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Non-technical Summary

ARCUS were commissioned by Watkin Jones Student Accommodation to undertake archaeological mitigation on the north side of Broad Street, Sheffield, centred on SK 3618 8758. A watching brief revealed structures and archaeological features, which were then subjected to excavation. Three trenches were machine stripped to the archaeological levels to allow rapid evaluation to take place. This process revealed the remains of brick and stone buildings which appear to be associated with late eighteenth and early nineteenth century back-to-back housing and associated small scale industry, The Park Steel Works?? Was any of this located??. Below these, features cutting natural strata and a possible palaeochannel were also investigated. Archaeological deposits encountered were heavily truncated..

Checked by	Passed for submission to client
Date	Date
	James Symonds *Executive Director*

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1 INTRODUCTION

Watkin Jones Student Accommodation commissioned ARCUS in December 2006 to undertake archaeological mitigation on a site on a site on the north side of Broad Street, Sheffield, South Yorkshire. The investigations were required by the South Yorkshire Archaeology Service, in line with government policy outlined in PPG16 (Department of the Environment 1990). This watching brief and excavation was the third and final phase of archaeological work on this development site. The first being a desk based assessment in 2004 (Ball and May, 2004) with the second phase a series of evaluation trenches completed by ARCUS in August 2006. (Holderness, 2007) ? or is this to be integrated here ?

The development site centred on SK 3618 8758 lies immediately to the south of the elevated trackway of the Sheffield Supertram, to the east of the Park Square roundabout. The site consists of a sub-rectangular area used as a temporary car park until redevelopment. The area is bounded on the south side by Broad Street, with the former Broad Street Lane and part of the former Blast Lane running through the central area.

The mitigation programme consisted of the three elements outlined in project design (Holderness, 2006) based on the findings of the evaluation trenching:

- A watching brief on the bulk excavation of the basement of block C
- Sample excavation, environmental sampling and recording of the putative palaeo-channel
- A contingency to excavate any unexpected archaeological features discovered during the bulk excavation

In addition SYAS requested a third trench in the area of block D. (?):

Areas 1 & 2 were in the central area – block C with are 3 being block D to the west of Blast Lane..

At the commencement of archaeological works Areas 1 and 2 were covered by a tarmac surface, and area 3 with recent overburden.

The geology of the site is >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>.

This report is an assessment report, summarising the results from archaeological investigations at the site, and outlining the potential of the stratigraphic, artefact and environmental records for further analysis.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

An archaeological desk-based assessment of the application area was undertaken by ARCUS in 2004 (May, 2004) on behalf of Watkin Jones Student Accommodation. The conclusions of this report are briefly summarised here.

2 ARCHAEOLOGICAL BACKGROUND

An archaeological desktop assessment of the application area was undertaken by

ARCUS in 2004 (Ball and May 2004). The conclusions of this report are briefly summarised here.

In medieval times the proposal area was part of the ancient deer park of the manor of Sheffield, and the road which became Broad Street led out eastwards from the medieval town past the Shrewsbury Hospital, heading towards Park Gate and Park Hill.

Coal reserves under the hunting park had begun to be exploited by the end of the sixteenth century, and a 'coal yard' occupied the approximate area of the site by the time of Gosling's plan of 1736. These collieries were worked out during the course of the eighteenth century, and the area was laid out for urban expansion from about 1780, with Broad Street established, and houses constructed along the street frontage, some with workshops in the back yards. The north side of Broad Street Lane appears to have remained undeveloped, with fields and gardens present.

The Park Steel Works was built in 1833, with the rear part of the works located within the northern part of the proposal area, north of Broad Street Lane. The Park Works included cementation furnaces and crucible furnaces. The area east of the Park Works and north of Broad Street Lane was unfilled by courtyard housing before 1850, and a cutlery works was present among the courtyards by 1889. The Shrewsbury Works had been built at the western end of the site by 1850. Along Broad Street east of Blast Lane, the domestic and retail premises established in the late eighteenth century appear to have continued throughout the nineteenth century, with infilling of rear yard areas. The Blue Ball Inn was shown on the Fairbank plan of the 1780s and was still extant in 1960.

The Park Steel Works was demolished in 1898, and the railway sidings of the LNWR were built over the northern part of the site. Some truncation may have occurred during this process: hachures on the 1923 map indicate a cutting down to the sidings. The Park Rope and Canvas Works is shown south of Broad Street Lane in 1954, by which time the Shrewsbury Works had been partially rebuilt as the Howard Works, occupied by several small firms including silversmiths, cutlers and manufacturers of electro-plate.

The railway sidings and most of the buildings on the eastern part of the site had been demolished by 1970, and further demolition occurred during construction of the Park Square roundabout and Parkway dual carriageway in 1976. Construction of the Sheffield Supertram in 1993 involved demolition of the rear range of the Howard Works, and probably further truncation of the northern part of the site to create the steep slope present today. The rest of the Howard Works was demolished in 2002 following a rapid survey by RCHME in 1998.

Watkin Jones bored ten boreholes on the site as part of the determination of ground conditions. Examination of the borehole logs shows substantial depths of demolition rubble over the entire site, although the sloping northern area was not tested. Depths of rubble varied from 1.20m to 3.20m. The area of the Howard Works appears to have been comprehensively demolished during 2002, and no structures were identified in the borehole logs. Evidence for unfilled cellarage with surviving structures was encountered in the central area along Broad Street. To the north of Broad Street Lane up to 3.20m of rubble was encountered, somewhat surprisingly in the light of probable truncation in this area. Borehole records should not however be considered an adequate substitute for archaeological evaluation, due to the small areas tested.

During the archaeological field evaluation 7 trial trenches were excavated. Generally the level of archaeological preservation was poor, trenches 1 and 2 were archaeologically sterile, trenches 3, 4 and 5 contained fragmentary cellar walls, and trench 7 contained a shadow of a cellar that had been demolished and removed. Trench 6 contained that most substantial archaeological remains with the probable palaeo-channel and the remains of a cellar. Following consultation with Dinah Saich of the South Yorkshire Archaeology Service it was determined that further work would be appropriate on the probable palaeo-channel.

4 DEVELOPERS ACTIVITIES

The development will involve the construction of a number of blocks of flats of which Block C will be next to the location of Trial Trench 6 (**illustration ?**). This building will have a basement under the footprint of the building, which will require the bulk excavation of the footprint of the building and possibly a small extent beyond the footprint.

The bulk excavation will lower the ground to the level required for the basement slab of the building, this will vary but will be approximately 4m below present ground level.). The watching brief will be carried out primarily in the area of the Block C Basement floor plan and machining will cease at the top of the palaeo-channel.

Watkins Jones will undertake the bulk dig and will be responsible for ensuring that all services are disconnected and that shoring is provided as required to make the excavation safe.

5 AIMS OF THE ARCHAEOLOGICAL INVESTIGATIONS

The aims of the investigations were:

- To gather sufficient information to establish the presence or absence of archaeological remains within the proposed development area
- To determine the extent, condition, character, importance and date of any archaeological remains present
- To provide information that would enable the remains to be placed with their local, regional, and national context and an assessment of the significance of the archaeology of the site to be made

6 METHODOLOGY

All excavation and recording work was carried out in accordance with current industry guidelines (IFA 1999).

6.1 Machine stripping (general)

A 360º mechanical excavator, with an appropriate toothless ditching bucket, carried out the removal of twentieth- century overburden under the strict control of a professional archaeologist. A toothed bucket and breaker was used, where necessary, to remove any reinforced concrete or compacted modern deposits.

Machining ceased at the top of the first archaeological horizon, the trenches were cleaned and recorded by hand. Archaeological features and deposits were then excavated stratigraphically, to enable their date, nature, extent and condition to be properly assessed.

6.2 Recording

A full written, and photographic record was made of all archaeological features in the excavation area. All features were surveyed using a total station with detailed plans drawn by hand in areas of specific interest. All archaeological features encountered were recorded using the ARCUS standard recording system.

6.3 Survey Tie-in

Detailed survey work fixed the archaeological investigations into the National Grid. Temporary benchmarks and planning grids were also surveyed in and all drawings assigned spot heights related to Ordnance Survey Datum Levels in metres, correct to two decimal places.

6.4 Fieldwork Programme

The fieldwork was undertaken between December 4th 2006 and March ?? 2006 by ARCUS staff; Supervisor: Paul Dawson, Rob Barnett, Alex Southeran, Claire ?, Magdalena ?, Scott Lomax, Lauren Macintyre, ,Ashley Tuck, Alicia ????. Glyn Davies managed the project.

7 RESULTS

PROBLEMS !

Pot ID and dates necessary.

Lack of plans and some context sheets missing

Poor recording; no drawing points / levels on lotsa drawings

Cannot read Paul's handwriting

Structures described as deposits on ctx sheets

A total of *** contexts were assigned across three areas (**Illustration ….**). Contexts in each area were assigned according to area numbers (e.g. Area 1, 1000+, Area 2, 2000+). An inventory of the contexts is presented in Appendix 1 below. Provisional phasing, based on observed stratigraphic and spatial relationships, and the provisional dating of recovered artefacts, is presented here for each area.

n.b. only those shown on TST plan (where possible to relate to context record) and sketch plans and which could be identified from context record are discussed here, no site plans were drawn for area 1. sketch plans mostly without dimensions ?, also it is v.difficult if not impossible to tell what the structural relationships are from context record, not recorded pro forma on site ! It appears no excavation was undertaken on structures.

SOME LINEARS RECORDED IN AREAS 1 & 2 ARE THE SAME FEATURES APPARENTLY

7.1 Area 1

7.1.1 The provisional first phase in area 1 consists of cut features, some are intercutting, unclear what they cut ?? natural boulder clay ?? (it is unclear if some of these features are linears or pits), not numbered on TST plans. Some of these features sample excavated, some only appear to have been recorded in machine cut sections.

Cuts described as cutting cuts not fills in context record !

Pits; [1120], [1148] , [1139] cut by linears [1135] & [1132], [1148], [1182] cut by post hole [1188] & [1183]

Linears; [1131]=[1151] linear aligned n/s, [1135]=[1154] linear aligned n/s possibly recut of [1131] ?, [1142]=[1158] linear aligned n/s, [1146]=[1162] linear aligned n/s. [1156] pit or linear ?. [1163], [1174] cut by [1131],

Post holes; [1163], [1165], [1170], [1178], [1188] these are described as forming a line of postholes.

Further stratigraphic analysis required on these features.

7.1.2 The second ?? phase consists of brick and stone built remains of several buildings: These are prefixed **A B C** etc at this stage as group numbers were not allocated.

A consisted of [1029] a red brick wall aligned e/w bonded with pink-orange mortar and jointed to red brick walls of the same brick and mortar type; [1030] aligned n/s, [1031] no plan aligned e/w , [1034] aligned e/w & [1047] no plan aligned north / south forming a square ? structure, with [1031] being an internal dividing wall.

Sandstone slab floors inside this structure : [1032] no plan [1048], no plan [1032] was cut by a pit [1109] no ctxt sheet or plan. A drain [1075] lined with stone [1077] is apparently associated with **A**

Structure **B** to the north? CHECK formed by [1052] rb wall aligned e/w, bonded to rb walls [1067] aligned n/s, [1054]=[1055]=[1056] aligned n/s, & [1072] aligned e/w. Internal flooring of brick: [1063], [1083] & [1084] & [1106]; sandstone slabs: [1062], [1064], [1065], [1080] & [1095].

Structure **C** adjacent to west of rb wall [1054] part of structure **B** consisting of external ? rb walls; [1093] aligned n/s, [1096]/[1104] aligned n/s, [1097] aligned e/w, rb wall [1099] internal ?; flooring: [1101], [1102] & [1103] (all concrete) with [1105] & 1095 sandstone slabs

[1067] internal n/s rb dividing wall in **C**

Sandstone walls [1012] & [1013] both aligned n/s not located

rb walls **A B C** some in straight side/base cuts backfilled

Further stratigraphic, brick and mortar analysis required on these structures.

7.1.2 Area 2

The earliest phase of activity was represented in area 2 by linear features;[2099], [2101], [2103], [2201], [2206], [2208], [2210], [2212] &[2216] cutting natural strata (2012) / (2243). These were revealed below overburden deposits and buried soil (2115). Tree throws; [2018], (2019), [2258] & [2292] may belong here. Intercutting linears; (some only seen in section/not excavated in plan) [2101], [2097], [2099], [2103], [2165], [2353], [2356] pit or ditch ??, [2357] pit or ditch ?[2263],

[2103] same as [1142] ??

A possible palaeochannel at the west of area 2 was exposed and sampled for enviro, though may be not that old, finds in deposit may help date/phase here., maybe a marshy area people threw refuse into >

Phase 2 ? The truncated remains of a building [2021] (HOUSE ?)aligned east / west consisted of gritstone / sandstone slabs bonded with a matrix of grey silty clay (????) forming foundationsfor brick walls. Some of which were set in a shallow straight sided trench with a flat base.(Dimensions, courses surviving, depth of trench cut) Slight traces of red brick wall [????} were noted where ? sitting on the foundations. Two possible fireplaces were positioned centrally back to back with remnants of a north/south oriented dividing wall. Two similarly constructed parallel wall foundations ????m to the west aligned east / west were recorded and excavated. (Dimensions etc) Between these a gritstone slab floor [????} (ALLEYWAY INTO HOUSE/ REAR YARDS ETC?) below was a levelling deposit (????) for the slabs.

[2361] &[2137]buildings ??

Other structural elements, walls : [2003], [2005], 2014], [2016], [2029], [2030], [2031], [2042], 2042] , [2043], [2045], [2048], [2049], [2052], 2053, 2054, [2104],[2105], [2140], [2155], [2170]=[2171], [2175], [2194], 2199, 2218, 2241, 2296, 2347, 2361,

Floors/surfaces: 2044, 2046, 2047, 2050, 2055, 2063, 2106, 2112, 2132, 2133, 2159, 2253., 2259, 2278, 2286,

Wells/ drains/manholes:[2017], [2040], [2077], [2162], [2173], [2188],, 2190, 2217,

2270,

Others; 2176 fireplace, 2301 f/place, 2341 f/place,

Lauren's fireplace / chimney, fireplace thing which Scott dug , what do these belong to ? any association etc…

Area 3.

A machine trench 14 x 2 x 3.40m was excavated by 360. Below modern tarmac (3000) and hardcore (3001) were several deposits of modern infill (3002), (3003), (3004), (3005) and (3010) to a depth of 2.00m, these deposits overlay a reinforced concrete slab [3006]. This was removed by pecker which revealed integral strengthening beams to a depth of 3.35m, below [2006] was yellow boulder clay (3012). Remains of red brick walls were revealed at the north end; [3007] aligned east / west with gritstone window sill [3011], [3008] & [3009] were both aligned north / south. These were bonded with ??????? mortar and all were keyed together. An unbonded red brick wall [3013] 1.00m x 1.60m was also noted in the northwest corner at 2.00m depth. This butted a concrete beam, part of [3006] but was not bonded to it. The depth and instability of the trench sides meant no excavation took place, the deposits and structures were recorded and backfilled.

7.2 Area 2

8 DISCUSSION

8.1 Area 1

The results of the investigations show the site has been heavily truncated.

Phase 1. Several linear features, shallow pits and post holes (unclear where these are cut from, also difficult to locate on plans in relation to other features) represent the earliest phase in area 1. Also poss. Palaeo-channel (1010) (1015) (1114)(1115)cut numbers required

Phase 2. The remains of buildings in area 1 are presumably part of south range of the Park Steel Works built in 1833 and demolished in 1898 for the railway sidings etc…. just north of the former Broad Street Lane.

8.2 Area 2.

8.3 Phase 1 Linears-bedding trenches and intercut e/w stuff and palaeo channel etc. It is possible that the narrow linears 2201, 2206, 2208, 2210, 2212, 2216 represent horticultural activity in the form of bedding trenches. These may be part of the orchards and hop yards of the Manor of Sheffield mentioned in Harrison's Survey of 1637, (13 acres of orchard / hopyard described here)

8.4 Phase 2 housing / workshops etc. plots/buildings first appear on the north side of bBroad Street on . Fairbank's plan 1780 – 89, with further development shown on Fairbank 1808

8.5 Area 3

The deep layers of modern infill / overburden in area 3 showed this area to have been deeply truncated. Remains of brick walls and reinforced concrete are part of the former Shrewsbury or Howard Works. (brick / mortar type may help) The unbonded brick wall appeared to be a blocking of a cellar ?

8 ARTEFACTS

A total of **** artefacts were recovered from the excavation. By far the most common artefact was pottery (***). Other artefacts included clay tobacco pipes (***), glass (***), ferrous (**) and non-ferrous material (**), animal bone (***), leather (**) and miscellaneous objects **). The artefacts have been passed to the appropriate specialists for assessment and the resulting reports are reproduced below.

Pottery by Dr C. Cumberpatch

Introduction

The pottery assemblage from Broad Street (ARCUS 844c) was examined by the author on ???????? 2007. The brief for the work called for an assessment of selected contexts and an overview of the remainder of the assemblage. The assessment data is presented in Table 1 and is discussed below together with a broader overview of the whole assemblage. The abbreviations used in Table ? are explained in Table ?.

Discussion

Assessment

Further work

This assemblage is of significance in terms of both the site itself and of the wider history of Sheffield and its surrounding region. A full report on the pottery should include a complete catalogue of the material with a discussion of the assemblage in relation to other classes of finds (notably glass and clay tobacco pipes) with a view to refining the chronology of the site and of the assemblage itself.

The report should consist of the following elements:

- Full quantification of the assemblage by number of sherds, weight of sherds and estimated (maximum) number of vessels;
- Description of the pottery by ware type, decorative motifs and reference to relevant parallels and to other groups of finds from the site (notably the glass and the clay tobacco pipes);
- Limited and problem-orientated comparison with results obtained from other sites in the immediate area of the Broad Street excavation;

- Discussion of the significance of the assemblage for the interpretation of the site;

- Recommendations for illustration.

8.1 Clay tobacco pipe by

8.1.2 Glass by Dr H. Willmott

8.3 Ferrous metals by A. Thomas

8.6 Non-ferrous metals by

8.7 Animal bone by Dr G. Davies and

8.8 Miscellaneous Finds by

8.9 Ceramic Building Materials (CBM) by

9 STATEMENT OF POTENTIAL

10 PROPOSALS

The primary aims and objectives of further post-excavation analysis and reporting will be:

- To analyse and interpret the stratigraphic results from the site with documentary and cartographic sources and further artefact analysis
- To produce a coherent account of the archaeological and historical development of the Broad Street site
- To consider the site in relation to other contemporary sites within South Yorkshire and, if appropriate, beyond

To synthesise the archaeological and historical evidence from the Broad Street site, it is proposed that the results of the all investigations at the site are integrated into a single and final client report. The report will be illustrated with relevant maps, plans, sections and photographs.

A publication report will be submitted to an appropriate journal depending on the national, regional and/or local significance, and period significance, of the remains. ***It is anticipated that, at the very least, summary reports will be submitted to period journals such as Britannia, Medieval Archaeology and Post-Medieval Archaeology, and the regional journal Archaeology in South Yorkshire.***

11 BIBLIOGRAPHY

Department of the Environment, 1990. *'Planning Policy Guidance Note 16, Archaeology and Planning'*

Institute of Field Archaeologists, 1999. '*Standard and Guidance for Archaeological Field Evaluation'*

Ball, C & May, R., 2002. *'Archaeological desk-based assessment of Broad Street / Park Square, Sheffield'.* ARCUS 844.1

Harrison, J. 1637. *'An Exact & Perfect Survey & View of the Mannor of Sheffield'.* See ARCUS 413 Castle Markets DBA

Holderness, H, 2006. *Project design for archaeological mitigation on land at Broad Street, Sheffield'.* ARCUS 844c.1

12 ILLUSTRATIONS

13 APPENDICES

Appendix 1 - Context inventory

Appendix 2 – Sample inventory

Sample No.	Context No.	Type	Purpose of sample	Comments / notes
1	1010	Bulk	C14 date/General Biological Analysis	Palaeochannel remnant
2	1015	Bulk	?	Base of palaeochannel
3	1114	Bulk	C14 date / GBA	Fill of palaeochannel / ditch
4	1115	Bulk	C14 date / GBA	Fill of palaeochannel / ditch
5	1149	Bulk	C14 date / GBA	Fill of pit
6	1136	?	Plant macros / C14 date / GBA	Fill of ditch
7	1116	Bulk	C14 date / GBA	Fill of ditch
8	1147	Bulk	C14 date / GBA	Fill of ditch
9	1140	Bulk	C14 date / GBA	Fill of ditch
10	1143	Bulk	C14 date / GBA	Fill of ditch
11	1150	Bulk	C14 date / GBA	Fill of ditch
12	1166	Bulk	C14 date / GBA	Fill of post hole
13	1171	Bulk	C14 date / GBA	Fill of post hole
14	2102	Bulk	GBA	Fill of ditch
15	2120	Bulk	GBA	Fill of ?
16	2100	Bulk	GBA	Fill of ditch
17	2124	Bulk	GBA	Primary fill of ditch
18	2096	Bulk	GBA	Primary fill of ditch
19	2264	Bulk	GBA	Fill of ditch
20	2265	Bulk	GBA	Fill of linear
21	2267	Bulk	GBA	Fill of linear
22	2268	Bulk	GBA	Fill of linear
23	2302	Bulk	GBA	Fireplace/chimney deposit
24	2319/2320	Bulk	Macro ref.	Cobbled/mortar surface
25	2340	Bulk	C14 date	Palaeochannel ? fill

Appendix 2 Context inventory