

Former Central Post Office, Sheffield Archaeological evaluation assessment report

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Archaeological Evaluation at the Former Central Post Office, Flat Street, Sheffield: Assessment Report

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CONTENTS

Ν	Non-technical summaryiii				
1	Intro	oduction1			
2	Site	location, geology & topography1			
3	Aim 3.1	s & methodology			
	3.2	Methodology			
4	Arch	naeological & historical background2			
5	Resi	ults5			
	5.1	Trench 1			
	5.2	Trench 2			
	5.3	Geotechnical investigations			
6	Disc	ussion and conclusion9			
7	7 References				
Plates					
Figures					
Α	Appendix 1: Index to archive				
Appendix 2: List of contexts					
Appendix 3: Geotechnical logs					
Α	ppendi	x 4: Written Scheme of Investigation22			

Plates

Plate 1: Trial pit at north end of Trench 1, showing concrete surface 101 and underlying con	crete 109
viewed facing north (scales in 50cm and 10cm divisions)	11
Plate 2: Trench 1, south end, viewed facing north	11
Plate 3: Wall 105, wooden planks 106 and base for metal pad 107 (at right end of trench), view	wed facing
north (scales in 50cm divisions)	12
Plate 4: Wall 103 and column base 104, viewed facing west	12
Plate 5: White-glazed J.C. Edwards bricks from the demolition backfill 203 (scale in 10cm divisio	ns) 13
Plate 6: Wall 209, viewed facing south, with wall 208 to the left and buttresses 210 and 212 to	centre and
right	13
Plate 7: West part of wall 209, showing pipe cut 217, and partition wall 211 in the centre, view	wed facing
north	14
Plate 8: West elevation of wall 208, viewed facing northeast	14
Plate 9: Top of wall 208 and structure 207, viewed facing north	15
Plate 10: Electrical cable emerging from under 206, within fill 214, viewed facing east	15
Plate 11: View of Trench 2 facing west, showing buttresses 210 and 212, with structure 2	207 in the
foreground	16
Plate 12: Structure 207 following removal of part of the floor, viewed facing north	16

Figures

- Figure 1: Site location
- Figure 2: Trench locations
- Figure 3: Plan of Trench 1
- Figure 4: East-facing section of Trench 1
- Figure 5: Plan of Trench 2
- Figure 6: North-facing section of Trench 2
- Figure 7: Trench and geotechnical test pit interpretation plan
- Figure 8: Schematic sections of geotechnical pits
- Figure 9: Trenches overlain on 1853 OS town plan
- Figure 10: Trenches overlain on 1905 and 1923 OS maps
- Figure 11: Trenches overlain on 1959 Goad plan
- Figure 12: Post Office basement plan and building elevations

NON-TECHNICAL SUMMARY

An archaeological trial trench evaluation was undertaken on the site of the southern end of the former Central Post Office at Flat Street, Sheffield, in July 2020. The evaluation was required as a condition of planning consent in advance of residential redevelopment of the site (planning ref 19/02619/FUL). The main part of the 1893 and 1909 Post Office buildings still stand to the north of the site, and are grade II listed. The buildings within the site area were demolished between 2005 and 2008, and comprised a one- to two-storey range at the south end of the 1893 block, and a three-storey late 1950s extension. The site is terraced into a natural east-facing slope, and the ground floor level of the buildings on the east side formed basements at the west side. The site is located within the area of the medieval town, and buildings present by the mid-19th century included back-to-back housing, shops and a public house. The evaluation aimed to ascertain whether there was any potential for preservation of archaeological remains below the Post Office buildings in this area.

Trench 1 revealed substantial concrete walls associated with a sub-basement or foundation level of the late 1950s Post Office extension. These were surrounded by demolition backfill that was excavated to a depth of 2m below the ground surface. The base of the walls and backfill were not reached within the excavation, but geotechnical trial holes indicated that the floors are at 2.7-3.1m BGL. Trench 2 recorded the remains of a sub-basement level associated with the 1893 Post Office, and a concrete structure at the eastern side that appears to be related to the electricity sub-station shown on the 1955 OS map. Within the main part of the trench, the base of modern backfill was not reached by 2.2m below the current ground surface, but again geotechnical pits indicated that the base of the cellar is at around 3.5m BGL. The concrete structure at the eastern side overlay sandstone bedrock at a depth of 1.3m below the current ground surface. Boreholes at the northwest corner of the site indicated that bedrock was present immediately below the concrete surface, demonstrating that the sub-basement level does not continue across the whole of the north end of the site, but it appears likely that the ground in this area has been terraced into the natural slope, as Flat Street is substantially above the ground level in this area.

No finds were recovered from the evaluation trenches, as only modern material arising from recent (21st-century) demolition activity was noted. The geotechnical investigations did not record any superficial deposits within the site, or made ground of potential archaeological interest (i.e. pre-dating the recent demolition activity). The evaluation and geotechnical investigations have concluded that the potential for survival of significant archaeological remains within the site is negligible.

1 INTRODUCTION

This report presents the results of archaeological trial trench evaluation on land at the junction of Flat Street and Pond Street, Sheffield, South Yorkshire. The evaluation was required as a condition of planning permission, to assess the potential for the preservation of archaeological remains at the site in advance of residential development. ArcHeritage were commissioned by Mount Group Student Vista to undertaken the evaluation, which was monitored by Dinah Saich of the South Yorkshire Archaeology Service (SYAS). All work was undertaken in line with the agreed Written Scheme of Investigation (WSI, Appendix 4), with the principles and guidance of the Chartered Institute for Archaeology (CIfA) and industry best practice. The evaluation was undertaken in July 2020 by Rowan May and Paul Renner.

2 SITE LOCATION, GEOLOGY & TOPOGRAPHY

The site (centred on NGR SK 35706 87321) is located in the eastern half of the urban centre of Sheffield, between Pond Street and Flat Street (Figure 1). Fitzalan Square lies to the north of the site. The site formerly covered the southern end of the Sheffield Central Post Office, including part of the central sorting office. The Royal Mail sorting office was commissioned and built for the Post Office by the Ministry of Works in 1893 (Poole 2005). The site contained a single-storey range (with basement) at the northern end that was part of the 1893 block, with the remainder occupied by a late 1950s three-storey extension. The site was cleared of buildings between 2005 and 2008 and is currently vacant.

The site measures approximately 650m² in total area and comprises a roughly triangular parcel of land, bounded along its western edge by Flat Street and along its eastern edge by Pond Street. The northern site boundary is bordered by the grade II listed former Post Office buildings of the 1893 and 1909 construction phases (NHLE 1254816). There is a substantial spoil heap at the western side of the site, presumably associated with demolition of the buildings on the site. Fragments of standing walls are located to the immediate north of the spoil heap.

The British Geology Survey records the bedrock geology across the site as sandstone of the Silkstone Rock formation. Geotechnical investigations (Ian Farmer Associates 2017 and Clancy Consulting 2020) recorded a mixture of sandstone and bands of mudstone, siltstone and clay in the deeper rotary boreholes, with a coal seam encountered at greater than 20m depth below the current ground surface. There is no recorded superficial geology within the site itself, although a north to south aligned band of alluvium is record approximately 70m to the east of the site. The ground level around the site drops steeply from Flat Street to Pond Street, with the current surface within the site terraced into the slope to the west.

3 AIMS & METHODOLOGY

3.1 Aims

The aims of the trial trenching were to investigate potential for the preservation of buried archaeological remains within the site. The general aims were:

- to determine the extent, condition, character, importance and date of any archaeological remains present;
- to provide information that will enable the remains to be placed within their local, regional, and national context and allow an assessment of the significance of the archaeology of the proposal area to be made; and
- to provide information to enable the local authority to decide any requirements for further archaeological mitigation for the site.

More specific aims were:

- to identify if medieval water management features extend into the site;
- to determine the character of medieval uses of the site;
- to examine the construction of the 19th-century post office buildings and the potential for preservation of earlier archaeological remains below them;
- to determine the potential for the preservation of archaeological remains below the late 20th-century post office building.

3.2 Methodology

Two trenches were proposed to evaluate the archaeological potential of the site. The initial proposal, agreed with SYAS as part of the Written Scheme of Investigation (WSI) was for both trenches to be 15m long by 2m wide (see Figure 2). On visiting the site to layout the trenches, it became apparent that it was not possible to fit in the northern trench (2) in its original dimensions, due to the presence of standing walls and a spoil heap at the western side. It was agreed with SYAS that this would be replaced by a 7.5m x 4m trench, that would evaluate the same area.

The trenches were opened using a JCB 3CX, using a pecker to remove hard surfacing, and a toothless ditching bucket to excavate backfill material. Full details of the excavation and recording methodology are stated in the WSI (Appendix 4). Coronavirus restrictions meant that monitoring by SYAS was undertaken via email and video-conferencing rather than site visits.

The logs of geotechnical investigations undertaken in 2013, 2017 and 2020 (Appendix 3) were examined after the trial trench evaluation was completed and have been correlated with the deposits recorded in the trenches.

4 ARCHAEOLOGICAL & HISTORICAL BACKGROUND

This section is summarised from information in a desk-based assessment and buildings appraisal of the site undertaken by L-P Archaeology (Poole 2005). Historic map extracts are shown in Figures 9-11, and a plan of the basements in Figure 12.

The site is located within the area of the medieval town of Sheffield, and lies just outside the theorised extent of the outer bailey of Sheffield Castle, which is thought to have extended as far south as Fitzalan Square (Jones 2003). Historic maps show that the site is located within an area long associated with water power, with ponds, dams, mills and reservoirs shown on various maps. The date for the commencement of water power within this area is unknown. Documentary sources first record Pond Mill, owned by the Earl of Shrewsbury, in 1578, but it was probably earlier in origin (Ball *et al.* 2006, 187). The grade II* listed Old Queen's Head

public house lies just 125m to the southeast of the site (NHLE 1247088). This is thought to date from 1475 when known as the Hall-in-the-Ponds. It is possible that the hall was used as a banquet hall or hunting lodge, for fowling and fishing parties in the ponds (Hey 2005, 40).

The first map to show the layout of the town is Gosling's plan of 1736, which depicted Pond Street, known as Pond Lane, but Flat Street did not exist at that time. This map indicated development along the west side of Pond Lane, partly within the site, but no details of the individual buildings or plots are depicted. A street crossed the southern end of the site on an east to west alignment. Much of the area to the south, east and west of the site was undeveloped fields at this time, with Pond Mill shown to the northeast and the Pond Tilt Hammer to the east. Flat Street was shown on Fairbank's map of 1808, though on a different alignment to its current route and bending southeast to join the land running through the site, named as Pond Hill. The fields shown to the south and west in 1736 had been laid out with streets and developed.

The 1853 OS town plan showed that the northern half of the site was occupied by a number of buildings, mainly small houses, at the south side of a courtyard named Dakin's Yard (Figure 9). The yard was accessed via Little Pond Street (now Pond Street). To the immediate north of Pond Hill was the Black Swan public house. The edge of a large building on the south side of Pond Hill and at its junction with Pond Street extended into the southern tip of the site.

On the 1890 OS town plan, the buildings around Dakin Yard in the northern part of the site had been cleared, with only the Black Swan fronting onto Pond Hill remaining. This left the northern end of the site a vacant plot. The partial clearance of the site at this time was probably to make way for the Post Office building, which was commissioned in 1893 (Poole 2005). The southern end of the site remained unchanged from the 1853 OS map, but Little Pond Street had been renamed Pond Street by 1894.

The 1896 Goad plan showed the new Post Office, extending over the northern part of the site. The range within the site was shown as two separate rooms or buildings, the larger eastern range labelled 'stores', the smaller west room unlabelled. The Black Horse public house and a small group of shops fronting onto Pond Hill were still extant at that date to the immediate south of the Post Office. The building to the south of Pond Hill, within the southern tip of the site, was partly two-storey with basement, and partly three-storey, and contained a hay and straw store on the first floor and a cigar factory over. This building was still present in 1905, but the group of buildings including the Black Swan had been demolished by that date leaving a vacant plot (Figure 10).

Two narrow rectangular buildings had been constructed within the vacant plot to the south of the Post Office by 1923 (Figure 10). These may have been part of a major 1909 extension to the Post Office, that included much larger buildings to the north of the 1893 block. The southern tip of the site had been cleared of buildings and was bounded by new extensions to Flat Street and Pond Street, forming a V-shaped area. By 1935, a third building, possibly open-sided, had been added between the other Post Office buildings in the central part of the site. This was depicted on the 1946 Goad Plan as a metal-clad shed with a steel frame and skylights, and by that date it was accessed by a concrete conveyor crossing Pond Street, also shown on the 1955 OS map. The building at the north edge of the site was still labelled 'stores' in 1946. The conveyor was also shown on the 1955 OS map, which showed an electricity sub-station at the northeast

corner of the site, occupying the corner of the stores in the 1893 block. A small structure possibly associated with the bus station was shown at the southern tip of the site in 1953.

The 1959 Goad revision showed that the part of Pond Hill crossing the southern end of the site had been removed and the buildings previously within the southern part of the site had been replaced by three-storey structure covering the site, labelled 'offices', with 'sorting and loading basement' and concrete floors (Figure 11). A wide vehicular entrance was depicted on the east side, with stone stairs to the south, and the concrete conveyor was still depicted at the north end of the extension. The former store to the north was labelled 'sorting', with an electricity sub-station in the eastern corner, possibly in the basement, though this is not clear. The smaller room to the west was labelled 'kitchen'. On the 1963 and later OS maps, the whole of the Post Office is shown as a single block, with the small square sub-station block defined within the overall structure, though it is not labelled on the 1968 and later maps.

All the buildings within the site were demolished between 2005 and 2008, with the main part of the grade II listed 1893 office block and 1909 extension to the north retained. The demolished buildings comprised the late 1950s extension, as well as the one- to two-storey range forming the south end of the 1893 'office wing'.

The L-P Archaeology report (Poole 2005) and the NHLE listing (1998) provide brief details of the buildings. At the north end on the west side was a small single-storey block (with basement), linking the 1893 office wing to the late 1950s extension and dating to the 1893 phase. This was constructed of red brick in a style similar to the office wing. It had a single six sash 36-plane window above ground, with a series of three tall six-pane floor-to-ceiling windows allowing light into the basement. The Listing description states that this structure had angle pilasters with ball finials, and coped gable with ball finial. It describes the ground floor window as a single three-light cross mullioned window with eight pane sashes, but does not mention the basement light.

On the eastern elevation, the northern building was keyed into the south end of the office wing, and comprised a small two-storey building similar to that on the west side. This had three rectangular windows, two each of eight panes flanking a central 16-pane window, positioned above two modern inserted metal double doorways. The listing description adds that it had a coped gable containing a central round window, and that the entrances had a pair of double board doors with louvred panels.

The east side of the late 1950s extension comprised three storeys of glass frontage set into a metal frame. The ground floor had a large roller shutter for vehicular access, to the north of a glass and metal doorway. Concrete decoration, made to look similar to the stone used elsewhere, had been applied to the northern section of the elevation next to the metal roller doors. The blank southern elevation had a face made up of concrete blockwork laid on end, to appear similar to the grey stone used elsewhere. The west face had similar styling to the east face.

No description of the cellar level within the modern extension is given in the L-P Archaeology report, apart from the information that the entrance to the cellar underlying the main building was from this block, and that this basement was at ground floor level on the Pond Street (east) side. The basement plan (Figure 12) shows a series of rooms within this level, but their function is not stated. As this building had a vehicle entrance, it is likely that some of these rooms were associated with loading and unloading vehicles and conveying mail to and from the main sorting area. There is

no information on any sub-basement levels. The cellar at the north end of the site lay below the 1893 single-storey adjunct to the office block, the larger western part lying within the large open-plan area of that ran under much of the western wing of the Post Office. This had clearly had a number of alterations during the use of the building, and had walls of white-glazed bricks. The eastern side was partitioned off into a smaller room, with two doorways into it from Pond Street. A staircase was shown to the immediate west of this room, though it is unclear from the plan whether this led up to the ground floor or down to a potential sub-basement (not described). No sub-basement level is noted on the Goad plans up to 1959.

5 RESULTS

5.1 Trench 1

Trench 1 was located in the southern half of the site and was aligned north-south. It was intended to be 15m by 2m in extent, and was located to assess whether any remains associated with the Black Swan public house and Pond Hill survived below the late 1950s extension. Cable detection undertaken prior to the excavation of the trench identified at least three live electrical cables running east-west across the northern half. A test hole was excavated between two of the cables to investigate the depth of the concrete surface (101), and found that it was reinforced with steel bars, with further concrete (109) underlying the surface, which is likely to have been laid to support the vehicular access bay (Plate 1). The concrete's depth and reinforcement meant that it was considered unsafe to excavate the northern end of the trench due to the risk of damaging the electrical cables.

The southern end of the trench was excavated for a length of 6.2m (Figures 3 and 4), where excavation was halted by the presence of a substantial concrete wall (108) and concrete surfacing with thick steel rebars (101), the latter likely to be the floor level of the 1950s 'basement'. Within the excavated area was a very extensive backfill or made ground deposit (102) largely comprising brick rubble, as well as plastic, sandstone and other modern building materials, in a mid-grey-brown loose silty sand matrix (Plate 2). This was excavated to a depth of 2m within the stepped central part of the trench, with no signs of the base of the deposit encountered. Given the loose nature of the deposit and the potential for collapse of the sides, it was not excavated any further.

The western side of the trench was formed by two stretches of concrete wall, 103 at the south end and 105 to the north. Wall 108 formed the northern end of the trench, possibly forming a return of 105. All three were of a pale grey, smooth concrete reinforced with thick steel bars. Their location corresponds approximately with dividing walls in the basement level above, as shown on Figure 12. The walls were observed to a depth of 1m below the current surface, but continued down beyond the base of excavation, likely to at least 2m in depth as indicated by the backfill or made ground deposit 102. Two wooden planks, each 4 inches (10cm) wide and 1 inch (2cm) thick, were attached to the west face of wall 105, one horizontally, the other vertically (Plate 3). These planks (106) may have been supports for cables or fixtures attached to the walls.

A concrete base at the north end of wall 103 supported a steel I-beam set as a column (104), presumably part of the frame of the 1950s building (Plate 4). The column had been cut off at ground level. The concrete surfacing (101) did not continue over the column or the southern end of the trench, and was largely present at the north, roughly contiguous with wall 105. A further,

narrower concrete base was present at the junction of walls 105 and 108. This (107) was topped by a thick steel pad, flat topped, with a large bolt in the corner. The full extent of this pad was not exposed, but it is likely to be square in plan, and cannot extend much further to the north or west given the presence of the walls.

5.2 Trench 2

Trench 2 was located at the northern end of the site, and was intended to examine the remains of the 1893 Post Office buildings, including establishing the depth of disturbance and the potential for preservation of earlier remains beneath. It was initially proposed to be a 15 x 2m trench, but as stated in section 3.2, it was modified to a 7.5 x 4m trench due to the constraining presence of the spoil heap and standing walls. It was also located at least 2m from the edge of the standing building immediately to the north, to avoid any damage or subsidence to its foundations. The trench plan is shown in Figure 5 and a section in Figure 6.

A modern tarmac surface (201) with a thin hardcore levelling layer (202) covered the western part of the trench, whereas the surface of the eastern part was the top of the rubble backfill material (203). This contained frequent building rubble material, including white-glazed bricks with a yellow, firebrick-type body. Some had stamps in the rectangular frogs, reading 'J.C. EDWARDS/RUABON' or 'J.C.E./2 %' (Plate 5). Identical glazed bricks are present on the standing walls at the northwest corner of the site, and are described in the L-P Archaeology report as being present within the main basement area of the Post Office. Also common in the rubble were frogged red bricks stamped 'GREGORY', relating to the local manufacturer J. Gregory and Sons Ltd who had a brickworks on Ecclesall Road, Sheffield, operating by 1877 and closed by 1943 (Sallery n.d.). These bricks are frequently found in Sheffield. By contrast, the J.C. Edwards bricks are from Ruabon in Denbighshire, a major brick- and terracotta-producing area. Edwards' works was active from 1903 to 1956 (Sallery n.d.), suggesting these bricks may be associated with the early 20th-century alterations and extensions to the Post Office. The backfill clearly derives from the recent demolition of the buildings and included modern plastics, pipes and cables as well as concrete and occasional pieces of sandstone, some neatly dressed. In the central part of the trench it was present to a depth of at least 54.564m aOD, 2.25m below the current ground surface, at which point excavation was discontinued due to safety concerns.

The southern edge of the trench was formed by a substantial brick wall, 209, which was 0.9m wide. It was truncated to different levels at various points, presumably during demolition of the superstructure, so it is uncertain if this was a single phase of wall or perhaps two adjacent walls. The highest point was at 56.84m, level with the current ground surface. To the south was a continuation of the concrete surfacing that probably formed the floor level within the 1950s basement (219), analogous to 101. The southern edge is likely to have been the outer wall of the 1893 Post Office building and corresponds with a dividing wall shown on the main basement plan (Figure 8). The northern part of this wall seems to have formed the south side of a sub-basement room, and had a thick plaster finish on its north face (Plate 6). A rough cut through the wall towards the western end of the trench (217) contained several inactive pipes in a fill similar to 203. It is not clear if this extended down the full depth of the wall, due to plaster coverage in the lower half of the trench (Plate 7). Another large diameter cast iron pipe extended through the plaster near the base of excavation in this area. It is likely that the cut and the pipes were associated with the provision of services to the 1950s extension.

Wall 208, also plastered on its west face forms the eastern side of this room, and corresponds with the wall at the edge of the separate room shown on the basement plan in the northeast corner of the site, and the electricity sub-station shown on the 1955 map. The base of this wall was not reached at 2.2m below the current ground surface (Plate 8), and it is likely that wall 209 is equally deep. The plaster finish obscures the junction of the walls and the nature of an area of possible rebuild at the south end of 208. The upper surface here is at least different to the main part of wall 208 (Plate 9). The northern end of 208 had been truncated, possibly during demolition but more likely earlier, as it was crossed by a substantial bundled electrical cable that extended out from concrete structure 206/207 (Plate 10). The junction between walls 208 and 209 was not quite a right angle, being slightly more acute at 85 degrees.

Two buttresses or stub walls (210 and 212) extend through wall 209 and into the room, both also with the same plaster finish (Plate 11). They each are 0.47m wide, with rounded bullnose bricks at the outer corners. Buttress 210 is more truncated in height, but this appears to be due to demolition activity, as well as damage caused by the machine during opening of the trench. As with 208, both are at a slightly acute angle to wall 209, being longer on the western sides. The plaster finish obscured their junctions with 209, but the bricks around the top of 210 suggested that at least the northern edge of 209 was built around 210. In between the two buttresses was a single-skin wall of frogged red bricks, with 'GREGORY' stamps (211), laid in stretcher rows (Plate 7). As with those in walls 208, 209 and the two buttresses, the bricks were 22 x 11 x 8cm in size. Wall 211 also had a thick skin of plaster skin on either side, but loss of some of the upper courses demonstrated that the wall butted against the north face of 209. This wall was again at a slight acute angle to 209, suggesting that this angled alignment is not due to an earlier structure. The 'north-south' walls on the east side of the building may have been aligned parallel to the Pond Street frontage. A slightly different backfill deposit, 204, was noted in the area to the west of wall 211, underlying a thinner spread of 203. This was a darker brown than 203, with a lesser rubble content, and was revealed to a depth of 55.254m aOD, where excavation ceased.

At the eastern edge of the trench, east of wall 208, was a concrete structure within the area shown on the basement plan as a separate room. This area was labelled as an electricity substation on the 1955 map. The structure had smooth concrete walls around the south and west sides (207), extending into a wider concrete pad at the northern side (206). A concrete floor (213) was found at a depth of 55.876m aOD, 0.6m below the top of wall 207 and 1m below the current ground surface. The area between the walls and the floor had been backfilled with a rubble deposit (205) that is probably the same as 203. Removal of part of the floor with the JCB demonstrated that it was 0.13m thick and reinforced with a steel bar mesh, at 10cm intervals (Plate 12). It was laid on a 0.18m thick levelling layer of crushed red brick, which overlay a yellow-brown sandy clay deposit with sandstone fragment inclusions (216), that appears to be natural bedrock. This was exposed at 55.566m aOD, and the upper surface was partly removed by the machine due to difficulties in excavating between the steel mesh of the floor. No evidence for any features cut into the bedrock was noted in the small area exposed. The bedrock in this area is at a minimum of 1.31m below the current ground surface. Wall 207 continued down below the level of the floor and base of excavation within this area, and it is possible that it extends as deep as the adjacent wall 208. Concrete pad 206 appeared to stop at the level of the base of the floor. As noted above, a thick electrical cable extended west from

under 206, possibly running into the room west of 208 (plate 10). A gap between the pad and the wall was filled by a dark grey sandy material containing frequent concrete fragments (214).

5.3 Geotechnical investigations

Three separate geotechnical investigations have been previously undertaken on the site, with investigations by Ian Farmer Associates in 2013 and 2017 and most recently by Clancy Consulting in 2020. The locations of test pits, boreholes and window samples are shown on Figure 7, coloured to illustrate those which recorded deep basements and those which recorded bedrock at 1m or less below the current ground level. A summary of the available borehole logs is given in Appendix 3, and schematic sections are shown in Figure 8. The Ian Farmer 2017 report has not been seen, and information on these investigations is based on summaries in the Clancy Consulting 2020 report.

The geotechnical investigations indicates that deep cellarage is present at the north end of the site, under the 1890s wing of the Post Office (TP02-03, WS02, BH102 & RT102), in the area of Trench 2. In some cases, the base of cellar backfill was not encountered due to obstructions or instability of the sides, but where concrete floors were encountered, these indicated that the cellarage extends to depths of 2.7-3.4m below the current ground level, although the base was not encountered in TP03 when it was terminated at 3.5m BGL. Two boreholes at the northwest corner (BH103 and WS101) indicate that this northern cellarage does not extend across the full width of the site, with bedrock encountered immediately below the concrete slab surface.

Further deep cellarage is present at the southern end of the site, as investigated in Trench 1. Three boreholes and a test pit in this area recorded cellar fills, extending to depths of 2.8-3.1m below the current ground surface where concrete surfaces were encountered (RT101 and TP01). The base was not reached in BH101 and WS05, which were terminated due to instability. These indicate that the cellar extends south from wall 109 recorded in Trench 1 to the southern end of the site. One borehole to the west of the trench (WS04) suggests that the cellar does not extend to the same depth to the west of walls 103 and 105, with bedrock encountered below demolition fill at 1m BGL.

The central area of the site, between walls 108 and 209, appears to have been less disturbed by cellarage, although this area was only investigated by two trial holes (WS03 & TP04). This area is crossed by live electrical cables and could not be safely investigated as part of Trench 1. Bedrock was encountered at shallow depths in both of these test pits, at 0.5m BGL in WS03. The thick reinforced concrete surface recorded in the northern part of Trench 1 was also present in TP04, to a depth of 0.6m, where it directly overlay bedrock.

None of the geotechnical test pits where bedrock was encountered recorded any overlying subsoil deposits, or made ground that could be of archaeological interest, suggesting that the site was stripped to bedrock level prior to the construction of the 1890s Post Office wing at the northern end, and the 1950s extension across the rest of the site. At the western side of the site, the natural ground levels appear to have been substantially reduced, as the pavement levels of Flat Street are several metres higher, retained by a substantial revetment wall along the western boundary.

6 DISCUSSION AND CONCLUSION

The excavation of Trench 1 revealed substantial steel-reinforced concrete walls and surfaces associated with the late 1950s extension to the Post Office. It is unclear whether these walls represent a sub-basement level or are part of a substantial set of foundations for the three-storey structure above. The smooth finish to the walls and the wooden fixtures may indicate that they were rooms rather than foundations, but no sub-basement level is recorded on available plans of this area. In either case, the evaluation and geotechnical test pits indicate that in this area the ground has been disturbed to a depth of more than 2.7m below the current ground surface, which is at approximately the current level of Pond Street. This is likely to have removed any traces of earlier archaeological remains unless they were very deeply cut into the bedrock.

The full depth of disturbance in the vehicle bay area in the centre of the building (north end of Trench 1) could not be ascertained in the evaluation due to the presence of live electrical cables and heavily reinforced concrete, but two geotechnical trial holes were located in this area. These indicate that there is less sub-surface disturbance here, but the presence of a reinforced concrete deposit below the surfacing suggests that at least some of this area was dug out and remediated for the construction of the 1950s extension. The test pits both recorded bedrock immediately below the concrete, suggesting that any archaeological deposits have been substantially truncated.

The remains within Trench 2 demonstrated that there was a sub-basement level room underlying at least part of the main basement area of the 1893 building, and that this has disturbed any underlying deposits to a depth in excess of 2.5-3.5m below the current ground and street levels. This is likely to have removed any earlier archaeological remains within this area. At the eastern edge, below the electricity sub-station, the disturbance may be slightly less, but is still present to 1.3m below the current ground level, and appears to cut into the bedrock. Any remains which do survive in this small area are therefore likely to be severely truncated and to have suffered disturbance on all sides from the construction of the superstructure and the insertion of electrical cables.

Boreholes undertaken in the northwest corner of the site recorded sandstone bedrock at 0.10-0.3m below the current ground surface. This suggests that the sub-basement from Trench 2 does not extend up to the western boundary of the site, but that this area, which is substantially below the level of Flat Street, has been terraced into the bedrock, which is again likely to have removed any archaeological remains. A borehole at the southwest corner had similar results, with bedrock recorded at 1m BGL below a rubble demolition deposit.

No finds were recovered from the evaluation trenches, as only modern material arising from 21st-century demolition activity was noted. No superficial deposits or made ground of archaeological interest were recorded in the geotechnical investigations. The evaluation and geotechnical trial holes have demonstrated that the potential for survival of significant archaeological remains within the site is negligible.

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Historic maps

Ralph Gosling's 1736 map of Sheffield

William Fairbank's 1808 map of Sheffield

1853 OS town plan, 1:1056

1890 OS town plan 1:500

1894 OS 1:2500 OS map sheet Yorkshire 294.8

1896 Goad fire insurance plan sheets Sheffield 3 and 8

1905, 1923 and 1935 OS 1:2500 maps sheet Yorkshire 294.8

1946 and 1959 Goad fire insurance plan revisions

1955 and 1968 OS 1:2500 maps

PLATES



Plate 1: Trial pit at north end of Trench 1, showing concrete surface 101 and underlying concrete 109, viewed facing north (scales in 50cm and 10cm divisions)



Plate 2: Trench 1, south end, viewed facing north



Plate 3: Wall 105, wooden planks 106 and base for metal pad 107 (at right end of trench), viewed facing north (scales in 50cm divisions)



Plate 4: Wall 103 and column base 104, viewed facing west



Plate 5: White-glazed J.C. Edwards bricks from the demolition backfill 203 (scale in 10cm divisions)



Plate 6: Wall 209, viewed facing south, with wall 208 to the left and buttresses 210 and 212 to centre and right



Plate 7: West part of wall 209, showing pipe cut 217, and partition wall 211 in the centre, viewed facing north



Plate 8: West elevation of wall 208, viewed facing northeast



Plate 9: Top of wall 208 and structure 207, viewed facing north



Plate 10: Electrical cable emerging from under 206, within fill 214, viewed facing east



Plate 11: View of Trench 2 facing west, showing buttresses 210 and 212, with structure 207 in the foreground



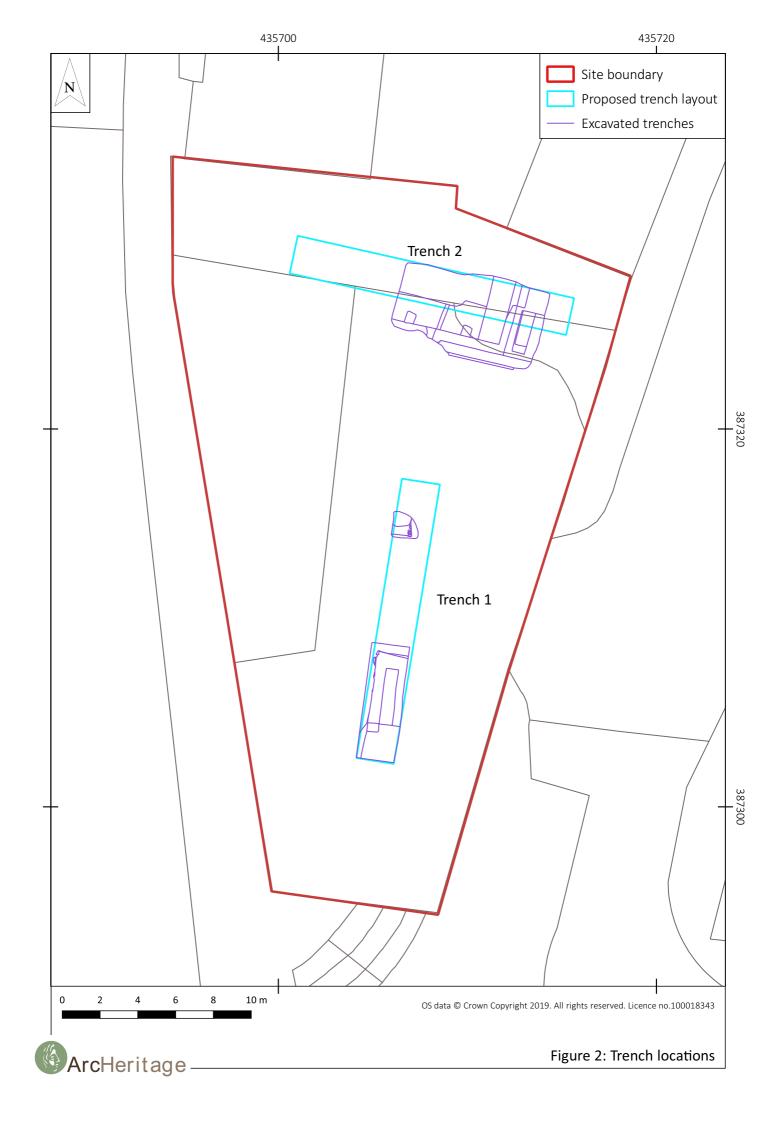
Plate 12: Structure 207 following removal of part of the floor, viewed facing north

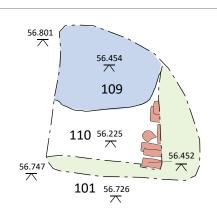
FIGURES

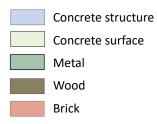


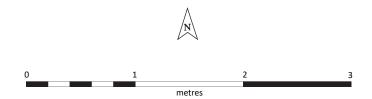


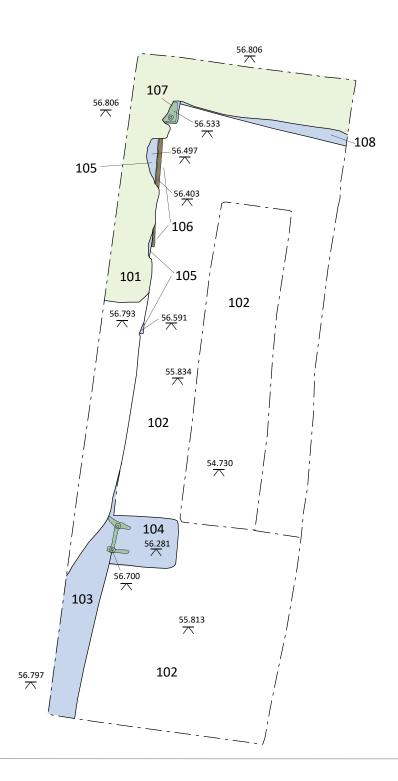
Figure 1: Site location











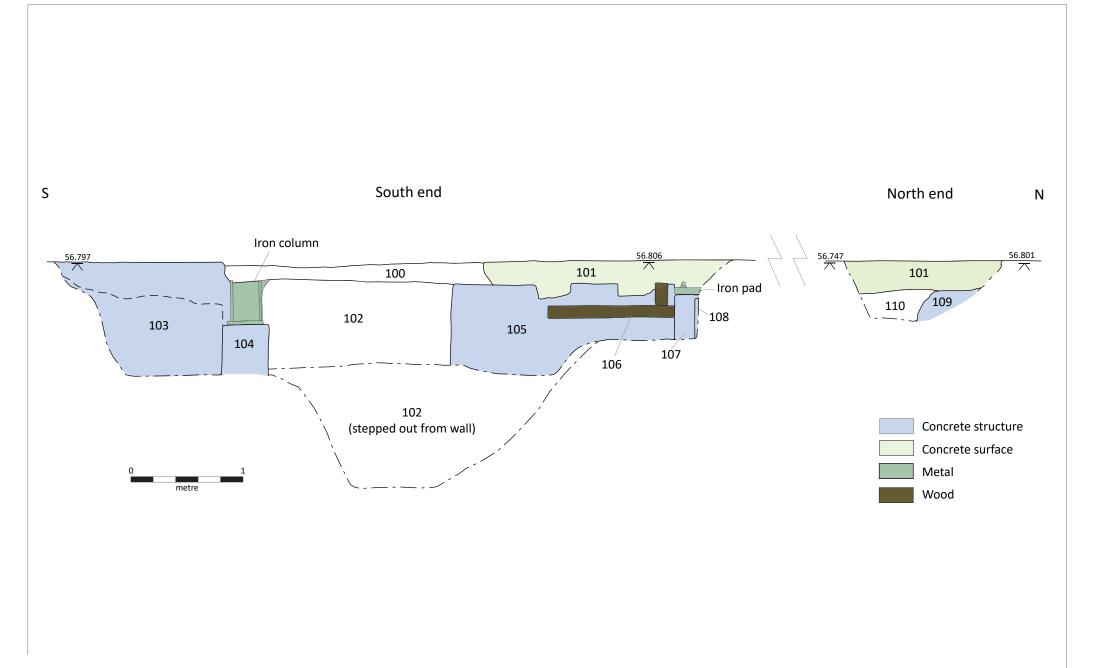




Figure 4: East-facing section of Trench 1

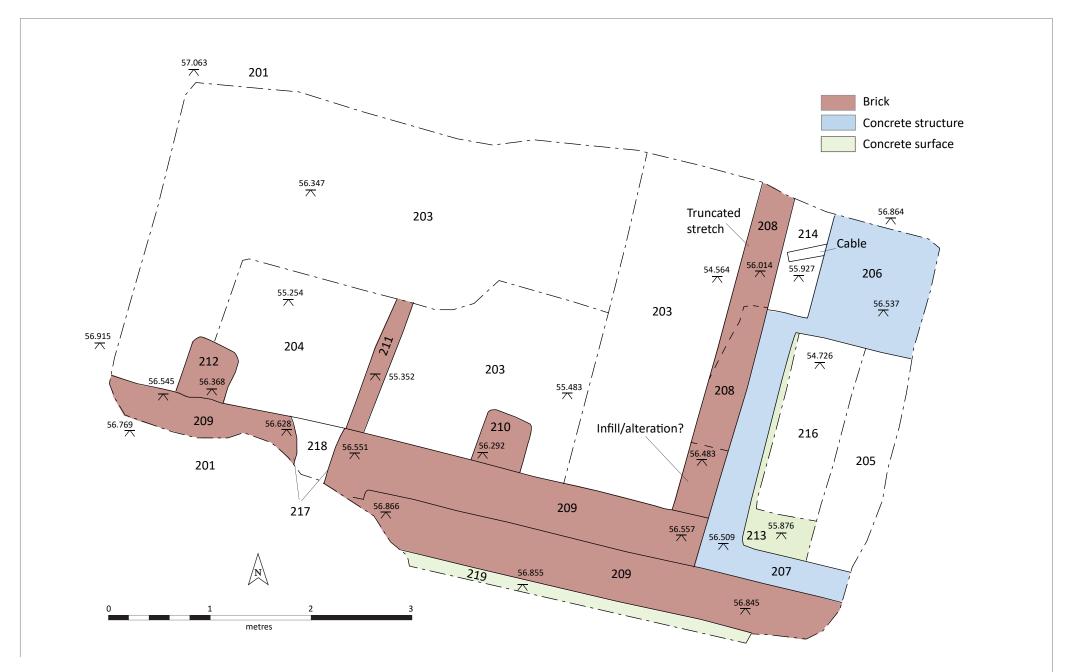




Figure 5: Plan of Trench 2

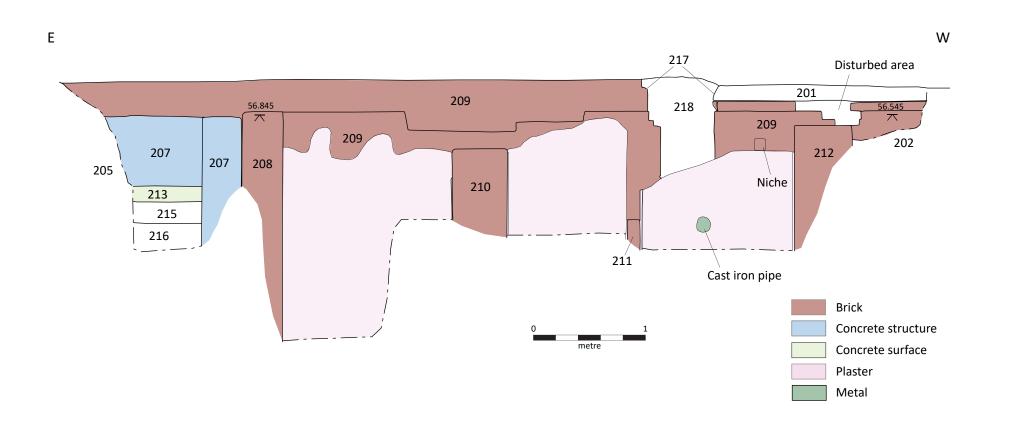
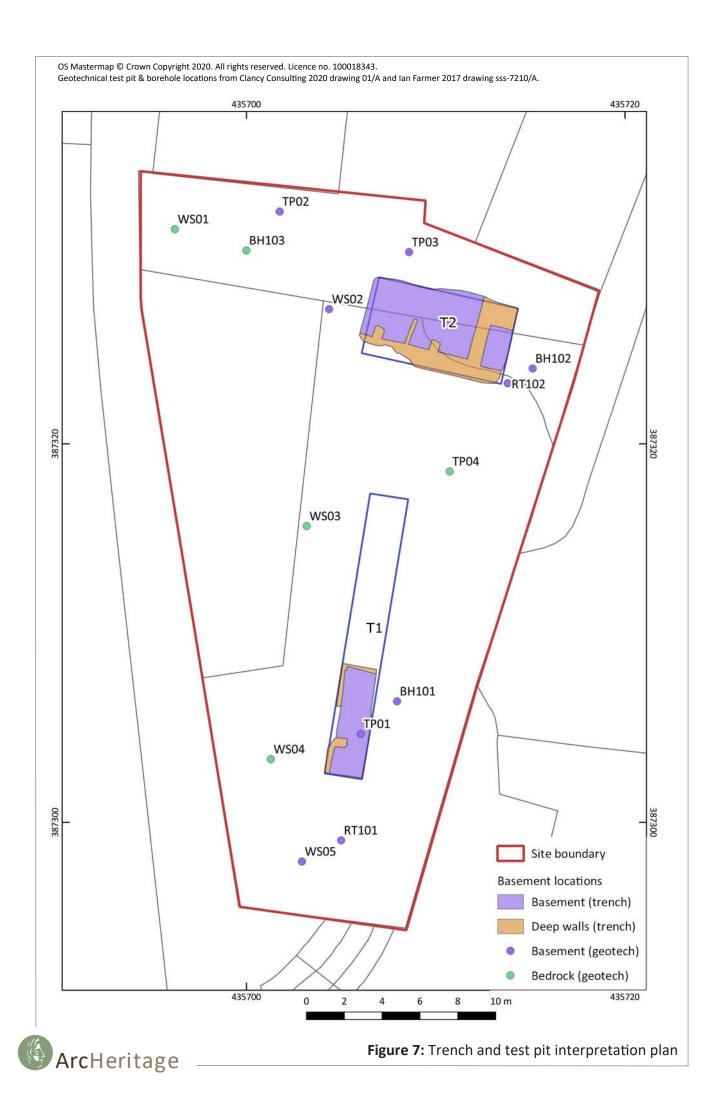




Figure 6: North-facing section of Trench 2



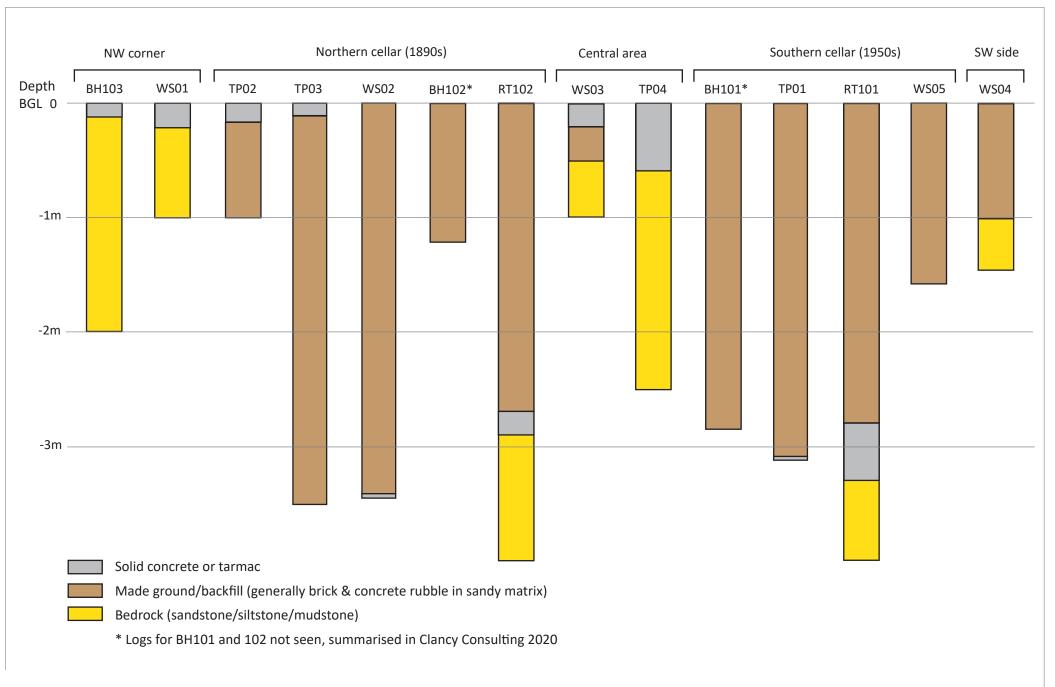




Figure 8: Schematic sections of geotechnical pits

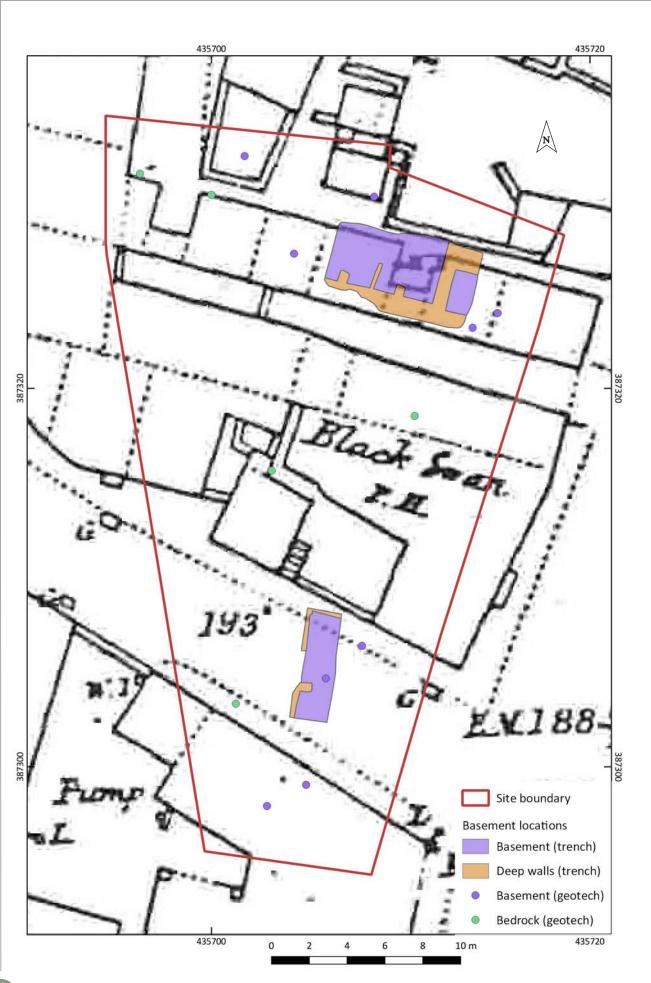
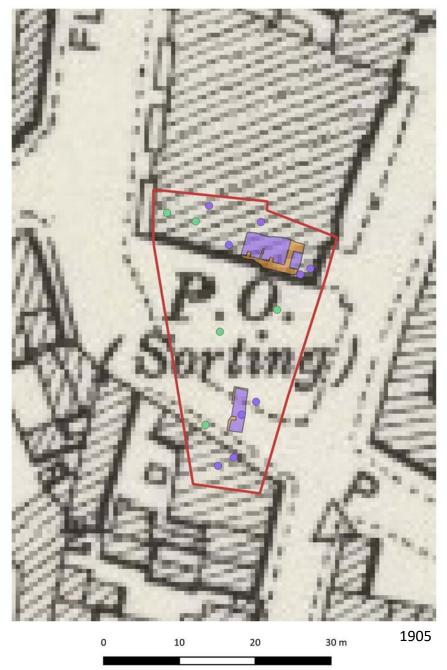




Figure 9: Trenches overlain on 1853 OS town plan



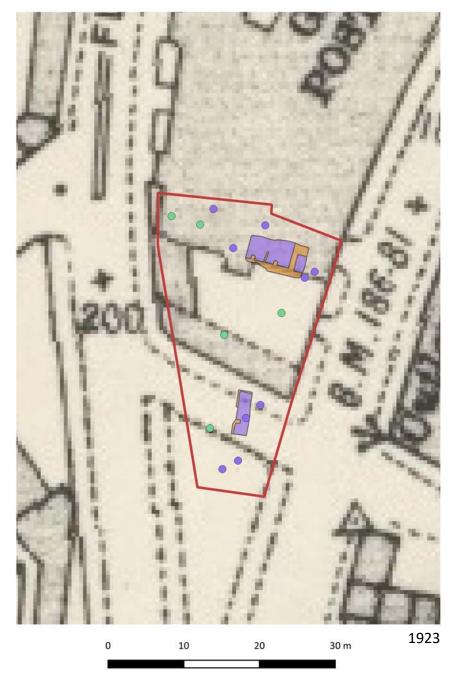


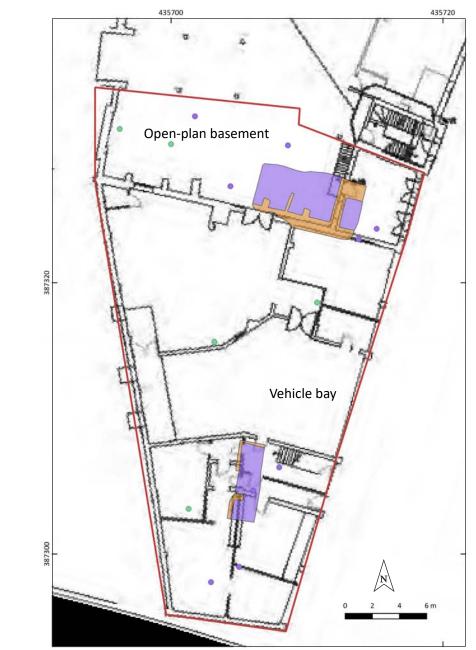
Figure 10: Trenches overlain on 1905 and 1923 OS maps







Figure 11: Trenches overlain on 1959 Goad plan



Reproduced from Poole 2005, figures 12 (below) and 21 (above).

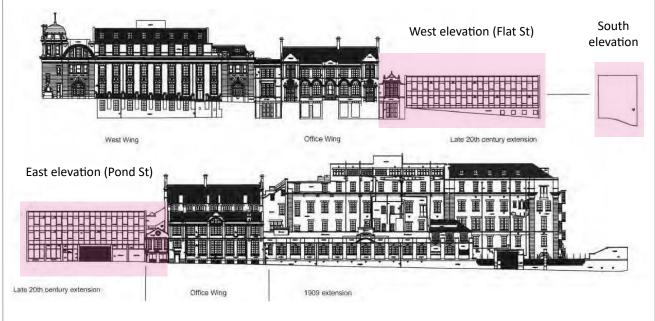




Figure 12: Post Office basement plan and building elevations

APPENDIX 1: INDEX TO ARCHIVE

Item	Quantity
Context sheets	30
Context registers	2
Drawing register	1
Drawings	6
Photo register	1
Photos (digital)	61
Survey (CAD)	1
Report	2
Written Scheme of Investigation	2

APPENDIX 2: LIST OF CONTEXTS

Context no	Trench	Description	
100	1	Concrete rubble post-demolition surfacing, south part of trench	
101	1	Concrete surface of 1950s basement floor, steel reinforced	
102	1	Demolition rubble backfill of sub-basement level	
103	1	Steel-reinforced concrete wall of sub-basement level	
104	1	Concrete base for steel I-beam column at north end of 103	
105	1	Steel-reinforced concrete wall of sub-basement level	
106	1	Wooden planks attached to wall 105	
107	1	Concrete base for steel/metal pad at junction of 105 and 108	
108	1	Steel-reinforced concrete wall of sub-basement level	
109	1	Concrete deposit/structure under floor (101) of vehicle bay	
110	1	Made ground deposit over 109 and under 101.	
201	2	Tarmac surface at the west end of the trench	
202	2	Hardcore bedding layer under 201	
203	2	Modern demolition backfill	
204	2	Darker backfill deposit in west part of trench	
205	2	Backfill similar to 203 within concrete structure 206/207	
206	2	Concrete slab/pad in northeast corner of trench	
207	2	Concrete wall/structure in east part of trench	
208	2	Red brick cellar wall with plaster on west face	
209	2	Red brick cellar wall with plaster on north face	
210	2	Stub wall extending out of/through wall 209	
211	2	Single-skin brick partition wall butting against 209	
212	2	Stub wall extending out of/through wall 209	
213	2	Concrete floor of 207	
214	2	Dark grey sandy fill between 206, 207 and 208	
215	2	Crushed brick rubble bedding layer below floor 213	
216	2	Yellow-brown sandy clay/sandstone bedrock	
217	2	Cut through wall 209 containing numerous pipes	
218	2	Fill of cut 217	
219	2	Concrete floor surface of 1950s cellar south of 209	

APPENDIX 3: GEOTECHNICAL LOGS

Locations in Figure 7; schematic sections in Figure 8

ID	Method & date	Description
BH103	Rotary borehole,	Concrete 0-0.1m BGL
	1998	Sandstone (bedrock) 0.1-0.5m BGL (driller's description)
		Bedrock 0.5-7m BGL (from 0.5-2m described as partially weathered, very weak medium-grained sandstone; 2-3.8m extremely weak destructured siltstone; similar bands of sandstone & siltstone to 7m)
BH101	Cable percussive borehole, 2017	Made ground to 2.84m BGL (gravelly sand with cobbles of brick, wood, tiles, metal and concrete)
		Terminated due to concrete obstruction
BH102	Cable percussive borehole, 2017	Made ground to 1.20m BGL (gravelly sand with cobbles of brick, wood, tiles, metal and concrete)
		Terminated due to concrete obstruction
RT101	Rotary borehole, 2017	Made ground 0-2.8m BGL (dark brown angular to subangular fine to coarse gravel of brick and concrete)
		Concrete 2.8-3.3m BGL
		Bedrock 3.3-28m BGL (grey mudstone to 4m, grey-brown fine- grained sandstone 4-5.1m; further bands of mudstone & sandstone below, with coal at 23.17-25m)
RT102	Rotary borehole, 2017	Made ground 0-2.7m BGL (black-brown angular to subangular fine to coarse brick and concrete gravel)
		Concrete 2.7-2.9m BGL
		Bedrock 2.9-20m BGL (grey mudstone to 4m, over siltstone to 5.4m, further bands of mudstone, clay and sandstone below, with coal at 14-14.12m BGL)
WS01	Window sample	Concrete surface 0-0.2m BGL
	borehole, 2020	Weathered bedrock 0.2-1m BGL (yellow-brown sandy sub-angular gravel of sandstone — Silkstone Rock)
WS02	Window sample borehole, 2020	Made ground 0-3.37m BGL (light brown slightly clayey sub-angular fine to coarse gravel of concrete, brick & sandstone with brick cobbles & occasional pieces of wood)
		Concrete 3.37-3.38m BGL
WS03	Window sample	Concrete 0-0.2m BGL
	borehole, 2020	Made ground 0.2-0.5m BGL (light grey sandy subangular to rounded fine to coarse gravel of concrete & brick, with brick cobbles)
		Weathered bedrock 0.5-1.4m BGL (yellow-brown sandy sub-angular gravel of sandstone — Silkstone Rock)
WS04	Window sample borehole, 2020	Made ground 0-1m BGL (light brown sandy clayey subangular fine to coarse gravel of brick, concrete & sandstone)
		Weathered bedrock 1-1.4m BGL (yellow-brown sandy sub-angular gravel of sandstone – Silkstone Rock)

ID	Method & date	Description		
WS05	Window sample borehole, 2020	Made ground 0-1.58m BGL (light greyish-brown sandy clayey subangular fine to coarse gravel of brick, concrete & sandstone)		
		Borehole terminated at 1.58m due to instability		
TP01	Trial pit, 2020	Made ground 0-3.1m BGL (light greyish-brown very sandy angular to subangular fine to coarse gravel of concrete, limestone, sandstone & brick with a medium cobble content of brick, concrete & sandstone. Occasional wire, plastic, metal, fabric, glass & wood). Brick wall on south face from 2.4-3.1m BGL		
		Concrete 3.10-3.11m BGL		
TP02	Trial pit, 2020	Concrete 0-0.15m		
		Made ground 0.15-1m (light greyish-brown very sandy subangular fine to coarse gravel of concrete, limestone, sandstone & brick with a high cobble content of brick, concrete & sandstone and low boulder content of concrete & sandstone). Concrete wall on east face; brick wall running east with sandstone slab above encountered at 0.9-1m BGL, partial void below.		
		Pit terminated due to obstructions and void		
TP03	Trial pit, 2020	Tarmac 0-0.1m BGL		
		Made ground 0.1-3.5m BGL (light brown very sandy subangular fine to coarse gravel of concrete, limestone, sandstone & brick with a high cobble content of brick, occasional plastic, cables, metal & wood). On east face, cellar wall with ?fireplace.		
		Pit terminated due to instability		
TP04	Trial pit, 2020	Concrete 0-0.6m BGL (brick cobbles on north side from 0.3-0.6m)		
		Weathered bedrock 0.6-2.5m (yellow-brown sandy clayey angular to subangular gravel of sandstone with medium sandstone cobble content – Silkstone Rock)		

APPENDIX 4: WRITTEN SCHEME OF INVESTIGATION

The Former Royal Mail Sorting Office, Pond Street, Sheffield Written Scheme of Investigation for Archaeological Evaluation Trenching

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Key Project Information

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Report title	The Former Royal Mail Sorting Office, Pond Street, Sheffield: Written Scheme of Investigation for Archaeological Evaluation Trenching
Report status	Final
ArcHeritage Project No.	2390
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Illustrations	Laura Strafford
Editor	Glyn Davies
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CONTENTS

1.	SUMMARY	2
2.	SITE LOCATION & DESCRIPTION	2
3.	DESIGNATIONS & CONSTRAINTS	3
4.	ARCHAEOLOGICAL INTEREST	3
5.	AIMS	4
6.	TECHNIQUES	5
7.	TRIAL TRENCHES	5
8.	RECORDING METHODOLOGY	6
9.	SPECIALIST ASSESSMENT	8
10.	REPORTING	8
11.	POST EXCAVATION ANALYSIS & PUBLICATION	9
12.	ARCHIVE DEPOSITION	9
13.	HEALTH AND SAFETY	10
14.	PRE-START REQUIREMENTS	10
15.	REINSTATEMENT	10
16.	STAFFING	10
17.	MONITORING OF ARCHAEOLOGICAL FIELDWORK	11
18.	PROJECT TIMETABLE	11
19.	COPYRIGHT	11
20.	KEY REFERENCES	12

Figures

- Figure 1: Site location
- Figure 2: Listed buildings around the site and previous investigations within the site
- Figure 3: Proposed trench location plan
- Figure 4: Trenches overlain on historic mapping

1. SUMMARY

- 1.1. Mount Group Student Vista Ltd are planning the redevelopment of the former Royal Mail sorting office, Pond Street, Sheffield. The development will lead to the construction of a new student accommodation building between Pond Street and Flat Street. The site measures approximately 665m² in total.
- 1.2. Conditional planning permission has been granted for the development, with the following condition attached:

No development of the student accommodation building, including any demolition and groundworks, shall take place until the applicant, or their agent or successor in title, has submitted a Written Scheme of Investigation (WSI) that sets out a strategy for archaeological investigation and this has been approved in writing by the Local Planning Authority. The WSI shall include:

- The programme and method of site investigation and recording.
- The requirement to seek preservation in situ of identified features of importance.
- The programme of post-investigation assessment.
- The provision to be made for analysis and reporting.
- The provision to be made for publication and dissemination results.
- The provision to be made for deposition of the archive created.
- Nomination of a competent person/ persons or organization to undertake the works.
- The timetable for completion of all site investigation and post-investigation works.

Thereafter the development shall only take place in accordance with the approved WSI and the development shall not be brought into use until the Local Planning Authority has confirmed in writing that the requirements of the WSI have been fulfilled or alternative timescales agreed.

Reason: To ensure that any archaeological remains present, whether buried or part of a standing building, are investigated and a proper understanding of their nature, date, extent and significance gained, before those remains are damaged or destroyed and that knowledge gained is then disseminated.

- 1.3. This Written Scheme of Investigation (WSI) has been prepared in response to the above requirement for archaeological evaluation of the site in order to assess the potential impact of the proposed development on any buried archaeological remains.
- 1.4. The archaeological evaluation will be carried out in accordance with this WSI, and will comply with the *Regional Statement of Good Practice for Archaeology in the Development Process, Yorkshire, the Humber and the North East,* with relevant Historic England best practice guidance documents, and with the principles of the Chartered Institute for Archaeology (CIfA) Code of Conduct and all relevant standards and guidance.

2. SITE LOCATION & DESCRIPTION

2.1. The proposal site (centred on NGR SK 35706 87321) is located in the eastern half of the densely developed urban centre of Sheffield, between Pond Street and Flat Street (Figure 1). Fitzalan Square lies to the north of the site. The site has been cleared of buildings but formerly

- contained an extension that formed part of Sheffield central sorting office that was attached to Sheffield Central Post Office. The Royal Mail sorting office was commissioned and purpose built for the Post Office by the Ministry of Works in 1893 (Poole 2005). The site has been cleared of previous buildings over recent years and currently stands unused and empty.
- 2.2. The site measures approximately 665m² in total and comprises a roughly triangular parcel of land, bounded along its western edge by Flat Street and along its eastern edge by Pond Street. The northern site boundary is bordered by the existing standing building of the late 19th-century grade II listed former post office (NHLE 1254816).
- 2.3. The British Geology Survey records the bedrock geology across the site as sandstone of the Silkstone Rock formation. There is no recorded superficial geology within the site itself, although a north to south aligned band of alluvium is record approximately 70m to the east of the site. The ground level within the site drops steeply from Flat Street to Pond Street.

3. DESIGNATIONS & CONSTRAINTS

- 3.1. The site does not contain any designated heritage assets and is not located in a Conservation Area, although the eastern limit of the City Centre Conservation Area lies approximately 80m to the west of the site.
- 3.2. There are no known site constraints. It is understood that access to the site is from Pond Street.

4. ARCHAEOLOGICAL INTEREST

- 4.1. The site is located immediately outside the putative boundary of the bailey of the medieval Sheffield Castle. The bailey of the castle, following reconstruction after the Baron's war, is thought to have extended as far south as Fitzalan Square (Jones 2003), which places the site directly outside the bailey, within the town layout (Poole 2005).
- 4.2. Historic maps demonstrate that the site is located within an area long exploited for water power, with numerous ponds, dams, mills and reservoirs. The exact date for the commencement of water power within this area is unknown, although Pond Mill, to the northeast of the site, was referred to in documentary sources from 1578, though it was probably earlier in origin (Ball et al. 2006, 187). At that date it was owned by the Earl of Shrewsbury, lord of the manor, and the dam (mill pond) was also used as a fish pond. In the 18th century, this was converted into a cutler's wheel and subsequently a forge (Pond's Forge). The grade II* listed Old Queen's Head public house lies just 125m to the southeast of the site (NHLE 1247088) (Figure 2). This is originally thought to date from 1475 with later 19th- and 20th-century additions and alterations. The pub was originally known as the Hall-in-the-Ponds, with the name deriving from the building's location in a low-lying area adjacent to the mill dams/fish ponds. It is possible that the hall was used as a banquet hall or hunting lodge, for fowling and fishing parties in the ponds and the wider deer park (Hey 2005, 40).
- 4.3. A map dated to *c*.1600 indicated potential development around and potentially within the site at this time, but as this map lacks detail it is hard to positively relate structures directly to the site itself. Gosling's plan of 1736 depicted Pond Street, known as Pond Lane, although Flat Street did not exist at this time. Development was shown along the west side of Pond Lane, with the site partly located over these; however, their nature and function is unclear from the map. These appear to be the same structures that are present on the *c*.1600 map. By 1736 a street was present crossing the southern end of the site on an east to west alignment. Much of the area to the south and west of the site was undeveloped fields at this time, with Pond Mill shown to the north-east and the Pond Tilt Hammer to the east.

- 4.4. The 1808 Fairbank map shows that Flat Street had been created by this time. The street crossing the southern end of the site was named Pond Hill. The fields that were present to the south and west in 1736 had been laid out with streets and developed.
- 4.5. The 1853 OS map shows the northern half of the site was occupied by a number of buildings, probably mostly houses, arranged around a courtyard named Dakin's Yard (Figure 4). The yard was accessed via Little Pond Street (now Pond Street). To the immediate north of Pond Hill was the Black Swan public house. The edge of a large building on the south side of Pond Hill extended into the southern tip of the site.
- 4.6. The 1894 OS map indicates that buildings around Dakin Yard in the northern part of the site had been cleared, with only a block fronting onto Pond Hill remaining. This effectively left the northern end of the site a vacant plot at this time. The partial clearance of the site at this time is no doubt to make way for the post office building, which was commissioned in 1893 (Poole 2005). The southern end of the site remained unchanged from the 1853 OS map, with the range of buildings which included the Black Swan remaining. Little Pond Street had been renamed Pond Street by 1894. The 1986 Goad plan showed the new Post Office, with the northern part of the site covered by the southern end of this block, including a stores range. The Black Horse public house was still extant at that date.
- 4.7. By the time of the 1905 OS map, the range of buildings fronting onto Pond Hill, which included the Black Swan, had been cleared. The northern end of the site contained the southern end of a the Post Office, which extended to the north, outside the site boundary. This building is labelled P.O. (sorting). The southern end of the site at this time stood empty, with the exception of Pond Hill. The building extending into the southern tip of the site had been somewhat altered from 1853, but was still unlabelled.
- 4.8. Two small buildings had been constructed at the southern end of the site by 1923. The large P.O building was still present within the northern end of the site. A separate structure was shown within the eastern side of the former stores building within the site, labelled Electricity Sub-Station. Another building was added at the southern end of the site by 1954, and by 1963 the street Pond Hill had been removed from the southern end of the site as part of works to create the bus interchange, located directly to the south of the site. From this point the site remained largely unchanged until the recent demolition of the P.O buildings within the site.
- 4.9. The site is located on a steep hill, with a sheer drop from the eastern side of Flat Street down into the site. The floor level of the previous buildings classed as basement was in fact at ground level from Pond Street (Poole 2005). It is possible that the terracing of the site to allow for construction of these buildings may have destroyed any archaeological remains; a borehole within the northwestern corner of the site recorded sandstone bedrock at just 0.10m below ground level (Ian Farmer Associates 1998) (Figure 2).

5. AIMS

- 5.1. The aims of the trial trenching are to investigate the archaeological potential of the site. General aims are:
 - to determine the extent, condition, character, importance and date of any archaeological remains present,
 - to provide information that will enable the remains to be placed within their local, regional, and national context and for an assessment of the significance of the archaeology of the proposal area to be made,
 - to provide information to enable the local authority to decide any requirements for further archaeological mitigation for the site.

- to identify if medieval water management features extend into the site.
- to determine the character of medieval use of the site
- to examine the construction of the 19th post office buildings and the potential for preservation of earlier archaeological remains below them.
- to determine the potential for the preservation of archaeological remains below the late 20th century post office building

6. TECHNIQUES

- 6.1. The recording will comprise the following elements:
 - Trial trenching
 - Reporting
- 6.2. Further stages of work or other mitigation measures could be required by the local authority, depending upon the results of the evaluation.

7. TRIAL TRENCHES

7.1. Two trenches will be excavated. The location of the trenches is shown on Figure 3. Trenches will be stepped if necessary, to ensure their stated size at the base of the trench. The rationale behind the trench locations is provided in Table 1.

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Tab	ച	1.	Tro	nch	ratio	าทา	ما

Trench No.	Size (m)	Rationale	
1	15 x 2	Examine early 19 th -century structures including the Black Swan public house and yard, and the street named Pond Hill at the southern end of the site. Determine state of preservation of remains below late 20 th -century building.	
		Determine if medieval remains survive	
2	15 x 2	Examine extent of remains of late 19 th -century Post Office structures in the northern part of the site.	
		Determine the potential for survival of remains of 18 th - to 19 th -century houses below late 19 th -century Post Office building.	
		Determine if medieval remains survive	

- 7.2. The trench locations will be accurately plotted using a survey grade GPS and by measurement to local permanent features shown on published Ordnance Survey maps. All measurements will be accurate to +/-10cm, and the trenches locatable on a 1:2500 Ordnance Survey map. This is to ensure that the trenches can be independently relocated in the event of future work.
- 7.3. Overburden such as current ground surfaces and superficial fill materials will be removed by a machine fitted with a toothless bucket. Mechanical excavation equipment will be used judiciously, under archaeological supervision down to the top of archaeological deposits, or the natural subsoil, whichever appears first. If archaeology is present machining will cease and excavation will normally proceed by hand. Where deep homogenous deposits, or deposits such as rubble infills are encountered, these may be carefully removed by machine, after

- consultation with SYAS. Machines will not be used to cut arbitrary sondages down to natural deposits.
- 7.4. The use of mechanical, air-powered, or electrical excavation equipment may also be appropriate for removing deep intrusions (e.g. modern brick and concrete floors or footings) after consultation with SYAS.
- 7.5. All trenches will be sufficiently cleaned by hand to enable potential archaeological features to be identified and recorded; areas without archaeological features will be recorded as sterile and no further work will take place in these areas. The stratigraphy of all trenches will be recorded on trench record sheets even where no archaeological features are identified.
- 7.6. A sufficient sample of any archaeological features and deposits revealed will be excavated in an archaeologically controlled and stratigraphic manner in order to establish the aims of the evaluation.
- 7.7. Discrete features will be half-sectioned in the first instance.
- 7.8. Linear features will be sample excavated (to a minimum of 20% of their length) with each sample being not less than 1m in length
- 7.9. Deposits at junctions or interruptions in linear features will be sufficiently excavated to allow relationships to be determined.
- 7.10. Structures will be sample excavated to a degree whereby their extent nature, form, date, function and relationships to other features and deposits can be established.

8. RECORDING METHODOLOGY

- 8.1. All archaeological features and deposits will be recorded using standardised pro forma record sheets. Plans, sections and elevations will be drawn as appropriate and a comprehensive photographic record will be made where archaeological features are encountered.
- 8.2. 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-section 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.
- 8.3. Photogrammetry from digital photography will be used to record surface areas, such as cobbled surfaces and brick floors. Photogrammetric images will be scaled, drawn up and combined with survey and plan data to produce the drawn site record.
- 8.4. Each context, where assigned, will be described in full on a pro forma context record sheet in accordance with the accepted context record conventions. Each context will be given a unique number. These field records will be checked and indexes compiled.
- 8.5. Photographs of work in progress and post-excavation of individual and groups of features will be taken. This will include general views of entire features and of details such as sections as considered necessary. The photographic record will comprise 35mm black and white film. Digital photography may be used in addition, but will not form any part of the formal site archive. All site photography will adhere to accepted photographic record guidelines.
- 8.6. Areas which do not contain any archaeological deposits will be photographed and recorded as being archaeologically sterile. The natural stratigraphic sequence within these areas will be recorded.
- 8.7. All finds will be collected and handled following the guidance set out in the CIfA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional

intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds, and located on plans. Other finds, finds within the topsoil, and dense/discrete deposits of finds will be collected as Bulk Finds, from discrete contexts, bagged by material type. Any dense/discrete deposits will have their limits defined on the appropriate plan.

- 8.8. 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.
- 8.9. An environmental 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 2011). Environmental and soil specialists will be consulted during the course of the excavation with regard to the implementation of this sampling programme. The sampling regime will include samples of the four types of deposit sample as appropriate. These are described below:
 - **Bulk-sieved Sample** (BS). Sample size will depend upon the context/feature size, but should be up to 40-60 litres in size (if the context size allows). They are taken for the recovery of charcoal, burnt seeds, bone and artefacts. The samples will be processed (flotation) on site where possible with 1mm and 500micron sieves on a rack to collect the carbonised washover. The retents and flots will then be dried, sorted and assessed to advise the potential for further analysis.
 - **General Biological Sample** (GBA): These are only taken if a deposit is waterlogged. A 10 litre sample size will be used (if the context size allows). These samples will be processed in the laboratory, to recover macrofossils and microscopic remains such as pollen and insects.
 - Column monolith: Kubiena tin samples may be taken for soils and pollen analysis and to determine soil accumulation processes.
 - Spot samples: these samples are taken as required, they may be contexts or material not suited to sieving, such as caches of seeds, pieces of eggshell or any specific finds of organic material. They may also be specialist samples (e.g. charcoal for radiocarbon dating).
- 8.10. Other samples will be taken, as appropriate, in consultation with ArcHeritage specialists and the Historic England Regional Science Advisor, as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc.). Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies. Material removed from site will be stored in appropriate controlled environments.
- 8.11. 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.
- 8.12. Any grave goods or coffin furniture will be retained for further assessment.
- 8.13. 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, CIfA Technical Paper 13 (1993) and Historic England guidance.

9. SPECIALIST ASSESSMENT

- 9.1. The stratigraphic information, artefacts, soil samples, and residues will be assessed as to their potential and significance for further analysis and study. The material will be quantified (counted and weighted). Specialists will undertake a rapid scan of all excavated material. Ceramic spot dates will be given. Appropriately detailed specialist reports will be included in the report.
- 9.2. Materials considered vulnerable will be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues on or in pottery, and mineral-preserved organic material). Allowance will be made for preliminary conservation and stabilization of all objects and a written assessment of long-term conservation and storage needs will be produced. Once assessed, all material will be packed and stored in optimum conditions, in accordance with Watkinson and Neal (1998), CIFA (2007) and Museums and Galleries (1992).
- 9.3. All finds will be cleaned, marked and labelled as appropriate, prior to assessment. For ceramic assemblages, any recognised local pottery reference collections and relevant fabric Codes will be used.
- 9.4. Allowance will be made for the recovery of material suitable for scientific dating and contingency sums will be made available to undertake such dating, if necessary. This application of will be decided in consultation with the curator.

10. REPORTING

- 10.1. Upon completion of the site work, a report will be prepared to include the following:
 - A non-technical summary of the results of the work.
 - An introduction which will include the planning reference number, grid reference and dates when the fieldwork took place.
 - An account of the methodology and detailed results of the operation, describing structural data, archaeological features, associated finds and environmental data, and a conclusion and discussion.
 - A selection of photographs and drawings, including a detailed plan of the site accurately identifying the areas monitored, trench locations, selected feature drawings, and selected artefacts, and phased feature plans where appropriate.
 - Specialist artefact and environmental reports where undertaken, and a context list/index.
 - Details of archive location and destination (with accession number, where known), together with a context list and catalogue of what is contained in that archive.
 - A copy of the key OASIS form details
 - Copies of the Brief and WSI
 - Additional photographic images may be supplied on a CDROM appended to the report
- 10.2. A digital copy of the report will be submitted to the commissioning body. A bound and digital copy of the report will be submitted direct to the SYAS for planning purposes, and subsequently for inclusion into the SMR.

11. POST EXCAVATION ANALYSIS & PUBLICATION

- 11.1. The information contained in the evaluation report will enable decisions to be taken regarding the future treatment of the archaeology of the development site and any material recovered during the evaluation.
- 11.2. If further archaeological investigations (mitigation) take place, any further analyses (as recommended by the specialists, and following agreement with the curator) may be incorporated into the post-excavation stage of the mitigation programme unless such analysis are required to provide information to enable a suitable mitigation strategy to be devised. Such analysis will form a new piece of work to be commissioned.
- 11.3. In the event that no further fieldwork takes place on the site, a full programme of post excavation analysis and publication of artefactual and scientific material from the evaluation may be required by the curator. Where this is required, this work will be a new piece of work to be commissioned.
- 11.4. If further site works do not take place, allowance will be made for the preparation and publication in a local and/or national journal of a short summary on the results of the evaluation and of the location and material held within the site archive.
- 11.5. The results of the work will be publicised locally e.g. by presenting a paper at the South Yorkshire Archaeology Day and talking to local societies, as appropriate.
- 11.6. A summary report accompanied by illustrations will be presented in digital format for publication in the appropriate volume of *Archaeology in South Yorkshire*.

12. ARCHIVE DEPOSITION

- 12.1. A field archive will be compiled consisting of all primary written documents, plans, sections and photographs. Catalogues of contexts, finds, soil samples, plans, sections and photographs will be produced. ArcHeritage will liaise with Sheffield Museums Trust prior to the commencement of fieldwork to establish the detailed curatorial requirements of the museum, to discuss archive transfer and to complete the relevant museum forms, in line with the *Archaeological Archive Deposition Policy for Museums in Yorkshire and the Humber*. The Museum's curator will be afforded access to visit the site and discuss the project results. The preparation of the archive will be undertaken with reference to the CIfA Archive Selection Toolkit.
- 12.2. The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the Local Authority 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.
- 12.3. Deposition of the field archive will occur after the assessment report in the event that no further mitigation is required. If further mitigation and/or post-excavation analysis and publication are required, the archive deposition will follow that phase.
- 12.4. Confirmation of deposition of the archive will be supplied to SYAS.
- 12.5. Upon completion of the project an OASIS form will be completed at http://oasis.ac.uk/form.

13. HEALTH AND SAFETY

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

14. PRE-START REQUIREMENTS

- 14.1. The client will be responsible for ensuring site access has been secured prior to the commencement of site works, and that the perimeter of the site is secure.
- 14.2. The client will provide ArcHeritage with up to date service plans and will be responsible for ensuring services have been disconnected, where appropriate.
- 14.3. The client will be responsible for ensuring that any existing reports (e.g. ground investigation, borehole logs, contamination reports) are made available to ArcHeritage prior to the commencement of work on site.
- 14.4. Prior to commencement of fieldwork, the contractor will complete and submit a Project Initiation Form. This and other templates relating to the joint deposition policy documentation are available to download from the SYAS website.

15. REINSTATEMENT

- 15.1. Following excavation and recording the spoil from the trenches will be backfilled unless requested otherwise. The backfill material will be levelled and compressed as far as possible with the mechanical excavator bucket, but will not be compressed to a specification. ArcHeritage are not responsible for reinstating any surfaces unless specifically commissioned by the client who will provide a suitable specification for the work.
- 15.2. During the first monitoring visit an agreement on a suitable staged backfill timetable for the trenches will be agreed, to avoid leaving all trenches open at once for health and safety reasons.

16. STAFFING

- 16.1. Specialist staff available for this project are:
 - Human remains Malin Holst (York Osteoarchaeology Ltd) & Rebecca Storm (University of Bradford)
 - Palaeoenvironmental remains Sheffield Archaeobotanical Consultancy
 - Head of Curatorial Services Christine McDonnell
 - Medieval pottery Anne Jenner
 - Post-medieval pottery David Barker and Richard Jackson
 - Post-medieval glass Karen Weston
 - Finds Officers Nienke Van Doorn
 - Archaeometallurgy & industrial residues Rod Mackenzie
 - Conservation Ian Panter
 - Worked wood Steve Allen
- 16.2. Other specialist staff may be commissioned as necessary. Appropriate specialist staff will be discussed and agreed with SYAS.

17. MONITORING OF ARCHAEOLOGICAL FIELDWORK

- 17.1. As a minimum requirement, SYAS 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 and to discuss the requirement any further phases of archaeological work. ArcHeritage will notify SYAS 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 SYAS.
- 17.2. With the client's agreement illustrated notices will be displayed on site to explain the nature of the works.

18. PROJECT TIMETABLE

18.1. An indicative timetable for the phases of work is given below; however, changes may be required due to the COVID-19 pandemic and associated restrictions, legislation and staff availability. SYAS will be notified of any changes to the timetable.

Phase	Item	Start	Complete
Fieldwork	Evaluation fieldwork	April 2020*	April 2020*
Assessment	Post-excavation assessment Assessment report circulated for comment	On completion of fieldwork	End of June 2020*
Post-excavation analysis and reporting (if required)	Post-excavation analysis Analysis report circulated for comment	On commission	Within 3 months of commission
Publication (if required)	Preparation and submission of publication text and images	On commission	Dependent on type of publication
Archiving	Deposition of archive		September 2020* if post-excavation analysis and reporting are not required. If these are required, the archive will be deposited within two months of completion of final reporting stage.

^{*}Note: the fieldwork, assessment and archiving schedules will be subject to restrictions relating to the ongoing COVID-19 situation, and cannot be definitively timetabled at this stage.

19. COPYRIGHT

19.1. ArcHeritage 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.

20. KEY REFERENCES

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https://www.sheffield.gov.uk/content/dam/sheffield/docs/planning-and-development/archaeology/Good_Practice_Guide_Rev_Nov_18.pdf

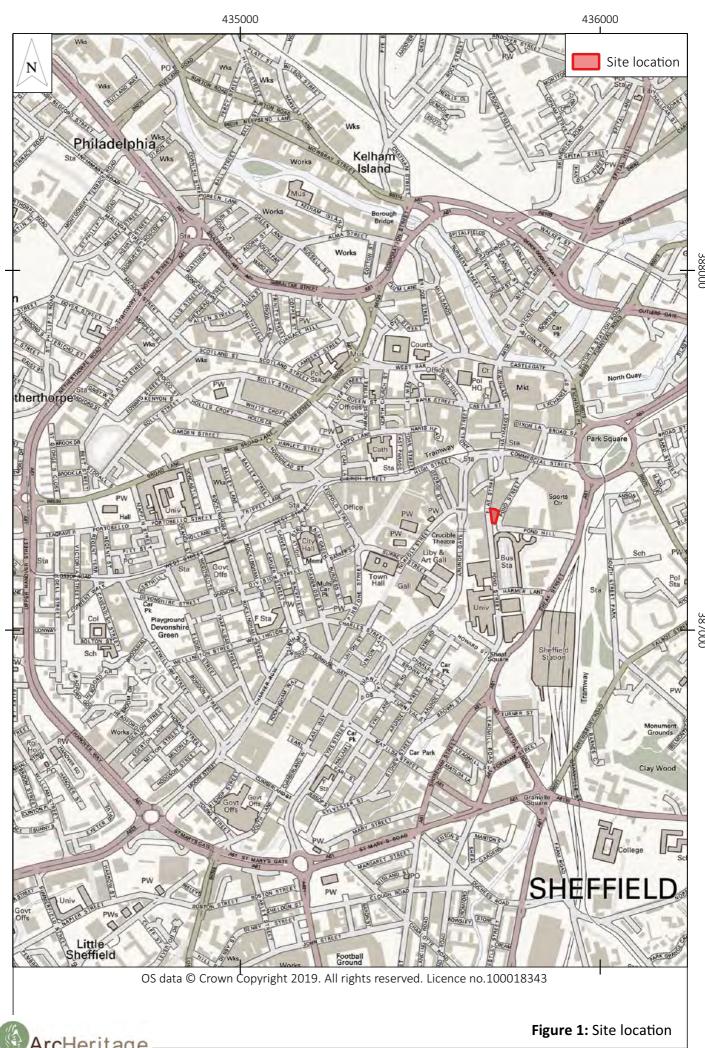
See also the website of the CIfA for all Guidance and Standards documentation:

http://www.archaeologists.net/codes/cifa

See also the Historic England website for a full list of guidance documents:

http://historicengland.org.uk/advice/technical-advice/recording-heritage/

FIGURES





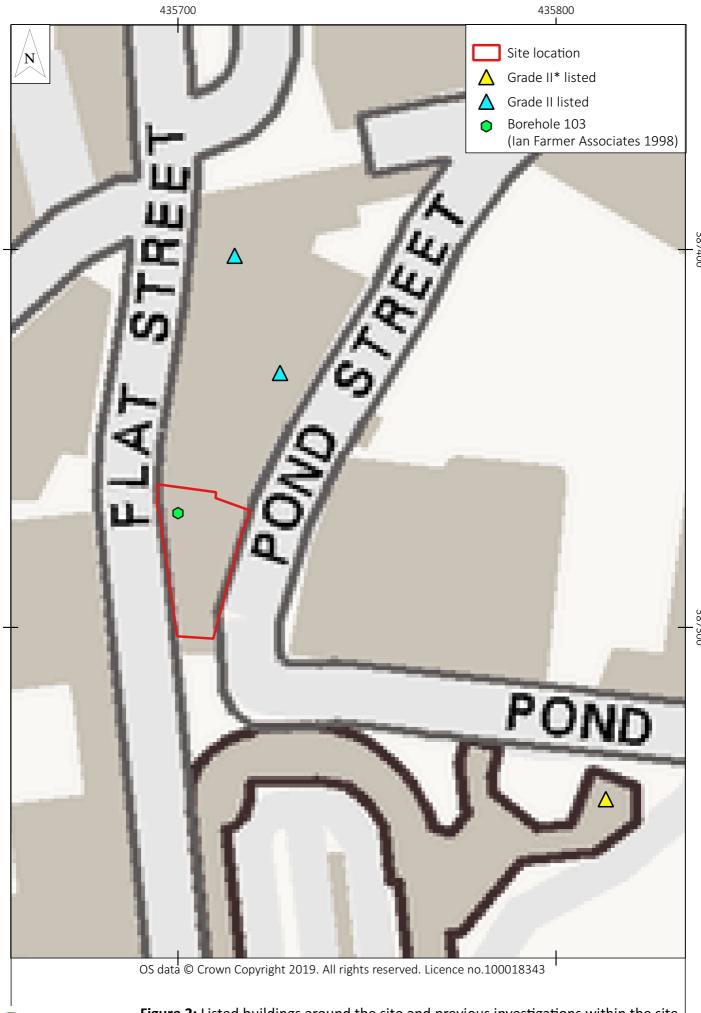
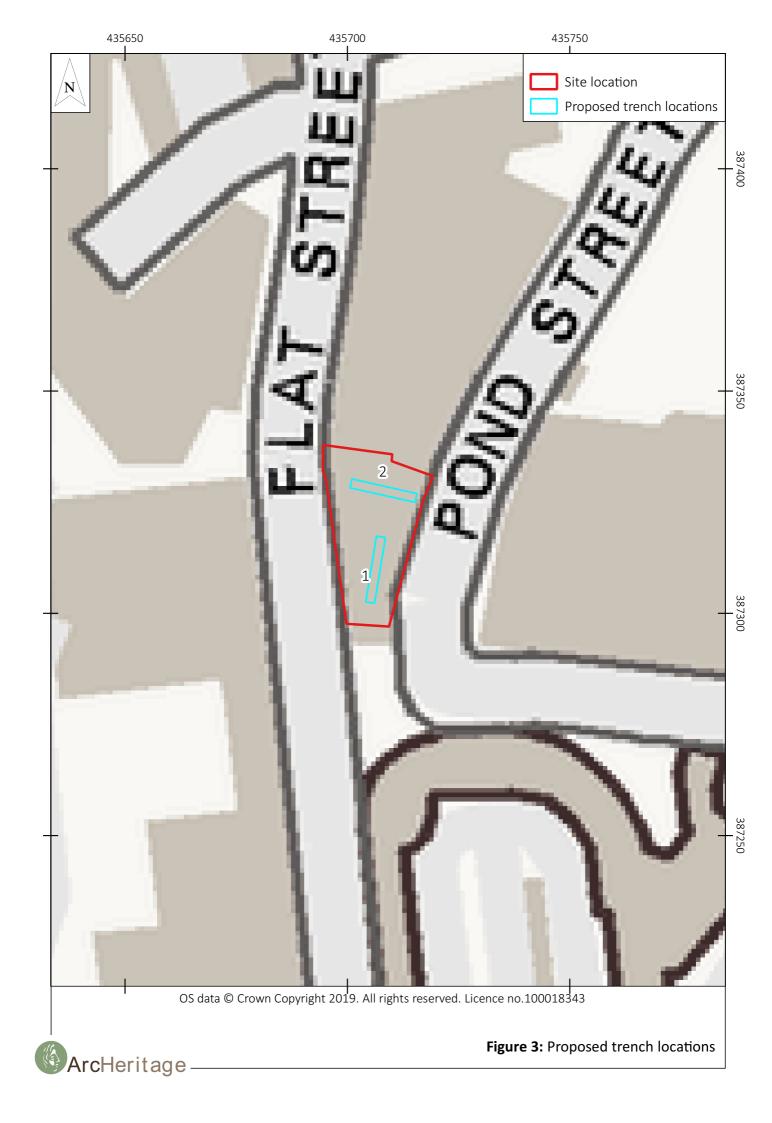


Figure 2: Listed buildings around the site and previous investigations within the site

ArcHeritage –





1923 OS map



Figure 4: Trenches overlain on historic mapping

1954 OS map



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