

Land South of Main Street Wheldrake North Yorkshire

Archaeological Trial Trenching Report 05-32-19

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Archaeological Trial Trenching

at

Land South of Main Street,
Wheldrake,
North Yorkshire

SE 6755 4442

MAP 05.32.19

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Date: 04/10/19	Date: 04/10/19		

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MAP 05.32.19

Archaeological Evaluation by Trial Trenching

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Summary

A scheme of Archaeological Evaluation by Trial Trenching was undertaken on Land South of Main Street, Wheldrake, North Yorkshire, on the 30th September 2019. Commissioned by Barratt/ David Wilson Homes and Vernon Land Partnership, the scheme was proposed to examine the potential for archaeological remains on the site. The results of this work would then allow the City of York HER to advise the Local Planning Authority on an appropriate mitigation strategy, if required.

A total of twelve trenches were excavated and have concluded that no archaeology was present at the site. Given the result of this work and in consultation with the City of York HER no further archaeological work is required on this site.



1. Introduction

- 1.1 The Archaeological Evaluation by Trial Trenching was commissioned by Barratt/
 David Wilson Homes and Vernon Land Partnership, and undertaken by MAP
 Archaeological Practice Ltd. to assess the impact of a proposed residential
 development and associated infrastructure at the Land South of Main Street,
 Wheldrake, North Yorkshire (Site Code: MAP 5.32.19; Fig. 1).
 - 1.2 Archaeological, Historical and Architectural remains are protected by means of Statutory Instruments (which include Scheduled Ancient Monument Legislation) and National Planning Policy Framework Chapter 16: July 2018.
 - 1.3 A Written Scheme of investigation for Archaeological Evaluation by Trial Trenching was produced by MAP and approved on the 23rd September 2019.
 - 1.4 The Archaeological Evaluation Trenches were excavated and recorded on the 30th September 2019.
 - 1.5 All work was commissioned and funded by Barratt/ David Wilson Homes and Vernon Land Partnership.
 - 1.6 All maps within this report have been produced from Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright. License No. AL 50453A.

2. Site Description

2.1 The Proposed Development Area was located to the South of Main Street on the West side of Wheldrake village, approximately 13km South-West of York City

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- Centre (central NGR SE 67555 44417; Fig. 1). The site was bounded by Main Street, properties off Main Street, mature hedgerow and farmland.
- 2.2 The proposed development was 4.72 hectares in size and stood at heights between 11.15m and 13.28m AOD (Figs. 1 & 2).
- 2.3 The Proposed Development Area lies on Sherwood Sandstone which is overlain deposits of the Alne Glaciolacustrine Formation (BGS 2019).

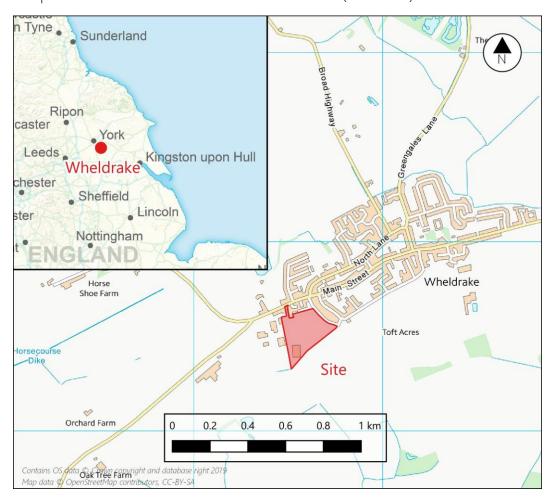


Figure 1. Site Location. 1:20,000

3. Archaeological and Historical Background

3.1 Little is known of the prehistoric periods in the immediate vicinity of the Proposed Development Area. Two Neolithic hand axes have been found in Wheldrake

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(MYO210 & MYO211), the latter of which was found close to the North-Eastern corner of the Proposed Development Area. A ring ditch of possible Prehistoric date has been identified through aerial photographs (MYO59).

- 3.2 Romano-British activity was identified during excavations at Millfield Farm in 2002 (NAA. 2005). The excavation revealed various features including several phases of a trackway, enclosure ditches, structures and burials.
- 3.3 A small castle was constructed in Wheldrake in the early 12th century. In 1149, King Stephen authorized the citizens of York to destroy it. In 1200, King John granted Richard Malbis a license to fortify a castle, but 'its completion was prevented, again at the instance of York' (ibid). The castle probably stood in a position to command over the River Derwent river. A fortified manor-house possibly stood at this site, which may have belonged to the Darels, who were undertenants of Fountains Abbey in 1361. The manor-house of the capital manor lay at the East end of the village, near the Church.
- 3.4 In September 2019 a Geophysical Survey was carried out across the areas of site which were allowed, the area to the West of the site contained dense vegetation, farm buildings and other obstructions which made the area unsuitable or inaccessible for a magnetometer survey. The survey identified anomalies associated with agricultural features, drainage features and linear and curvilinear trends of uncertain origin (Phase Site Investigations 2019).

4. Aims and Objectives

4.1 The aim of this archaeological evaluation was to gather sufficient information to establish the presence/absence, date, sequence, nature, depth, quality of survival and importance of any archaeological deposits. This would then enable an



assessment of the potential and significance of any archaeology of the site to be made and inform any mitigation that may be required ahead of the development.

5. Methodology

Twelve Evaluation Trenches were excavated (Fig. 2); two trenches (1 and 2) measured 20m by 2m, the remaining ten trenches measured 40m by 2m. Trench 1, 2, 3, 9 and 10 were aligned west to east, Trenches 4, 7 and 11 were aligned north-east to south-west, Trenches 6 and 12 were aligned north to south and Trenches 5 and 8 were aligned north-west to south-east. Trenches were placed in order to target anomalies or blank areas from the geophysical survey, as well as to investigate the area to the West of the site that could not be surveyed. All trench positions were surveyed in using a Trimble GPS.

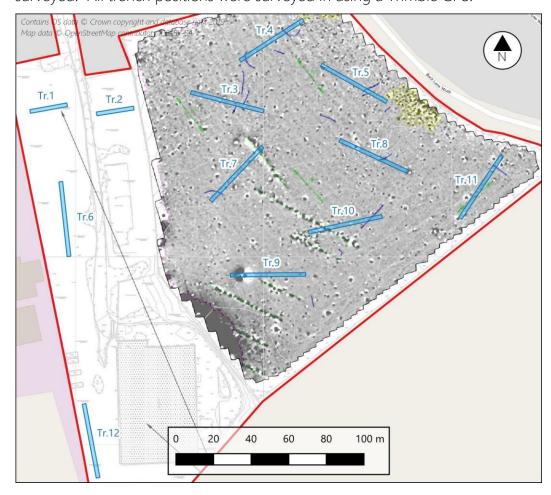


Figure 2: Proposed Trench Location. 1:2000



- 5.2 The topsoil and subsoil were removed using a tracked 360 mechanical excavator with toothless ditching bucket. Excavation of the trenches took place on the 30th September 2019 and were backfilled on the 2nd October 2019.
- 5.3 All archaeological deposits were recorded according to correct principles of stratigraphic excavation on MAP's pro forma context sheets, which are compatible with the MOLAS recording system. A total of twenty-four contexts were recorded (Appendix 1).
- 5.4 The photographic Record comprised a series of fifty-two high-resolution digital images (Appendix 2).

6. Results

6.1 Evaluation Trench 1 (Fig. 2)

6.1.1 Evaluation Trench 1 was aligned west to east and measured 20m by 2m. No archaeological features or finds were noted in Evaluation Trench 1, although there was a significant amount of modern disturbance. Existing ground level was at heights between 13.14m AOD and 13.28m AOD. The topsoil (context 101) was approximately 0.25m deep and was a dark grey-brown clayey silt deposit; the subsoil measured approximately 0.1m in depth and was a mid grey-clay deposit. Both were removed to reveal mid yellow-brown silty clay natural.

6.2 Evaluation Trench 2 (Fig. 2)

6.2.1 Evaluation Trench 2 was aligned west to east and measured 20m by 2m. No archaeological features or finds were noted in Evaluation Trench 2, though there was modern disturbance throughout. Existing ground level was at heights between 12.84m AOD and 13.03m AOD. The topsoil deposit (context 201) was a dark grey-brown clayey silt and was 0.3m deep; the topsoil overlay a 0.1m deep



deposit of dark grey clay subsoil (context 202). These were removed to reveal mid yellow-brown silty clay natural.

6.3 Evaluation Trench 3 (Fig. 2)

6.3.1 Evaluation Trench 3 was aligned west to east and measured 40m by 2m. No archaeological features or finds were present in Evaluation Trench 3. Existing ground level was at heights between 12.19m AOD (east) and 12.47m AOD (west). The topsoil, a dark grey-brown clayey silt deposit, was approximately 0.3m deep (context 301); the subsoil was 0.1m in depth and was a dark grey clay. These were removed to reveal a mid yellow-brown silty clay natural.

6.4 Evaluation Trench 4 (Fig. 2; Pl. 4)

6.4.1 Evaluation Trench 4 was aligned north-east to south-west and measured 40m by 2m. No archaeological features or finds were revealed in Evaluation Trench 4. Existing ground level was at heights between 12.31m AOD and 12.34m AOD. The topsoil, a mid grey-brown clayey silt deposit, was approximately 0.25m deep (context 401); the subsoil (402) was a mid brown-grey silty clay and approximately 0.1m in depth. These were removed to reveal mid yellow-brown clay natural.

6.5 Evaluation Trench 5 (Fig. 2)

6.5.1 Evaluation Trench 5 was aligned north-west to south-east and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 5. Existing ground level was at heights between 11.96m AOD (south-east) and 12.14m AOD (north-west). The topsoil, a mid-dark grey-brown clayey silt deposit, was approximately 0.25m deep (context 501); the subsoil, 502, was a mid brown-grey, compacted, silty clay. These were removed to reveal mid yellow-brown, silty clay natural.



6.6 Evaluation Trench 6 (Fig. 2; Pl. 5)

6.6.1 Evaluation Trench 6 was aligned north to south and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 6, though a large amount of modern debris was present throughout, including the foundations of a modern shed. Existing ground level was at heights of between 12.15 AOD (south) and 12.47m AOD (north). The topsoil, a dark grey-brown clayey silt deposit, was approximately 0.3m deep (context 601); the subsoil was approximately 0.1m in depth and was a dark grey clay (context 602). These were removed to reveal a light brown-yellow silty clay natural.

6.7 Evaluation Trench 7 (Fig. 2)

6.7.1 Evaluation Trench 7 was aligned north-east by south-west and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 7. Existing ground level was at heights between 11.69m AOD (south-west) and 11.99m AOD (north-east). The topsoil, a mid grey-brown clayey silt deposit, was approximately 0.25m deep (context 701); the subsoil, 702, was a mid grey, silty clay. These were removed to reveal mid yellow-brown silty clay natural.

6.8 Evaluation Trench 8 (Fig. 2)

6.8.1 Evaluation Trench 8 was aligned north-west to south-east and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 8. Existing ground level was at heights between 11.74m AOD and 11.92m AOD. The topsoil, a mid grey-brown clay silt deposit, was approximately 0.25m deep (context 801); the subsoil, 802, is a mid grey silty clay and 0.1m in depth. These were removed to reveal mid yellow-brown silty clay natural.



6.9 Evaluation Trench 9 (Fig. 2)

6.9.1 Evaluation Trench 9 was aligned west to east and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 9. Existing ground level was at heights between 11.15m AOD (west) and 11.37m AOD (east). The topsoil, a mid grey-brown clay silt deposit, was approximately 0.25m deep (context 901); the subsoil was a mid grey silty clay, approximately 0.1m in depth (context 902). These were removed to reveal mid yellow-brown silty clay natural.

6.10 Evaluation Trench 10 (Fig. 2; Pl. 6)

6.10.1 Evaluation Trench 10 was aligned west to east and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 10. Existing ground level was at heights between 11.44m AOD and 11.58m AOD. The topsoil, a mid greybrown clay silt deposit, was approximately 0.25m deep (context 1001); the subsoil was a mid brown-grey silty clay and was approximately 0.1m deep (context 1002). These were removed to reveal mid yellow-brown silty clay natural.

6.11 Evaluation Trench 11 (Fig. 2)

6.11.1 Evaluation Trench 11 was aligned north-east to south-west and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 11. Existing ground level was at heights between 11.32m AOD (south-west) and 11.68m AOD (north-east). The topsoil, a mid grey-brown clay silt deposit, was approximately 0.25m deep (context 1101); the subsoil was a mid-dark grey silty clay, which was approximately 0.1m in depth (context 1102). These were removed to reveal mid brown-yellow silty clay natural.

6.12 Evaluation Trench 12 (Fig. 2)

6.12.1 Evaluation Trench 12 was aligned north to south and measured 40m by 2m. No archaeological activity was revealed in Evaluation Trench 12, however there was



significant modern disturbance. Existing ground level was at heights between 11.16m AOD (south) and 11.43m AOD (north). The topsoil, a very dark brown silt deposit, was between 0.2m and 0.6m deep (context 1201); the subsoil was a mid grey-brown silty clay and was approximately 0.1m deep (context 1202). These were removed to reveal mid yellow-brown silty clay natural.

7. Conclusions

- 7.1 The excavation of the twelve evaluation trenches revealed no archaeological finds or features.
- 7.2 No further archaeological work is necessary in respect of this site.



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9. List of Contributors

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Plates Catherine Whitehouse

Filing and Administration Sophie Coy





Plate 1: General View of Site. Facing North-West.



Plate 2: General View of Site. Facing West.





Plate 3: Stripping Trench 4. Facing West.



Plate 4: Trench 4. Facing South-West. 1m Scale.





Plate 5: Trench 6. Facing North. 1m Scale.



Plate 6: Trench 10. Facing West. 1m Scale.



APPENDIX 1

Context Listing

Context	Context Type	Fill of	Description
101	Deposit	-	Trench 1 Topsoil: Dark grey-brown, loosely compacted, clayey silt
102	Deposit	-	Trench 1 Subsoil: Mid grey, firmly compacted, clay
201	Deposit	-	Trench 2 Topsoil: Dark grey-brown, loosely compacted, clayey silt
202	Deposit	-	Trench 2 Subsoil: Dark grey, firmly compacted, clay
301	Deposit	-	Trench 3 Topsoil: Mid grey-brown, loosely compacted, clayey silt
302	Deposit	-	Trench 3 Subsoil: Mid brown-grey, firmly compacted, silty clay
401	Deposit	-	Trench 4 Topsoil: Mid grey-brown, loosely compacted, clayey silt
402	Deposit	-	Trench 4 Subsoil: Mid brown-grey, firmly compacted, silty clay
501	Deposit	-	Trench 5 Topsoil: Mid-dark grey-brown, loosely compacted, clayey silt
502	Deposit	-	Trench 5 Subsoil: Mid brown-grey, firmly compacted, silty clay
601	Deposit	-	Trench 6 Topsoil: Dark grey-brown, loosely compacted, clayey silt
602	Deposit	-	Trench 6 Subsoil: Dark grey, firmly compacted, clay
701	Deposit	-	Trench 7 Topsoil: Mid grey-brown, loosely compacted, clayey silt
702	Deposit	-	Trench 7 Subsoil: Mid grey, firmly compacted, silty clay
801	Deposit	-	Trench 8 Topsoil: Mid grey-brown, loosely compacted, clayey silt
802	Deposit	-	Trench 8 Subsoil: Mid grey, firmly compacted, silty #clay
901	Deposit	-	Trench 9 Topsoil: Mid grey-brown, loosely compacted, clayey silt
902	Deposit	-	Trench 9 Subsoil: Mid grey, firmly compacted, silty clay
1001	Deposit	-	Trench 10 Topsoil: Mid grey-brown, loosely compacted, clayey silt
1002	Deposit	-	Trench 10 Subsoil: Mid brown-grey, firmly compacted, silty clay
1101	Deposit	-	Trench 11 Topsoil: Mid grey-brown, loosely compacted, clayey silt
1102	Deposit	-	Trench 11 Subsoil: Mid-dark grey, firmly compacted, silty clay
1201	Deposit	-	Trench 12 Topsoil: Very dark grey-brown, loosely compacted, clayey silt
1202	Deposit	-	Trench 12 Subsoil: Mid grey-brown, firmly compacted, silty clay



APPENDIX 2

Photographic Archive Listing

Digital

Frame	Context -	- Scale	Facing SE	Description Road adjacent to site
2	-	-	NW	Site overview
3	-	-	NE	Site overview
4	-	-	W	Site overview, trenches 1, 2 and 6
5	-	-	W	Site overview, trenches 1, 2 and 6
6	-	-	SE	Site overview
7	-	-	S	Site overview
8	-	-	SW	Stripping Trench 4
9	-	-	W	Stripping Trench 4
10	401, 402	1m	SW	Trench 4
11	401, 402	1m	NE	Trench 4
12	401, 402	1m	NE	Furrow, Trench 4
13	301, 302	1m	NW	Trench 3
14	301, 302	1m	SE	Trench 3
15	701, 702	1m	SW	Trench 7
16	701, 702	1m	NE	Trench 7
17	901, 902	1m	W	Trench 9
18	901, 902	1m	Е	Trench 9
19	1001, 1002	1m	W	Trench 10
20	1001, 1002	1m	Е	Trench 10
21	1101, 1102	1m	NE	Trench 11
22	1101, 1102	1m	SW	Trench 11
23	801, 802	1m	SE	Trench 8
24	801, 802	1m	NW	Trench 8
25	501, 502	1m	SE	Trench 5
26	501, 502	1m	NW	Trench 5
27	-	-	Ν	Site overview with trenches
28	-	-	Ν	Site overview with trenches
29	1201, 1202	1m	S	Trench 12
30	1201, 1202	1m	Ν	Trench 12
31	601, 602	1m	Ν	Trench 6
32	601, 602	1m	S	Trench 6
33	401, 402	1m	SW	Trench 4
34	401, 402	1m	NE	Trench 4
35	301, 302	1m	NW	Trench 3
36	301, 302	1m	SE	Trench 3
37	701, 702	1m	SW	Trench 7
38	701, 702	1m	NE	Trench 7
39	901, 902	1m	W	Trench 9



40	901, 902	1m	Е	Trench 9
41	1001, 1002	1m	W	Trench 10
42	1001, 1002	1m	Е	Trench 10
43	1101, 1102	1m	NE	Trench 11
44	1101, 1102	1m	SW	Trench 11
45	801, 802	1m	SE	Trench 8
46	801, 802	1m	NW	Trench 8
47	501, 502	1m	SE	Trench 5
48	501, 502	1m	NW	Trench 5
49	201, 202	1m	Е	Trench 2
50	201, 202	1m	W	Trench 2
51	101, 102	1m	W	Trench 1
52	101, 102	1m	Е	Trench 1



APPENDIX 3

Land South of Main Street Wheldrake North Yorkshire

MAP 5-32-2019

Written Scheme of Investigation Archaeological Trial Trenching

1 Summary

- 1.1 This document sets out the details for the archaeological work required at Land to the south of Main Street, Wheldrake, City of York, North Yorkshire in order to inform the City Archaeologist at the City of York Council of the archaeological potential of the site, prior to the commencement of a residential development with associated infrastructure.
- 1.2 The Written Scheme of Works has been commissioned by Barratt/ David Wilson Homes and Vernon Land Partnership.
- 1.3 In accordance with the recommendations of the National Planning Policy Framework (July 2018) on 'Archaeology and Planning' a staged scheme of archaeological work is proposed which has previously consisted of a Desk Based Assessment (MAP 2019) and Geophysical Survey (Phase Site Investigations 2019). The results of the Trial Trenching will be summarised in a report and an appropriate mitigation strategy will be supplied.

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2 Site Description

- 2.1 The Proposed Development Area is located to the south of Main Street on the west side of Wheldrake village, approximately 13km north-west of York City Centre (central NGR SE 67555 44417; Fig. 1).
- 2.2 The Proposed Development Area measures 4.72ha and is currently occupied by a commercial unit with associated parking and access, and areas of arable farmland. The site is bounded by Main Street, properties off Main Street, mature hedgerow and farmland.

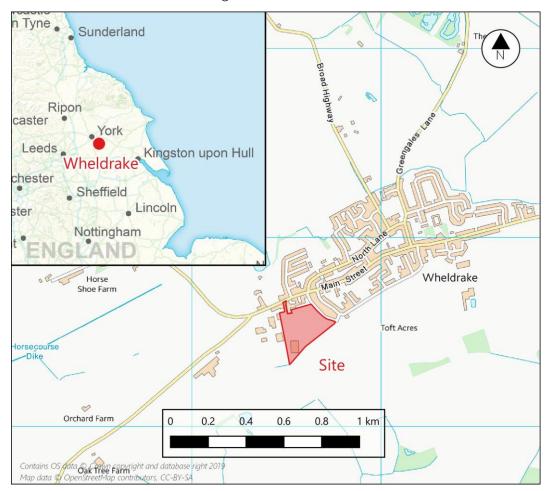


Figure 1. Site Location. 1:20,000

2.3 The site lies on Sherwood Sandstone which is overlain deposits of the Alne Glaciolacustrine Formation (BGS 2019).

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3. Archaeological and Historical Background

- 3.1 Little is known of the prehistoric periods in the immediate vicinity of the Proposed Development Area. Two Neolithic hand axes have been found in Wheldrake (MYO210 & MYO211), the latter of which was fund close to the north-eastern corner of the Proposed Development Area. A ring ditch of possible Prehistoric date has been identified through aerial photographs (MYO59).
- 3.2 Romano-British activity was identified during excavations at Millfield Farm in 2002 (NAA. 2005). The excavation revealed various features including several phases of a trackway, enclosure ditches, structures and burials.
- 3.3 A small castle was constructed in Wheldrake in the early 12th century. In 1149, King Stephen authorized the citizens of York to destroy it. In 1200, King John granted Richard Malbis a license to fortify a castle, but 'its completion was prevented, again at the instance of York' (ibid). The castle probably stood in a position to command over the River Derwent river. A fortified manor-house possibly stood at this site, which may have belonged to the Darels, who were undertenants of Fountains Abbey in 1361. The manor-house of the capital manor lay at the east end of the village, near the Church.
- 3.4 In September 2019 a Geophysical Survey was carried out across the site areas of the site which allowed, the area to the west of the site contains dense vegetation, farm buildings and other obstructions which made the area unsuitable or inaccessible for a magnetometer survey. The survey

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identified anomalies associated with agricultural features, drainage features and linear and curvilinear trends of uncertain origin (Phase Site Investigations 2019).

4. Aims and Objectives

- 4.1 The aim of the Archaeological Trial Trenching is to determine the presence/absence, nature, date, quality of survival and importance of archaeological deposits to enable an assessment of the potential and significance of the archaeology to be made.
- 4.2 In the event of significant archaeological remains being identified on the site, further work may be necessary, in the form of Open Area Excavation or Strip, Map and Record. In accordance with the 'Standard and Guidance for Archaeological Excavation' (CIfA 2014b) the aims of the Archaeological Excavation is to:
 - Examine the archaeological resource within a given area or site within a framework of defined research objectives;
 - To seek a better understanding of the resource;
 - To compile a lasting record of the resource; and
 - To analyse and interpret the results of the excavation and disseminate them.

5 Compliance

5.1 MAP will adhere to the general principles of the CIfA Code of Conduct (CIfA 2014) throughout the project and to the CIfA 'Standards and Guidance for Archaeological Field Evaluations' (CIFA 2014b).

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- 5.2 All work will be carried out in accordance with chapter 16 of the National Planning Policy Framework (February 2019) on 'Archaeology and Planning'.
- 5.3 The work will be monitored under the auspices of the City Archaeologist at City of York Council who should be consulted before the commencement of site works.
- All maps within this report have been produced from the Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright. License No. AL 50453A and also data derived from Open Street Map (htps://www.opennstreetmap.org/copyright).
- 5.5 If human remains are encountered during the course of this evaluation it is considered best practice to not remove the remains at this stage, however, this should be considered at a site-specific level. If it is deemed necessary to remove human remains, this will be carried out under the conditions of licences for the removal of human remains (issued by the Ministry of Justice) and in accordance with the Burial Act (1857) and 'Guidelines to the Standards for Recording Human Remains' (Brickley & McKinley. 2004) to ensure that they are treated with due dignity.
- 5.6 MAP Archaeological Practice is an ISO 9001 accredited organisation (certificate number GB2005425). The award of the ISO 9001 certificate, independently audited by the British Standards Institution (BSI), demonstrates MAP's commitment to providing a quality service to our clients. ISO (the International Organisation for Standardisation) is the most

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recognised standards body in the world, helping to drive excellence and continuous improvement within businesses.

6 Fieldwork Methodology

- 6.1 Twelve Trial Trenches are proposed, positioned across the site to investigate the archaeological potential of the site, targeting both geophysical anomalies and areas devoid of anomalies (fig 2). Ten of the trenches measure 40m by 2m and two measure 20 by 2m.
- 6.2 All overburden will be carefully removed by mechanical excavator using a wide toothless blade, under archaeological supervision, to the top of archaeological features or layers. Excavated topsoil will be redeposited to the site of each evaluation trench. Topsoil and subsoils will be stored separately, and all spoil will be stored and managed in line with the standards of the Construction Code of Practice for Sustainable Use of Soils on Construction Sites (DEFRA 2009).

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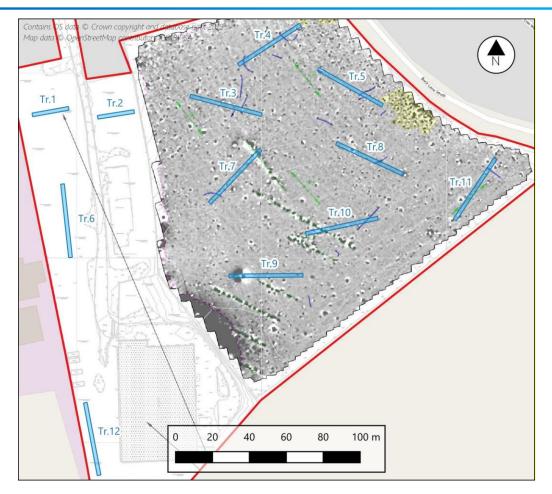


Figure 2. Proposed Trench Location. 1:2000

- 6.1.3 All excavation of archaeological features and deposits carried out will be by hand. Areas of intensive modern disturbance will be given a low priority in excavation. Where practicable, the fills of these features will be removed by mechanical excavator following consultation by the City Archaeologist at City of York Council.
- 6.1.4 Context recording methodologies and systems will be used. All archaeological deposits will be recorded according to principles of stratigraphic excavation on MAP's *pro forma* sheets, which are compatible with the MoLAS recording system. The MoLAS recording manual will be used on site where necessary. The stratigraphy of trenches will be recorded even if no archaeology is found.



- 6.1.5 The excavation sampling policy is:
 - a. A 100% sample of stakeholes
 - b. An initial 50% sample should be taken of all postholes, but where they are part of a building these should be 100% excavated
 - c. A 50% sample of pits with a diameter up to 1.5m (where justified, these should be 100% excavated,
 - d. A minimum 25% sample of all pits over 1.5m in diameter, but this should include a complete section across the pit to record a full profile (where justified, these should be 100% excavated)
 - e. All junctions/intersections and corners of linear features will be investigated and their stratigraphic relationships determined if necessary, using box sections and all ditch terminals will be examined,
 - f. All funerary contexts, all buildings and all industrial features will be subject to 100% excavation. As noted above, postholes and the enclosing ditches around barrows and roundhouses would be first subject to sample excavation, sectioning and recording, but then should be fully excavated
- 6.1.6 In certain cases, the use of mechanical excavation equipment may also be appropriate for removing deep intrusions (e.g modern brick and concrete floors or footings), or for putting sections through major features after partial excavation (e.g ditches), or through deposits to check that they are of natural origin
- 6.1.7 A full written, drawn and photographic record will be made of all material revealed during the course of the Trial Trenching. Plans should be completed at a scale of 1:50 or 1:20 (as appropriate), whilst section drawings

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should be at a scale of 1:10. High resolution digital photographs should form the basis of the photographic archive.

- 6.1.8 A sampling strategy for the recovery for environmental remains has been formulated in accordance with an Environmental Strategy written by an Environmental Consultant (Diane Aldritt, appendix 1) and also follows the guidance of the Association for Environmental Archaeology (1995) and Historic England (2011).
- 6.1.9 Samples will be collected from primary and secondary contexts, where applicable, from a range of representative features, including pit and ditch fills, postholes, floor deposits, ring gullies and other negative features. Where features allow between 40 and 60 litres will be taken although entire contexts will be sampled if the volume is low, and specialist samples, such as for General Biological Analysis (GBA) or column samples, will be of the order of 20 litres. Positive features will also be sampled; retention of structural material such as bricks will be implemented where necessary. Sampling will also be considered for those features where dating by other methods (for example pottery and artefacts) is uncertain. Animal bones will be hand collected, and bulk samples collected from contexts containing a high density of bones. Spot finds of other material will be recovered where applicable. Flotation samples and samples taken for coarse-mesh sieving from dry deposits will be processed at the time of the fieldwork wherever possible, partly to permit variation of sampling strategies if necessary, but also because processing at a later stage could cause delays.
- 6.1.10 If human remains are encountered during the course of this evaluation and it is deemed necessary to remove the remains, this will take place under the

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conditions of licences for the removal of human remains (issued by the Ministry of Justice, to ensure that they are treated with due dignity). The preferred option would be for them to be adequately recorded before lifting, and then carefully removed for scientific study, and long-term storage with an appropriate museum; however, the burial licence may specify reburial or cremation as a requirement.

- A finds recovery and conservation strategy will be discussed with the City Archaeologist and recipient museum in advance of the project commencing, and a policy for finds recording should be agreed and submitted to the City Archaeologist, before commencement of site works. Any recording, marking and storage, materials will be of archive quality, and recording forms and manuals will be submitted to the City Archaeologist, prior to the commencement of on-site works, if these have not been supplied previously. Allowance will be made for preliminary conservation and stabilisation of all objects and an assessment of long-term conservation and storage needs We have made an allowance for a minimum four boxes in calculating estimates for museums storage grant.
- 6.1.12 All finds (artefacts and ecofacts) visible during excavation will be collected and processed, unless variations in this principle are agreed with the Local Authority. Finds will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication First Aid for Finds. In accordance with the procedures outlined in MoRPHE, all iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy will be X-radiographed before assessment.

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- 6.1.13 We will make provision within our excavation strategies, where necessary, for use of shoring, pumps or artificial lighting. Such strategies will also follow for sampling for radiocarbon, archaeomagnetic and/or dendrochronological determinations, as appropriate: where in situ timbers are found to survive in good condition, samples should be taken for dendrochronological assay.
- 6.1.14 Arrangements for site access and reinstatement are to be agreed with the commissioning body.
- 6.1.15 Health and safety will take priority over archaeological matters. All archaeologists undertaking fieldwork must comply with all Health and Safety Legislation, this includes the preparation of a Risk Assessment.
- 6.1.16 Necessary precautions should be taken over underground services and overhead lines.
- 6.1.17 All on site staff hold valid CSCS cards. All Project Officers and Project Managers hold a valid First Aid at Work Certificate and Site Supervisor Safety Training qualifications.
- 6.1.18 MAP will provide evidence of all necessary insurances, including Employer's Liability, Professional Liability and Public Liability Cover.

7. Post Excavation Analysis and reporting

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- 7.1 Upon completion of the evaluation, the artefacts, soil samples and stratigraphic information will be assessed as to their potential and significance for further analysis.
- 7.2 A report will be prepared to include the following:
 - a) A non-technical summary of the results of the work, Introduction and aims and objectives.
 - b) An introduction which should include
 - the site code/project number
 - planning reference number and HER Casework number
 - dates when fieldwork took place
 - grid reference
 - c) An account of the methods and results of the evaluation, describing structural data and associated finds and/or environmental data recovered.
 - d) Interpretation, including phasing of the site sequence and spot-dating of ceramics (Descriptive material should be clearly separated from interpretive statements). This shall be supported by the use of photographs and drawings, to include an overall plan of the site accurately identifying the location of trenches; individual trench plans as excavated indicating the location of archaeological features, with at least one section detailing the stratigraphic sequence of deposits within each trench.
 - e) A specialist assessment of the artefacts recovered with a view to their potential for further study. Allowance should be made for preliminary conservation and stabilisation of all objects and an assessment of long-term conservation and storage needs.
 - Assessment of artefacts must include inspection of X-radiographs of all iron objects, a selection of non-ferrous artefacts (including coins), and a sample of any industrial debris relating to metallurgy. A rapid scan of all excavated

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material should be undertaken by conservators and finds researchers in collaboration. Material considered vulnerable will be selected for stabilisation after specialist recording. Where intervention is necessary, consideration will be given to possible investigative procedures (e.g glass composition studies, residues in or on pottery, and mineral preserved organic material). Once assessed, all material will be packed and stored in optimum conditions, as described in First Aid For Finds. Waterlogged organic materials should be dealt with, following Historic England documents, Guidelines for the care of waterlogged archaeological leather, and guidelines on the recording, sampling, conservation and curation of waterlogged wood.

- f) A specialist assessment of environmental samples taken, with a view to their potential for subsequent study.
 - Processing of all samples collected for biological assessment, or subsamples of them, will be completed. Bulk and site-riddled samples from dry deposits should have been processed during excavation, where possible. The preservation state, density and significance of material retrieved must be assessed, following methods presented in Environmental Archaeology and archaeological evaluations, or existing local guidelines, until national guidelines are available. Unprocessed sub-samples must be stored in conditions specified by the appropriate specialists.
 - Assessments for any technological residues will be undertaken. Samples for dating must be submitted to laboratories promptly, so as to ensure that results are available to aid development of specifications for subsequent mitigation strategies.
- g) The results from investigations in archaeological sciences will be included in the Site Archive and presented in the Evaluation Report. Reports must include sufficient detail to permit assessment of potential analysis. They will



include tabulation of data in relation to site phasing and contexts, and must include non-technical summaries. The objective presentation of data must be clearly separated from interpretation. Recommendation for further investigation (both on samples already collected, and at future excavations) must be clearly separated from the results and interpretation.

- h) An assessment of the archaeological significance of the deposits identified, in relation to other sites in the region.
- i) A conclusion with recommendations for further post-excavation work, if required.
- j) Detailed archive location and destination.
- k) Appendices and figures, as appropriate, including a copy of the specification and/or project design.
- l) References and bibliography of all sources used
- 7.3 Copies of the report will be submitted to the commissioning body, the Local Planning Authority and the City of York Historic Environment Record within an agreed timetable and subject to any contractual requirements on confidentiality (see 8.1 below).
- 7.4 We will provide a digital copy of the report in PDF format to the City of York Historic Environment Record Office.
- 7.5 A Brief, interim report may be required shortly after the completion of fieldwork.
- 7.6 The following Specialists have been contacted as are available to work on the project:
 - Pottery T G Manby (Prehistoric),

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M R Stephens (medieval and Post-medieval)

P A Ware (Roman)

Flint - P Makey

Animal Bone – Jane Richardson

Environmental Sampling – Diane Alldritt

Conservation – York Archaeological Trust

Human Remains – York Osteology

Ceramic Building Material – Dr Phil Mills

Clay Tobacco Pipe - M R Stephens

8. Copyright, Confidentiality and Publicity

8.1 Unless the individual/organisation commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic records and reports rests with MAP.

9. Archive Preparation and Dissemination

- 9.1 The requirements for archive preparation and deposition must be addressed and undertaken in a manner agreed with the recipient museum: in this instance, the Yorkshire Museum is recommended. The recipient museum will be contacted at an early stage, before submission of the project design and before commencement of fieldwork.
- 9.2 A site archive should be prepared in accordance with the specification outlined in *Management of Archaeological Projects* (MoRPHE (Lee, E, 2006). See also *Towards an Accessible Archaeological Archive, the Transfer of Archaeological Archives to Museums: Guidelines for use in England, Northern Ireland, Scotland and Wales Society of Museum Archaeologists 1995.*

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- 9.3 The site archive, including finds and environmental material, subject to the permission of the relevant landowners, will be labelled, conserved and stored according to the United Kingdom Institute for Conservation (UKIC)'s. Provision will be made for the stable storage of paper records and their long term storage on a suitable medium, such as microfilm, a copy of which should be deposited with the NMR (Historic England). An index to the contents of the archive together with details of its date and place of deposition should be lodged with the SMR.
- 9.4 Archive deposition must be arranged in consultation with the recipient museum and the City Archaeologist at City of York Council and must take account of the requirements of the recipient museum and the relevant guidelines (see above) relating to the preparation and transfer of archives. The timetable for deposition shall be agreed on completion of the site archive and narrative.

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APPENDIX 1

Conservation Strategy By Ian Panter of York Archaeological Trust

Artefacts from all categories and all periods will be recovered as a matter of routine during the excavation. When retrieved from the ground finds will be kept in a finds tray or appropriate bags in accordance with **First Aid for Finds**. Where necessary, a conservator may be required to recover fragile finds from the ground depending upon circumstances.

If waterlogged conditions are encountered a wide range of organic materials may be recovered, including wood, leather and textiles. Advice will be sought from a

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conservator to discuss optimum storage requirements before any attempt is made to retrieve organic finds and structural timbers from the ground.

After the completion of the fieldwork stage, a conservation assessment will be undertaken which will include the X-radiography of all the ironwork (after initial screening to separate obviously modern debris), and a selection of the non-ferrous finds (including all coins). A sample of slag may also be X-rayed to assist with identification and interpretation. Wet-packed material, including glass, bone and leather will be stabilised and consolidated to ensure their long-term preservation. All finds will be stored in optimum conditions in accordance with First Aid for Finds and Guidelines for the Preparation of Excavation Archives for Long-Term Storage (Walker, 1990).

Waterlogged wood, including structural elements will be assessed following the English Heritage guidelines, Waterlogged wood: sampling, conservation and curation of structural wood (Brunning 1996). The assessment will include species identification, technological examination and potential for dating.

The conservation assessment report will include statements on condition, stability and potential for further investigation (with conservation costs) for all material groups. The conservation report will be included in the updated project design prepared for the analysis stage of the project.

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APPENDIX 2

Environmental Strategy By Diane Alldrit

The on-site environmental sampling strategy will systematically seek to recover a representative sample of botanical, molluscan (both terrestrial and aquatic), avian and mammalian evidence from the full range of contexts encountered during the This will enable, at the assessment stage, the possibility for excavation. radiocarbon dating material to be obtained, and for an initial analysis of the economic and environmental potential of the site. In order to achieve this, a bulk sample (BS, Dobney et al 1992) comprising an optimum size of 40litre of sediment (where possible) should be taken from every stratigraphically secure and archaeologically significant context. In practice it may not always be possible to obtain 28l of sediment from certain features during the assessment stage, for instance from partially excavated pits or post-holes, in which case a single bucket sample, c.10 to 14litre should be taken at the site supervisors discretion. Deposits of mixed origin, for instance topsoil, wall fills and obvious areas of modern contamination, should be avoided where possible, as these will contain intrusive material and not provide secure radiocarbon dates.

All buckets and other sampling equipment must be clean and free of adherent soil in order to prevent cross-contamination between samples. If dry soil is to be stored for any length of time it should be kept in cool, dry conditions, and away from strong light sources. However, it is preferable to process samples as soon as possible after excavation.

Bulk soil samples shall be processed using an Ankara-type water flotation machine (French 1971) for the recovery of carbonised plant remains and charcoal. The

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flotation tank should contain a >1mm mesh for collection of the retent or 'residue' portion of the sample (which may contain pottery, lithics and animal / bird bone, in addition to the heavier fragments of charcoal which do not float). The 'flot' portion of the sample, which may include carbonised seeds, cereal grain, charcoal and sometimes mollusc shell, should be captured using a nest of >1mm and >300micron Endicot sieves. Flotation equipment, including sieves, meshes, brushes and so forth must be meticulously cleaned between samples in order to prevent contamination of potential radiocarbon dating material. All material resulting from flotation will be dried prior to microscopic examination. Flotation is not suitable for the recovery of pollen or for processing waterlogged samples, which shall be discussed below.

Where there is potential for waterlogged preservation, shown for instance by the presence of wood and other organic or wet material, then a 5 to 10litre size sample should be taken (GBA sample, Dobney *et al* 1992). This material is to be retained for later processing using laboratory methods to enable the recovery of waterlogged plant material and insects. For assessment purposes a 1litre subsample of the organic sediment from each potential waterlogged sample shall be processed using laboratory wash-over methods, and once processed **kept wet**. All waterlogged samples awaiting processing should be kept damp, preferably stored in plastic sealable tubs, and in cool conditions. Where large waterlogged timbers are recovered these should be stored under refrigerated conditions and an appropriate conservator consulted.

There is the possibility that the waterlogged deposits may require parasite egg analysis. It is proposed that the 'squash' technique is adapted, this would require small lumps of raw sediment approximately 3mm in diameter taken from three separate points from within the sample and homogenised in a little water by



shaking. After allowing coarse particles to settle for a few moments, a drop of the supernatant was removed. This work would be undertaken by either John Carrott or Harry Kenwood if necessary.

If sediment suitable for pollen analysis is encountered, for instance rich organic peaty deposits, or deep ditch sections with organic preservation, the archaeobotanical specialist is to be consulted prior to any sampling taking place. These deposits would require sampling with large kubiena tins and require the specialist to be on-site. Pollen analysis, even at assessment level, would subsequently impose a considerable cost implication should it be carried out.

The specialist is available to provide consultation and advice on the environmental sampling strategy throughout the course of the excavation and during post-excavation processing if required.

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