



YORK ARCHAEOLOGICAL TRUST



ARCHAEOLOGICAL INVESTIGATIONS AT CLEMENTHORPE MALTINGS

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with contributions by B. Savine

UPDATED WATCHING BRIEF REPORT

Report Number 2017/18 February 2017



YORK ARCHAEOLOGICAL TRUST



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Abbreviations

AOD –Above Ordnance Datum

BGL – Below Ground Level

NON-TECHNICAL SUMMARY

An archaeological watching brief was undertaken at Clementhorpe Maltings, Lower Darnborough Street, York between the 24th February and the 18th March 2016. Ground works involved the excavation of foundation trenches for new dividing walls within the property. This work was followed up with a further watching brief undertaken on service trenches, initially those located to the north of the Maltings building, on 31st May and 1st June 2016. A watching brief was undertaken on a drainage run located outside the western wall, between 18th August and 19th August 2016.

Features relating to previous phases of the Maltings building were uncovered including internal wall footings, column pedestals and a tile floor surface. The Maltings building was constructed on top of a thick levelling deposit. Beneath this deposit five rectangular features were uncovered that were interpreted as possible grave cuts. These were not further investigated as the ground works did not impact upon them. They remain preserved *in-situ*.

KEY PROJECT INFORMATION

Project Name	Clementhorpe Maltings Watching Brief
YAT Project No.	5893
Report status	Final
Type of Project	Watching Brief
Client	Northminster Ltd
Planning Application No.	15/00114/FUL
NGR	SE 60318 51021
Museum Accession No.	YORYM : 2016.253
OASIS Identifier	Yorkarch1-246897

REPORT INFORMATION

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1 INTRODUCTION

From the 24th of February to the 15th March 2016 York Archaeological Trust carried out a watching brief on groundworks at Clementhorpe Maltings, York on behalf of Northminster Ltd. The programme of works consisted of the excavation of foundations for new dividing walls within the property. These comprised of 0.75m wide foundation trenches, with a maximum depth of 0.85m BGL. In addition two column footings measuring 1.0m x 1.0m were excavated to a depth of 1.2m BGL. The service trench on the north side of the Maltings building, excavated between the 31st May and 1st June 2016 exposed former surfaces associated with the use of the Maltings and at their deepest point the top of a buried plough soil. A watching brief was carried out on a drainage run located along the outside of the western wall between the 18th and 19th August 2016. This uncovered a rubble makeup layer associated with the construction of the malting building, and possibly the top of natural clay deposits.

The primary reason for monitoring the ground works was due to the presence of Roman burials to the west and the north of the site, found in the 19th Century. A tessellated pavement was also found 100m to the north of the site in the 19th Century, and excavations in the 1970's revealed evidence of 3rd and 4th Century Roman buildings.

2 METHODOLOGY

Foundation trenches were excavated by Croft Farm Construction Ltd using a micro excavator due to the lack of headroom afforded by the height of the first floor. The ground level was stripped to a depth of 0.4m BGL in the first instance. Six dividing wall foundation trenches 0.75m wide were then excavated to a depth of 0.85m BGL, (c.9.85m AOD). A trench down the centre of the malthouse measuring 1.0m wide was excavated to a depth of 0.6m BGL (c.10.1m AOD), providing footings for a walkway between the apartment units. Two column footings measuring 1.0m x 1.0m were excavated to a depth of 1.2m BGL, (c.9.5m AOD).

The service trench on the north side of the Maltings building was also excavated using a micro excavator employing a 0.7m wide flat bladed ditching bucket for the majority of the excavation except at the north end of the trench where the presence of live services necessitated the use of a smaller bucket, in this case a 0.4m wide toothed bucket. The trench measured 11.4m long, 1.2m wide at its southern end where it butted up against the west side of the building, north of that point it narrowed to a width of 0.9m. At its southern end the trench extended to a depth of 1.3m BGL (10.37m AOD), the base gradually sloped up to a depth of 0.7m BGL (10.95m AOD) to the point at which it extended north of the building.

Excavation of these ground works were monitored by an archaeologist. Areas monitored were recorded by a 1:200 overall plan of excavated areas, and a 1:20 plan of the position of features identified within the central walkway foundation trench, section drawings and digital photography.

3 LOCATION, GEOLOGY & TOPOGRAPHY

- 3.1 The proposal site is located on Lower Ebor Street at NGR SE 60318 51021, c.0.8km south of York City Centre (Figure 1).
- 3.2 The site consists of a large brick-built, late nineteenth century malting and kiln building, latterly in use as a warehouse, occupying the eastern side of the site with a yard to the west.

The site is located between Lower Ebor Street to the south and Lower Darnborough Street to the north. To the east the site is abutted by the terraced properties of both these streets; to the west the site is bordered by the rear gardens of properties fronting onto Cherry Street.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 The archaeological interest in the site is Roman, medieval and early modern. Evidence for Roman occupation is known from immediately north of the site, where a tessellated pavement and the remains of 3rd and 4th century buildings have been found (Dobson and Donaghey 1984). Roman burials are also known to the north and west of the site (RCHMY 1, 108)

4.2 In the medieval period, St Clement's Priory was located near to the site. Excavations nearby revealed fragmentary structures and 250 burials associated with the Priory (Dobson and Donaghey 1984).

The area was in agricultural use through the Post-medieval period, until the development of industry and workers terraced housing in the 19th century. The Maltings building was built in the late 19th century and operated until the late 1950s (Rimmer, YAT 2014/63, 2).

4.3 A watching brief was maintained during site investigation works in April 2014 (Hunter-Mann, YAT 2014/22). Three trial pits were excavated within the building, identifying ground make-up deposits associated the construction of the Maltings. A quarry tile floor was also identified beneath the current concrete floor. The quarry tile floor produced a fragment of *ex-situ* malting brick and represented an early phase of the building's use; it was absent at the northern end of the building, which is interpreted as having been extensively re-built. Three boreholes were cored along the long axis of the building. Ground make-up deposits were c.1m thick, overlying natural deposits in the form of sands and gravels at 9.7m AOD at the northern end, dropping to c.6m AOD towards the south, where alluvial silts and clays were observed.

4.4 An Archaeology and Heritage Statement was undertaken in 2014 (Rimmer, YAT 2014/63). This report assessed the impact of the development on below-ground archaeological deposits as low and on below-ground structures associated with the building as medium, based on the results of the site investigation works. A watching brief was recommended during ground works associated with the development.

4.5 A Building Survey Report was undertaken in 2015 (Rimmer, YAT 2015/31) of the extensive and significant surviving internal fabric and fittings of the Maltings.

5 RESULTS

5.1 Watching brief on internal elements of groundwork (24th February - 15th March 2016)

5.1.1

Excavations in the kiln room were carried out to a depth of 0.4m BGL. These revealed the earliest deposit to be a soft, brown, clayey silt (1010) containing moderate tile and brick fragments. This has been interpreted as a levelling deposit for the construction of the Maltings building. Set into this deposit were two column pedestals (1005 and 1007) (Plate 1) constructed of bricks (measuring 240mm x 120mm x 70mm) one of which was topped with a sandstone padstone that was broken (Plate 2). These appear to match the foundation for the circular iron columns that are extant within the main building. To the south of these were two

rectangular concrete foundations (1006 and 1008) that appear to match the type of foundations used for the H column supports in the main room.

These foundations were sealed by a friable, dark grey, sandy silt bedding layer measuring 0.15m and concrete measuring 0.15mm thick.

5.1.2

The southern area of the malthouse was excavated to a depth of 0.4m BGL. The earliest deposit encountered was a levelling deposit (1010) 0.2m thick. Cut into this deposit were the foundations for a brick wall (1009) measuring 220mm x 110mm x 70mm and laid in alternate stretcher and header coursing (Plate 3). The wall footing ran east/west across the building, and was truncated by the inspection shaft for the double bucket elevator mechanism. This has been interpreted as an internal wall, reflecting a previous configuration of the building.

Above the wall footing there was a friable, dark brown, sandy silt bedding layer (1004) of 70mm in thickness. Above this a loose, light brownish yellow, sand (1003) with a maximum depth of 0.1m lay below a layer of concrete (1001) 70mm thick.

5.1.3

The earliest deposit encountered within the central part of the malthouse was a firm, orangey brown, clay with occasional pebbles (1016). This deposit could be natural and was found in the west of the site at a depth of 0.57m BGL or 10.16m AOD. The deposit sloped down to the east disappearing below the extent of excavation within the eastern end of the central dividing wall foundation trench. This may represent the natural slope of the ground towards the river Ouse.

Within the column base foundation trench a firm, light brown, clay was encountered, a possible natural deposit at a depth of 1.2m BGL or 9.51m AOD. The deeper natural at this point than found on the western side of the building, suggests the natural slope west to east.

Within the central walkway foundation trench a loose, brownish yellow, silty sand was found at the base of the trench at a depth of 0.6m BGL or 10.12m AOD on the north western side and may represent the remains of a layer of subsoil (1028). Five rectangular shaped features (1023, 1024, 1025, 1026, and 1027) aligned east/west and in a row running north/south were uncovered cut into this deposit (Plates 4 and 5). These could be grave cuts, and were not further investigated as they would not be impacted by further ground works, and no human remains had been exposed. The features were covered with terram and preserved *in-situ* (Plate 6).

5.1.4

Within the eastern end of the central dividing wall foundation trench natural deposits were not encountered. Instead the deepest deposit encountered was context (1020) a soft, brown, clayey silt found at 0.54m BGL. Above this was a thin deposit (1019) of compact, dark grey, gravelly silt with frequent charcoal flecks that was 2mm thick, followed by a compact, grey brown silty gravel (1018) that was 80mm thick and a thin 2mm thick friable, grey sandy silt mortar layer (1017), (Plate 7). These deposits possibly represent make-up for ground consolidation.

Above these deposits was a levelling deposit (1010) found at 0.16m BGL. It varied from a thickness of 0.44m in the western end of the wall foundation trench to 0.27m in the eastern

end of the wall foundation trench (Plate 8). Within the column base foundation trench the levelling deposit (1010) had been cut into by a ceramic pipe (1030) with a circumference of 130x130mm within the column footing trench.

5.1.5

Cut into levelling deposit (1010) was a linear (1015) filled with loose dark brownish grey, sandy silt containing frequent tile fragments, pottery sherds and moderate CBM flecks. It also contained a large number of earthenware pots. This may represent the dumping of pottery wasters and rubbish during the 19th Century, perhaps representing industrial activity prior to the construction of the Maltings.

Above these deposits was a sandy silt bedding layer (1004) measuring 30mm in thickness and a sand bedding layer measuring 50mm (1003). Laid upon these deposits was the previous tile floor of the Maltings germination floor. This was constructed of red tiles measuring 180mm x 170mm x 50mm that were marked with the letters "J.C" on the front and stamped with "SHAFTOE YORK" on the reverse. The tile floor is only present north of the double bucket elevator mechanism and south of the H girder supports in the northern part of the malthouse (Plate 9).

The tile floor had been covered by a thin layer of concrete in the 20th Century (1001) which was 30mm thick.

5.1.6

The northern area of the malt house appears to have been extensively rebuilt in the early 20th Century. A wall footing (1011 and 1012) was found running east/west constructed of bricks measuring 230 x 110x 70mm. These were bonded by a firm, grey, mortar cement. The wall was two courses wide with brickwork laid in stretcher bond. At the eastern and western ends of this wall there were two wall footings (1013 and 1021) running north/south towards the northern back wall of the malt house (Plate 10). A wall footing (1029) was found running north/south in the west facing section of the central walkway foundation trench (Plate 11). This wall butts up against the footings for the northern external wall of the malt house. These wall footings together represent a previous phase of the internal structure of the malt house at its northern end, and suggest that in this area the malt house had been extensively rebuilt in the 20th Century.

Above these structures was a deposit of brick and tile rubble demolition (1022) containing discarded materials including a damaged possible furnace door with the inscription "W THOMLINSON-WALKER - IRONFOUNDRY TO THE QUEEN - IRON WORKS YORK". This layer extends to the full extent of excavation at 0.85m BGL. This rubble deposit was only present in the northern area of the malt house to the north of the east/west wall footing (1011) and (1012). This is possible the result of the demolition of the previous internal walls in the northern area of the malt house.

The present floor was formed by a concrete layer (1001) to a thickness of 0.12m.

5.2 Watching brief on external service trenches (31st May – 1st June 2016).

5.1.1

The trench located to the west and north of the Maltings building was excavated to a depth of 1.3m BGL at its southern, gradually sloping up to 0.7m BGL over a distance of 4.3m, continuing at that depth over the remaining 7.1m length of the trench.

The top 0.33m consisted of the current concrete yard surface, including levelling and bedding materials. Below that were two drains running from up against the west wall of the Maltings building. One contained a plastic pipe in a pea gravel backfill. This dropped to depth of 0.6m BGL. The other was a ceramic drain pipe encased in concrete that ran up against the west wall, falling from north to south. Disturbance from this service extended beyond the 1.3m depth of the trench.

A 0.15m thick compacted cinder surface (1033) overlying c.0.1m thick clayey bedding material (1034) was encountered at 11.35m AOD. The top of that surface was positioned at broadly the same level as the bottom course of the Maltings' west wall. Below that level the brick work of the wall foundation contrasted to the wall above (Plate 12). The way in which the bricks were jointed and mortared indicates that the wall was built from inside the footprint of the Maltings building up against a construction cut, this however was not clear enough to positively identify as such during excavation because of disturbance caused by the later insertion of the concrete encased drain. A 0.3m thick layer of fairly mixed mid brown clayey silt that contained an abundance of inclusions (1035), extending from 0.52 m to 0.82m BGL, had an appearance of rapid formation. This material extended across the entire length of the trench which suggests a deliberate levelling or making good, most likely as preparation for the construction of the Maltings or demolition and clearance of structures on the site that predated it.

Deposits extending from below (1035) were only visible within the southern 1-2m of the trench (Plate 13). A firm deposit of grey brown clayey silt (1036), c.0.45m thick, contrasted with the overlying deposits in that it was much more homogeneous. Large fragments of plain tile and frequent flecks of mortar indicate a later medieval or post medieval date.

Located at c.1.2m BGL (1037) a thin spread of cobbles covered an area approximately 1m². This could be the heavily abraded remains of a cobble surface. Underlying that at c.10.4m AOD is what appears to be plough soil (1038), although only the top 0.1m was excavated (Plate 13). It shares similarities with deposit (1020) found at around the same height during the watching brief inside the Maltings building.

5.3 Watching brief on external drainage trench (18th August – 19th August 2016).

The trench for new drainage was located along the southern part of the western wall of the Maltings building. It was excavated to a maximum depth of 2.30m BGL at the southern end to facilitate the placement of a manhole, the remaining run of the trench was excavated to a depth of 1.50m BGL. The trench ran alongside the outside of the malting western wall and was 1.0m in width.

The earliest deposit encountered was a firm, orangey brown, silty clay, possibly representing natural deposits. The top of this deposit was recorded at 1.5m BGL. Above this was a loose, mid brownish grey, clayey silt with moderate mortar flecks, tile and brick fragments. This was found at a depth of 0.40m BGL, and is probably related to the construction of the Maltings wall. Above this was a mortar bedding layer 0.25m thick and a concrete surface 0.15m thick, that formed the current yard surface.

6 CONCLUSION

The results of the watching brief suggest that there may be potential for archaeological deposits below the levelling layer for construction of the Maltings building. The natural deposits slope steeply towards the east, in the direction of the river Ouse. Only in the western area of the building were deposits uncovered that may be natural clay. These were covered by build-up and levelling deposits that deepen towards the east. Within the higher ground to the west possible grave features were uncovered cut into a sandy subsoil layer.

The watching brief has uncovered evidence for the rebuilding of the Maltings. It appears that the column footings existing in the malt house originally extended into the kiln room. This suggests that the furnace was later inserted into the building at the southern end. Column pedestals for both the circular iron pillars and the H column steel girders exist below the present concrete floor. This indicates that the furnace was likely to have been installed after the H column steel girder supports were added to the building.

Two additional wall footings running east/west across the axis of the building indicate that the internal layout of the building was reorganised. It is only between these two wall footings that the Maltings tile floor is present. This perhaps suggests that this was the original extent of the germination floor or the tile floor in areas to the north and south has been taken out.

The southern wall footing (1009) appears to have been removed when the double bucket elevator was installed. At this point it may be that the dividing wall was moved to the south to accommodate a larger germination floor. The present dividing wall between the malt house and the kiln does not appear to align perfectly with the window opening. This may also indicate that this wall was a later insertion.

The wall footing at the northern end of the building may have been for an internal wall dividing the germination floor from a room to the north. It could be that this northern room previously housed the furnace. Wall footings extend from this wall north and could be related to a structure within a room. Furthermore a furnace door was recovered from the rubble within the northern part of the building. Overall this may indicate that the internal structure of the Maltings was reorganised in the 20th Century at both the northern and southern ends of the building.

On the northern, Lower Darnborough Street, side of the Maltings a compacted cinder yard or path surface was found which is likely to have been contemporary with the later reorganisation of that end of the building as its height ties in closely with the interface between the wall foundation and the west wall elevation

REFERENCES

- Dobson R.B. and Donaghey S. 1984. 'The History of Clementhorpe Nunnery', in P/V/ Addyman (ed.) *The Archaeology of York Volume 2 – Historical Sources for York Archaeology after AD 1100*, Fascicule 1.
- Hunter-Mann, K. 2014. *Clementhorpe Maltings, Lower Darnborough Street, York*. YAT Watching brief report, 2014/22.
- RCHMY1, 1962. *City of York Volume 1: Eboracum*, HMSO, London

Rimmer, J. 2014. *Clementhorpe Maltings, Lower Ebor Street, York*. YAT Archaeology and Heritage Report, 2014/63

Rimmer, J. 2015. *Building recording at Clementhorpe Maltings, Lower Darnborough Street, York*. YAT Building Survey Report 2015/31

ACKNOWLEDGEMENTS

YAT wish to acknowledge the assistance of the client, Northminster Ltd. And their building contractor Croft Farm Construction.

APPENDIX 1 – INDEX TO ARCHIVE

Item	Number of items
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Photographic register	-
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B/W photographs (films/contact sheets)	-
Colour slides (films)	-
Digital photographs	61
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Report	1

Table 1 Index to archive

APPENDIX 2 – CONTEXT LIST

Trench	Context no.	Description
-	1000	Unstratified finds
-	1001	Concrete Floor
-	1002	Tile Floor, constructed of red tiles measuring 180mm x 170mm x 50mm
-	1003	Bedding layer, loose, light brown, sand
-	1004	Levelling layer, friable, dark grey, sandy silt
-	1005	Brick pedestal, constructed of red bricks measuring 240mm x 120mm x 70mm, 0.60m X 0.50m
-	1006	Concrete footing for H column, rectangular in shape, 0.88 X 0.72m
-	1007	Brick pedestal, constructed of red bricks measuring 240mm x 120mm x 70mm. 0.76m X 0.72m
-	1008	Concrete footing for H column, rectangular in shape, 0.88 X 0.72m
-	1009	Wall footing, running east/west across axis of building. Constructed of bricks measuring 220mm x 110mm x 70mm. Has both stretcher and header coursing, bonded with a firm grey cement mortar. 11.00m x 0.32m
-	1010	Build up/levelling deposit, soft, brown, clayey silt, moderate CBM fragments, occasional broken bricks and tile fragments
-	1011	Wall footing, running E-W, constructed of red brick measuring 230mm x 110mm x 70mm, bonded with grey mortar cement, stretcher coursing.
-	1012	Same as 1011
-	1013	Wall footing, running north/south, constructed of red brick measuring 230mm x 110mm x 70mm, laid in stretcher coursing, bonded with a grey mortar cement.
-	1014	Fill of 1015, loose, dark brownish grey, sandy silt, frequent tile fragments, moderate CBM and mortar flecks, 19 th Century rubbish dump
-	1015	Linear cut, sharp break of slope at top, near vertical edges, base not excavated, 3.20m x 1.10m . 0.30m in depth. 19 th century rubbish dump.
-	1016	Natural, soft, orangey brown, clay
-	1017	Mortar floor, friable, grey, sandy silt mortar
-	1018	Bedding layer, compact, grey brown, silty gravel
-	1019	Ground consolidation, compact, dark grey, gritty silt, frequent charcoal flecks.
-	1020	Build up, soft brown, clayey silt.
-	1021	Wall footing, running north/south, constructed of brick measuring 230 x 110mm x 70mm, bonded with a grey cement mortar, stretcher coursing.
-	1022	Demolition, loose, brownish grey, sandy silt, frequent tile and brick fragments.
-	1023	Rectangular feature (possible grave cut). Aligned east/west. 0.70m x 0.44m not fully uncovered. Soft, grey brown, clayey silt, occasional small stones and CBM flecks.
-	1024	Rectangular feature (possible grave cut) Aligned east/west. 0.68m x 0.42m not fully uncovered. Soft, grey brown, clayey silt, occasional small stones and CBM flecks.
-	1025	Rectangular feature (possible grave cut) Aligned east/west. 0.62m x 0.40m not fully uncovered. Soft, grey brown, clayey silt, occasional small stones and CBM flecks.

-	1026	Rectangular feature (possible grave cut) Aligned east/west. 0.60m x 0.40m not fully uncovered. Soft, grey brown, clayey silt, occasional small stones and CBM flecks.
-	1027	Rectangular feature (possible grave cut) Aligned east/west. 0.80m x 0.50m not fully uncovered. Soft, grey brown, clayey silt, occasional small stones and CBM flecks.
-	1028	Subsoil?, loose yellow brown, clayey sand
-	1029	Wall footing (possible furnace structure?), running north/south, constructed of bricks measuring 240mm x 110mm x 70mm, bonded with a grey mortar cement.
-	1030	Ceramic pipe, diameter is 110mm x 110mm, running north-west/south-east. Backfill is a soft, dark brown, clayey silt.
-	1031	Fill, soft, grey brown, silty clay, occasional stones, CBM fragments and mortar flecks.
-	1032	Cut (possible cut for pipe?), sharp break of slope at top, vertical sides, base unexcavated,
-	1033	Surface. Compact black cinder, 0.15m thick. Occasional CBM flecks.
-	1034	Make-up. Firm light brown clay, 0.1m thick. Frequent mortar, CBM and slate inclusions. Probably a bedding material for 1033.
-	1035	Make-up. Firm, mid brown clayey silt, 0.3m thick. Frequent clay, CBM, mortar and charcoal inclusions, occasional cobbles and pebbles.
-	1036	Build-up. Firm mid grey brown clayey silt, 0.45m thick. Frequent mortar CBM and charcoal inclusions.
-	1037	Possible surface. A single course of medium sized cobbles, 50mm thick, c.1m x 1m in area.
-	1038	Build-up. Firm red brown clayey sand. Frequent pebbles, occasional charcoal flecks. Probably plough soil.

Table 2 Context list

APPENDIX 3 – WRITTEN SCHEME OF INVESTIGATION

Site Location: Clementhorpe Maltings, Lower Ebor Street, York, YO231AP

NGR: SE 60318 51021

Proposal: Residential conversion

Planning ref: 15/00114/FUL

Prepared for: Northminster Ltd by York Archaeological Trust, 08/02/16

Version	Produced by		Edited by		Approved by	
	Initials	Date	Initials	Date	Initials	Date
1	IDM	16/02/16	DA	16/02/16	DA	16/02/16

1 SUMMARY

1.1 Planning Permission has been granted for the residential conversion of the former Clementhorpe Maltings, Lower Ebor Street, York.

1.2 The following archaeological condition has been imposed:

3: No work shall commence on site until the applicant has secured the implementation of a programme of archaeological work (a watching brief on all ground works by an approved archaeological unit) in accordance with a specification supplied by the Local Planning Authority. This programme and the archaeological unit shall be approved in writing by the Local Planning Authority before development commences.

Reason: The site lies within an Area of Archaeological Importance and the development will affect important archaeological deposits which must be recorded during the construction programme.

1.3 This Written Scheme of Investigation (WSI) has been prepared in response to a Brief supplied by the client. The work will be carried out in accordance with the Brief and this WSI.

2 SITE LOCATION & DESCRIPTION

2.1 The proposal site is located on Lower Ebor Street at NGR SE 60318 51021, c.0.8km south of York City Centre (Figure 1).

2.2 The site consists of a large brick-built, late nineteenth century malting and kiln building, latterly in use as a warehouse, set in the entire eastern side of the site with a yard to the west. The site is located between Lower Ebor Street to the south and Lower Darnborough Street to the north. To the east the site is abutted by the terraced properties of both these streets; to the west the site is bordered by the rear gardens of properties fronting onto Cherry Street.

3 DESIGNATIONS & CONSTRAINTS

3.1 The Former Clementhorpe Maltings building is Grade II listed.

4 ARCHAEOLOGICAL INTEREST

4.1 The archaeological interest in the site is Roman, medieval and early modern. Evidence for Roman occupation is known from immediately north of the site, where a tessellated pavement and the remains of 3rd and 4th century buildings have been found (Dobson and Donaghey 1984). Roman burials are also known to the north and west of the site (RCHMY 1, 108)

In the medieval period, St Clement's Priory was located near to the site. Excavations nearby revealed fragmentary structures and 250 burials associated with the Priory (Dobson and Donaghey 1984).

The area was in agricultural use through the Post-medieval period, until the development of industry and workers terraced housing in the 19th century. The Maltings building was built in the late 19th century and operated until the late 1950s (Rimmer, YAT 2014/63, 2).

4.2 A watching brief was maintained during site investigation works in April 2014 (Hunter-Mann, YAT 2014/22). Three trial pits were excavated within the building, identifying ground make-up deposits associated with it. A quarry tile floor was also identified beneath the current concrete floor. The quarry tile floor produced a fragment of *ex-situ* malting brick and represented an early phase of the building's use; it was absent at the northern end of the building, which was interpreted as having been extensively re-built. Three boreholes were cored along the long axis of the building. Ground make-up deposits were c.1m thick, overlying natural deposits in the form of sands and gravels at 9.7m AOD at the northern end, dropping to c.6m AOD towards the south, where alluvial silts and clays were observed.

4.3 An Archaeology and Heritage Statement was undertaken in 2014 (Rimmer, YAT 2014/63). This report assessed the impact of the development on below-ground archaeological deposits as low and on below-ground structures associated with the building as medium, based on the results of the site investigation works. A watching brief was recommended during ground works associated with the development.

4.4 A Building Survey Report was undertaken in 2015 (Rimmer, YAT 2015/31) of the extensive and significant surviving internal fabric and fittings of the Maltings.

5. GROUNDWORKS TO BE MONITORED

5.1 This work will comprise a **continuous** watching brief, on the excavation of all foundations, trenches, services and any subsequent groundworks involving excavation (Figure 2). The watching brief may be stepped down **to intermittent monitoring**, depending on the results, and following agreement from the City of York Archaeologist, John Oxley.

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 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 discernible. 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. Digital photography will be used, at a minimum resolution of 10 megapixels. 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 IfA 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 English Heritage guidelines (English Heritage 2002). 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 Industrial activity relating to the malting process may be present on site, but no residues or deposits relating to metal working are likely to be present. However, 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-slugs (hammer-scale and spherical droplets) (English Heritage 2001).

7.10 Other samples will be taken, as appropriate, in consultation with YAT specialists and the English Heritage 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 In the event of human remains being discovered during the evaluation these will be left *in-situ*, covered and protected, in the first instance. The removal of human remains will only take place in compliance with environmental health regulations and following discussions with, and with the approval of, the Ministry of Justice. If human remains are identified, the Ministry of Justice and curator will be informed immediately. An osteoarchaeologist will be available to give advice on site.

- If **disarticulated** remains are encountered, these will be identified and quantified on site. If trenches are being immediately backfilled, the remains will be left in the ground. If the excavations will remain open for any length of time, disarticulated remains will be removed and boxed, for immediate reburial by the Church.
- If **articulated** remains are encountered, these will be excavated in accordance with recognised guidelines (see 6.12) and retained for assessment.
- Any grave goods or coffin furniture will be retained for further assessment.

7.12 Where a licence is issued, all human skeletal remains must be properly removed in accordance with the terms of that licence. Where a licence is not issued, the treatment

of human remains will be in accordance with the requirements of Civil Law, IfA Technical Paper 13 (1993) and English Heritage guidance (2005).

8 REPORT & ARCHIVE PREPARATION

8.1 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.
- 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

8.2 Copies of the report will be submitted to the commissioning body and the HER/SMR (also in PDF format).

8.3 The requirements for archive preparation and deposition will be addressed and undertaken in a manner agreed with 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.

8.4 Provision for the publication of results, as outlined in the Brief, will be made.

8.5 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.

9 HEALTH AND SAFETY

9.1 Health and safety issues will take priority over archaeological matters and all archaeologists will comply with relevant Health and Safety Legislation.

9.2 A Risk Assessment will be prepared prior to the start of site works.

10 TIMETABLE & STAFFING

10.1 The works are anticipated to commence on Monday 22nd February 2016.

10.2 Specialist staff available for this work are as follows:

- Human Remains – Ruth Whyte (Dickinson Laboratory for Bio-archaeology)
- Palaeoenvironmental remains – Dr Jennifer Miller (Dickinson Laboratory for Bio-archaeology)
- Head of Curatorial Services - Christine McDonnell
- Finds Researcher - Nicky Rogers
- Pottery Researcher - Anne Jenner
- Ceramic Building Material Researcher – Jane McComish
- Finds Officers – Nienke Van Doorn
- Archaeometallurgy & Industrial Residues – Dr Rod Mackenzie
- Conservation - Ian Panter

11 MONITORING OF ARCHAEOLOGICAL FIELDWORK

11.1 As a minimum requirement, the City of York Archaeologist, John Oxley, 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 the City of York Archaeologist, John Oxley, 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 the City of York Archaeologist, John Oxley,.

12 COPYRIGHT

12.1 York Archaeological Trust retain the copyright on this document. It has been prepared expressly for the named client, and may not be passed to third parties for use or for the purpose of gathering quotations.

13 KEY REFERENCES

Brown, D. H. 2007. Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation. IfA/AAA

Department for Communities and Local Government 2010 Planning Policy Statement 5: planning for the Historic Environment.

Dobson R.B. and Donaghey S. 1984. 'The History of Clementhorpe Nunnery', in P/V/ Addyman (ed.) The Archaeology of York Volume 2 – Historical Sources for York Archaeology after AD 1100, Fascicule 1.

English Heritage. 2001. *Archaeometallurgy*. Centre for Archaeology Guidelines.

- English Heritage. 2002. Environmental Archaeology. A guide to the theory and practice of methods from sampling and recovery to post-excavation.
- English Heritage. 2002. With Alidade and Tape – graphical and plane table survey or archaeological earthworks.
- English Heritage. 2003. Where on Earth are We? The Global Positioning System (GPS) in archaeological field survey.
- English Heritage. 2004. Geoarchaeology: using earth sciences to understand the archaeological record.
- English Heritage. 2005 Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England.
- English Heritage. 2006. Guidelines on the x-radiography of archaeological metalwork.
- English Heritage. 2006b. Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide.
- English Heritage. 2007. Understanding the Archaeology of Landscape – a guide to good recording practice
- English Heritage. 2008. Investigative Conservation.
- Hunter-Mann, K. 2014. *Clementhorpe Maltings, Lower Darnborough Street, York*. YAT Watching brief report, 2014/22.
- Institute for Archaeologists. 1993. Technical paper No 13 by McKinley, J. I., and C. Roberts. [Excavation and post-excavation treatment of cremated and inhumed human remains](#).
- Institute for Archaeologists. 2007. Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation by D.H. Brown.
- Institute for Archaeologists. 2008. Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.
- Institute for Archaeologists. 2008. Standard and Guidance for Archaeological Field Evaluation
- Museum and Galleries Commission. 1992. Standards in the museum care of archaeological collections.
- RCHMS. 1999. 'Recording Archaeological Field Monuments – a descriptive specification.
- RCHMY1, 1962. *City of York Volume 1: Eboracum*, HMSO, London
- Rimmer, J. 2014. *Clementhorpe Maltings, Lower Ebor Street, York*. YAT Archaeology and Heritage Report, 2014/63
- Rimmer, J. 2015. *Building recording at Clementhorpe Maltings, Lower Darnborough Street, York*. YAT Building Survey Report 2015/31
- Standing Conference of Archaeological Unit Managers (SCAUM). 2007. *Health and Safety in Field Archaeology*

Neal, V., and D. Watkinson (eds). 1998. *First Aid for Finds: practical guide for archaeologists*. United Kingdom Institute for Conservation of Historic & Artistic Works, Archaeology Section; 3rd Revised Edition.

See also the **Historic England** website for a full list of English Heritage Guidance documents.

<http://historicengland.org.uk/advice/>

APPENDIX 4 – POTTERY BY ANNE JENNER

1.1 INTRODUCTION

Twenty-one sherds of domestic and industrial pottery were retrieved from two Contexts.

Sherds range from the early 12th century to the early 20th century.

Medieval wares are clearly residual. Despite this, there is little abrasion, though the earlier material is generally, but not always, smaller.

1.2 METHODOLOGY

Visual analysis involved identifying the constituent fabric and form groups from each Context and assigning a date to each Context. Decoration and other significant features are also noted. This information is recorded below (see Table1).

1.3 DISCUSSION

This material provides a glimpse into the ceramic history of York, from the medieval period to the early 20th century. Most of the sherds are from known fabric and form types. Despite this, the finely gritted green glazed jug with comb stabbed and incised decoration (1010) is unusual, both in fabric and form. Also, the two complete industrial jars (1014) are enigmatic. These jars show signs of heating and the glazed interior suggests that a substance such as malt was warmed within it. Perhaps malt was processed and collected in these jars. The function of the two indentations/lips in the upper surface is at present unclear, but they may have been used to hold rods or pour off liquids.

1.4 RECOMMENDATIONS FOR FURTHER WORK

The green glazed jug sherd (1010) and one of the industrial vessels (1014) should be drawn so that further identification can be made at a later stage.

Context	Quantity	Dating	Details
1010	17	12TH TO EARLY 20TH CENTURY	6 transfer printed blue and white, 1 plain banded slip with bead moulded rim 1 gritty ware jar rim, 1 post medieval unglazed red earthenware rim, 1 pearl ware plate rim with scalloped edge and blue grassed rim, 1 pearl fluted saucer rim, 1 black glazed red earthenware with dripped external glaze, 1 Brandsby type jug with ribbing, 1 finely gritted light green glazed jug with vertical incised wavy line under rod handle and horizontal comb marks of four small indentations *draw, 1 Humber 1 sandy Brandsby with mottled green glaze 1 white earthenware with overglaze painted bands in green red and brown.
1014	4	18TH/19TH CENTURY	1 English stone ware bottle base and walls with grey fabric and brown glaze at base, 1 fine red earthenware bowl rim with mottled brown and black glaze, 2 fine hard Industrial red earthenware bowls with two grooves close together on the flat upper rim surface and brown glaze inside and soot on external surfaces. Complete *darw.

Table 3 Pottery quantification

PLATES



Plate 1 Brick pedestal (1005), looking west, scale units 0.1m



Plate 2 Sandstone padstone found on (1005), scale units 0.1m



Plate 3 Wall footing (1009), looking east, scale units 0.1m



Plate 4 Possible grave features (1023 - 1027), looking west, scale units 0.1m



Plate 5 Possible grave features (1023 - 1027), looking south, scale units 0.1m



Plate 6 Laying terram



Plate 7 Eastern end of central dividing wall foundation trench, looking north, scale units 0.1m



Plate 8 Western end of central dividing wall foundation trench, looking north, scale units 0.1m



Plate 9 Germination floor, looking north



Plate 10 Wall footing (1012 and 1013), looking west, scale units 0.1m



Plate 11 Western end of central dividing wall foundation trench, looking north, scale units 0.1m



Plate 12 South end of service trench revealing west face of Maltings, looking south-east



Plate 13 Section 5, looking south, scale units 0.1m

FIGURES

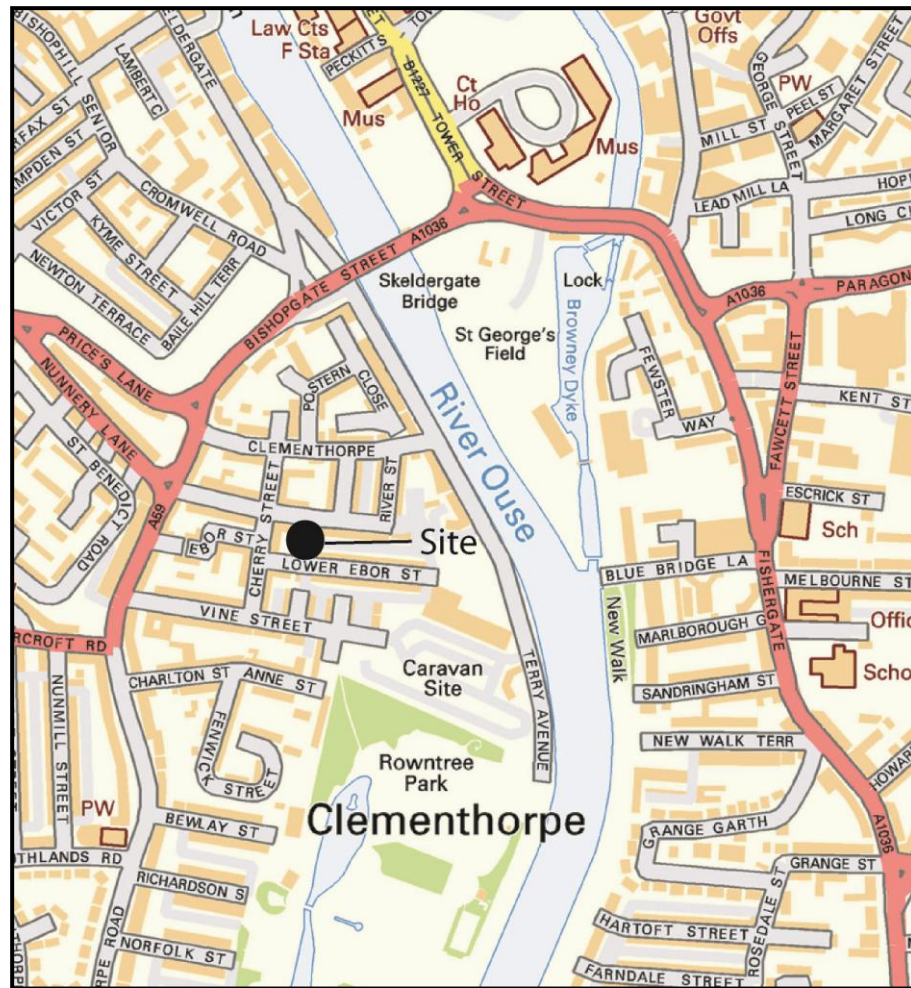


Figure 1 Site location

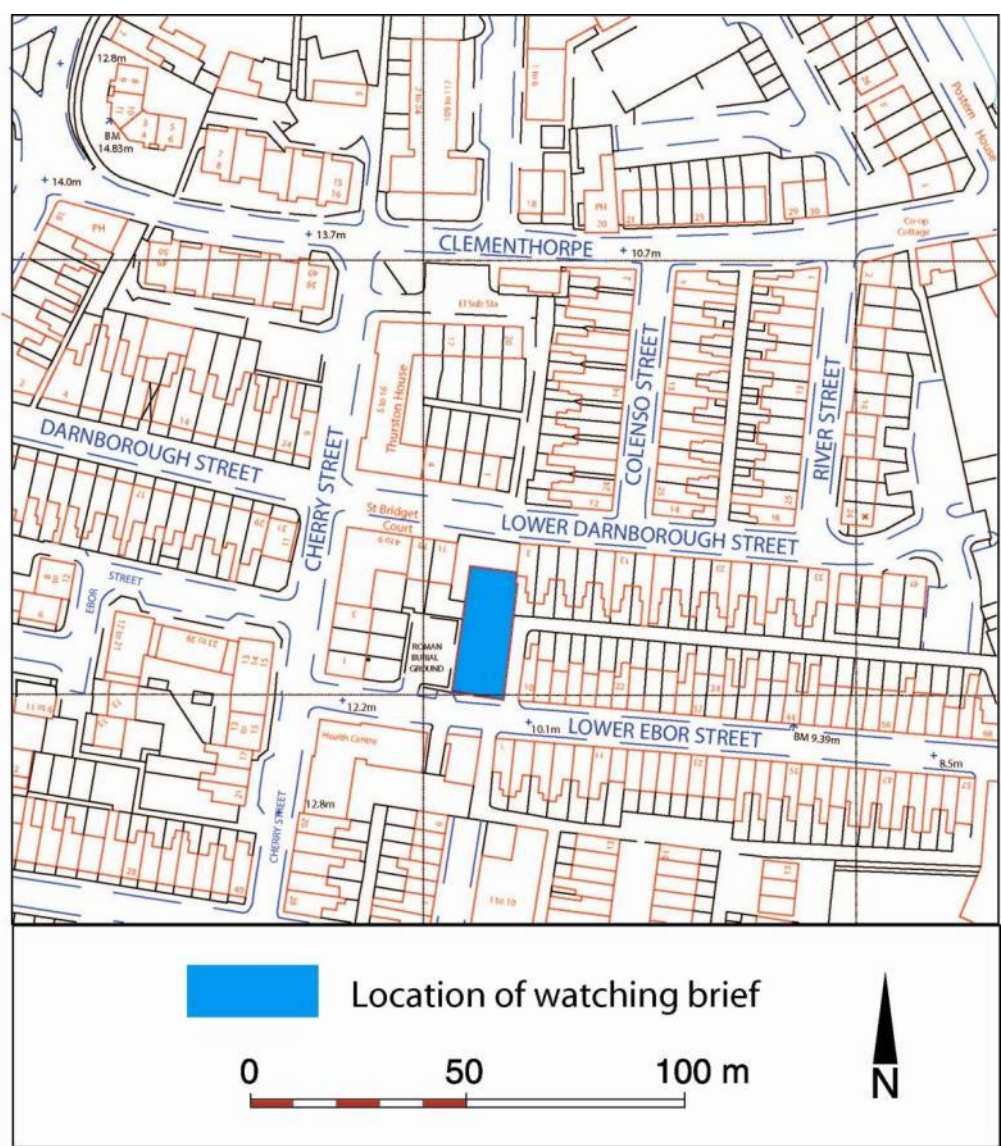
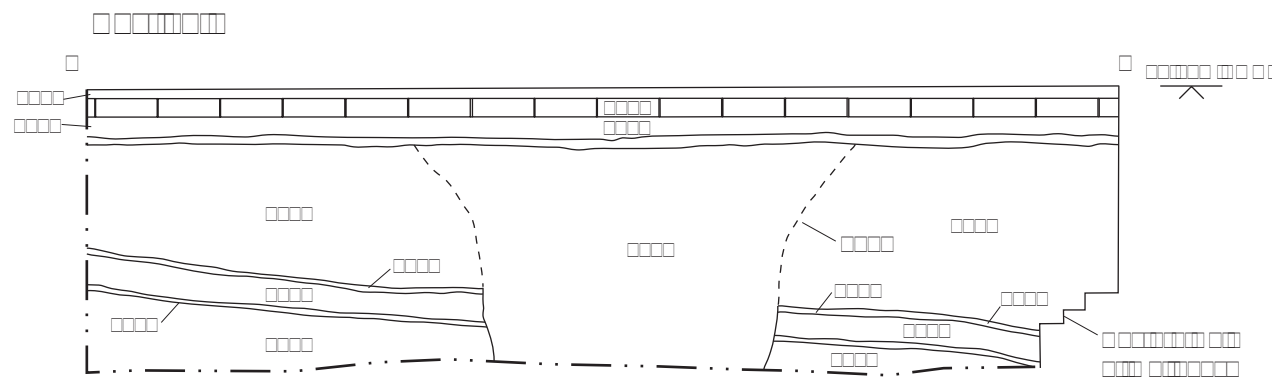
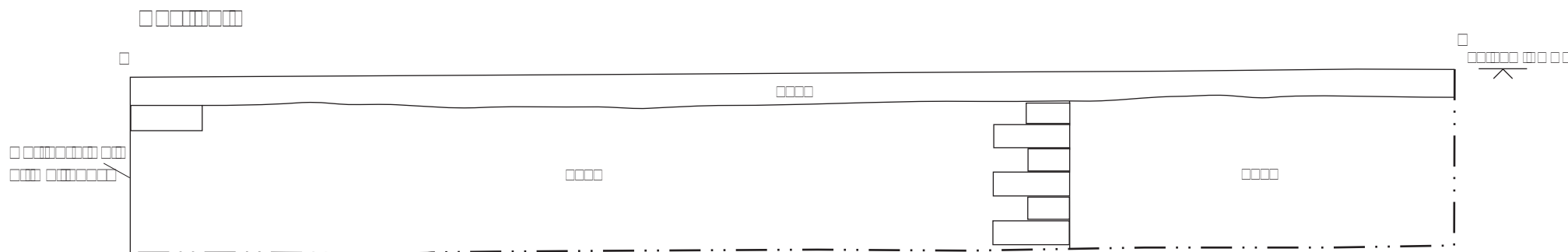


Figure 2 Location of watching brief



0 1 2 m

scale 1: 20 □ □ □



0 1 2 m

scale 1: 20 □ □ □

Fig. 4 Sections 1 and 2

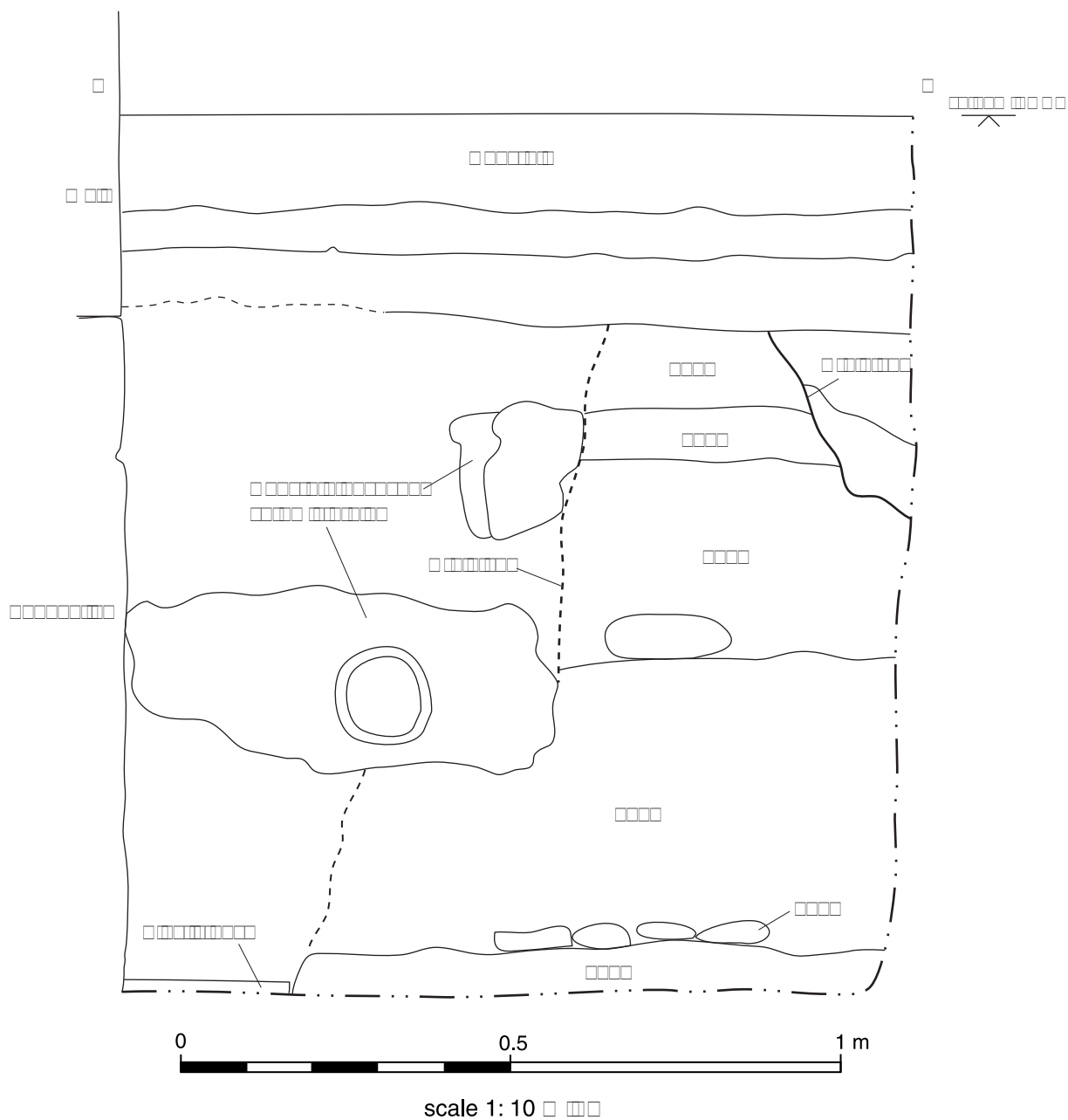


Fig. 5 Section 5, north side of Maltings