepting the archive to use such documentation for their statutory functions and provide copies to third parties as an incidental to such functions. Under the Environmental Information Regulations (EIR), such documentation is required to be made available to enquirers if it meets the test of public interest. Any information disclosure issues would be resolved between the client and the archaeological contractor before completion of the work. EIR requirements do not affect IPR.

10 HEALTH AND SAFETY

- 10.1 Health and safety issues will take priority over archaeological matters and all archaeologists will comply with relevant Health and Safety Legislation.
- 10.2 A Risk Assessment will be prepared prior to the start of site works.

11 TIMETABLE & STAFFING

11.1 The timetable to be agreed with the client.

- 11.2 Specialist staff available for this work are as follows:
 - Human Remains Malin Holst, York Osteology Ltd
 - Palaeoenvironmental remains John Carrott, Palaeoecology Research Services Itd
 - Head of Curatorial Services Christine McDonnell, YAT
 - Finds Researcher Nicky Rogers, Freelance
 - Pottery Researcher Anne Jenner, YAT
 - Finds Officers Nienke Van Doorn, YAT
 - Archaeometallurgy & Industrial Residues Rachel Cubitt and Dr Rod Mackenzie,
 Freelance
 - Conservation Ian Panter, YAT

12 MONITORING OF ARCHAEOLOGICAL FIELDWORK

12.1 As a minimum requirement, Claire MacRae, City of York Archaeologist will be given a minimum of one week's notice of work commencing on site, and will be afforded the opportunity to visit the site during and prior to completion of the on-site works so that the general stratigraphy of the site can be assessed. York Archaeological Trust will notify Claire MacRae, City of York Archaeologist of any discoveries of archaeological significance so that site visits can be made, as necessary. Any changes to this agreed WSI will only be made in consultation with Claire MacRae, City of York Archaeologist.

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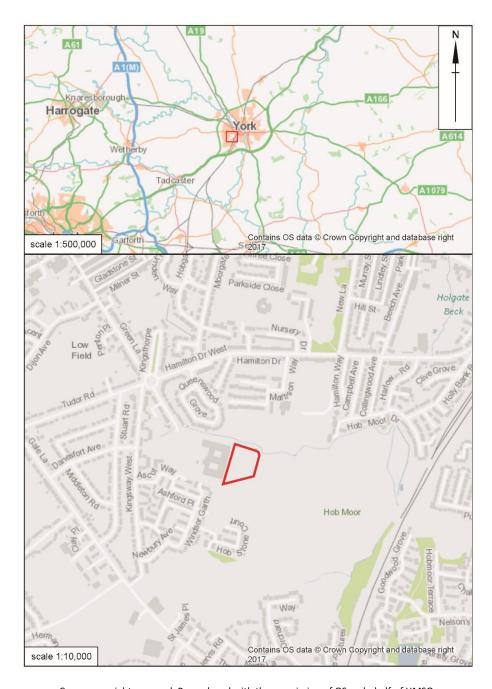
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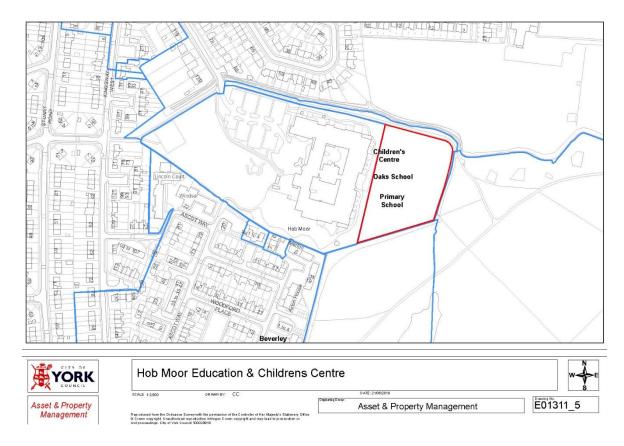
For current Historic England guidance documents see:

https://historicengland.org.uk/advice/latest-guidance/



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Illustration 1 Site location



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Illustration 2 Works Location (courtesy of the Client)

PLATES



Plate 1 Ceramic electrical mains covers exposed in test pits along the northern extent of the site



Plate 2 Representative section through ploughsoil, subsoil and natural deposits



Plate 3 ridge and furrow, with furrow forming a later field boundary (right), looking west-north-west



Plate 4 ridge and furrow in mowed are adjacent to school fence, facing north-north-east

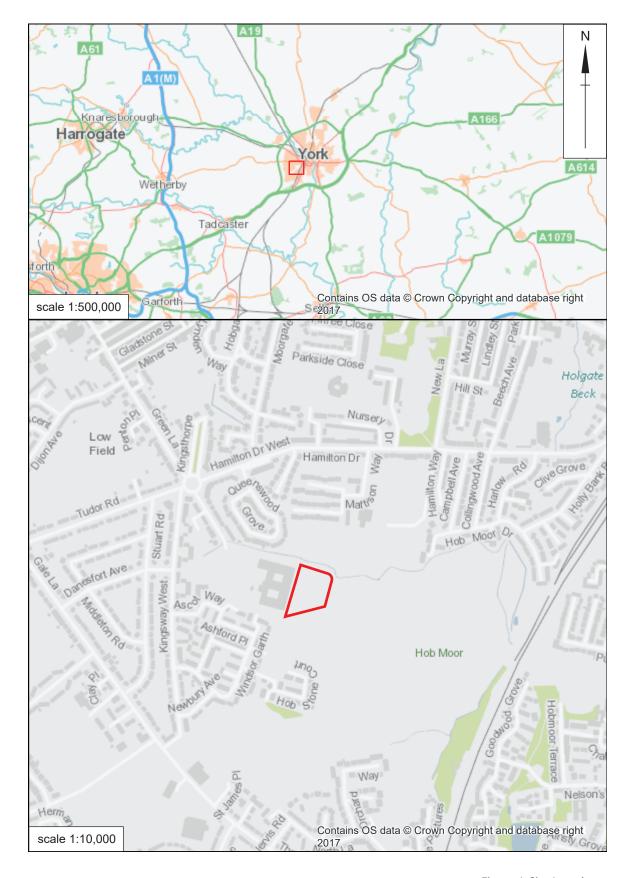


Figure 1 Site Location

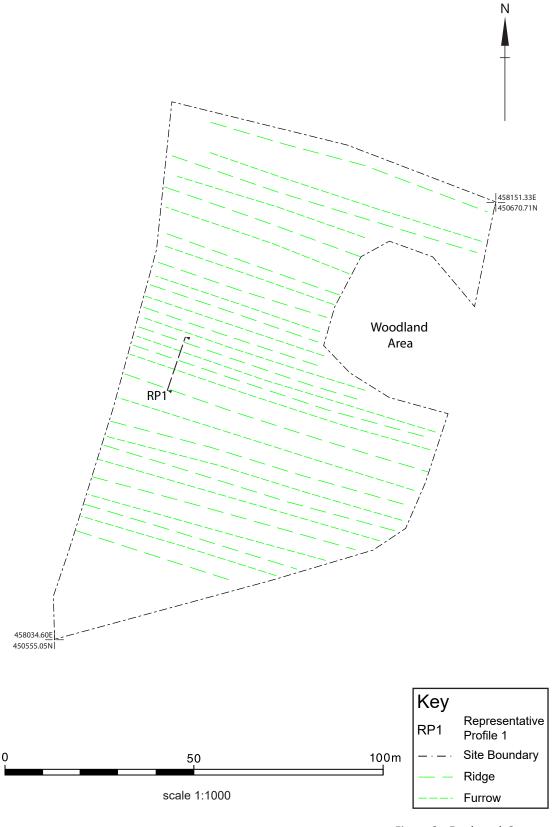


Figure 2 Earthwork Survey





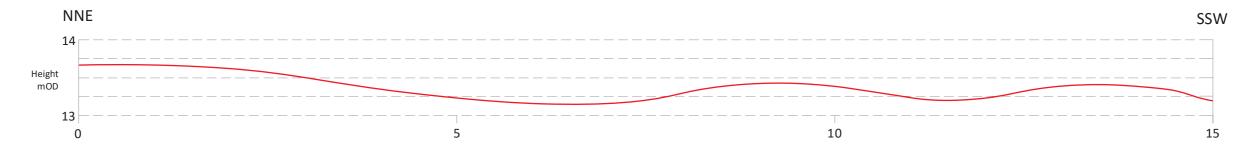




Figure 4 Representative Profile

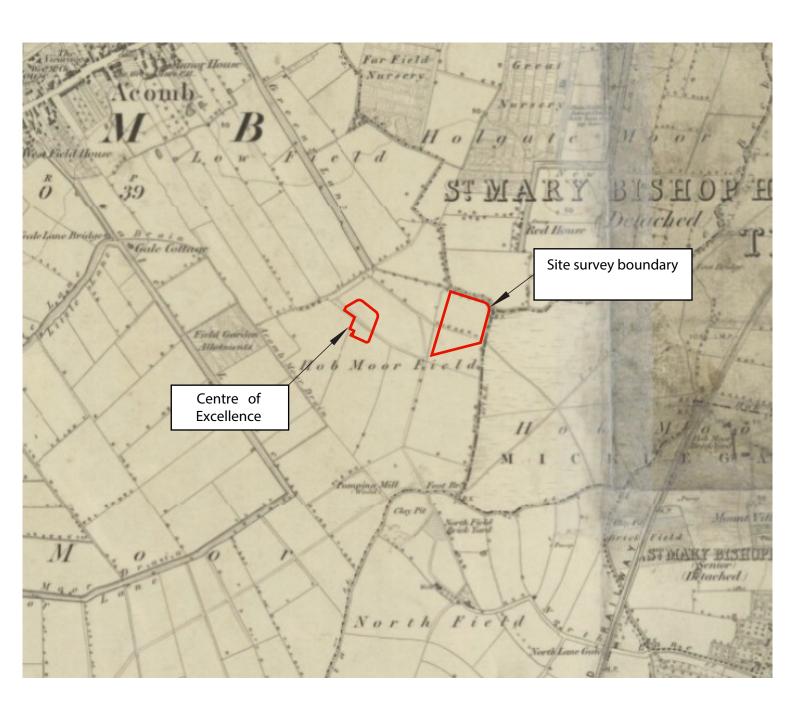


Figure 5 Development area over 1853 OS map showing line of former field boundary in Plate 3



1951 Aerial Photograph

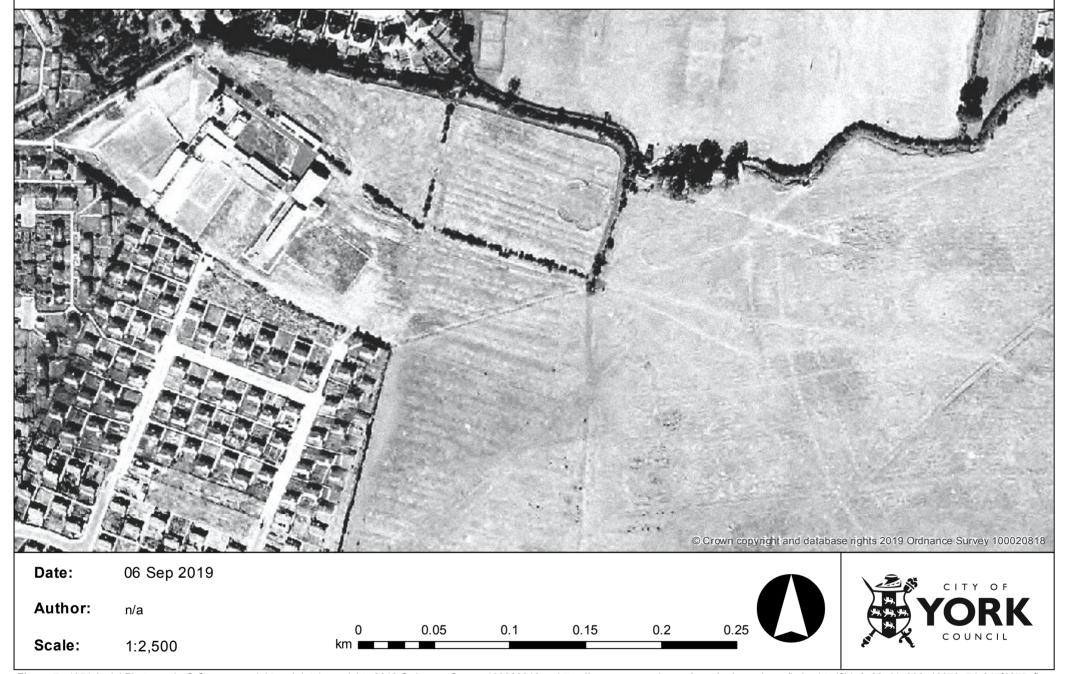


Figure 7 1951 Aerial Photograph. © Crown copyright and database rights 2019 Ordnance Survey 100020818: https://cyc.maps.arcgis.com/apps/webappviewer/index.html?id=6e02c41a806e46879e7dc215f1275afb



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