

1&2 Howgill Street, Whitehaven, CUMBRIA



Archaeological Desk- Based Assessment, Evaluation and Recording



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Louise Hetherington

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SUMMARY

Following a proposals by Louise Hetherington (Planning Application 4/04/2611) for a residential development at Numbers 1 and 2 Howgill Street, Whitehaven, Cumbria (centred NX 9725 1788), Cumbria County Council Historic Environment Service (CCCHES) requested that an initial scheme of archaeological investigation be undertaken to further inform the planning process. This initial programme comprised a desk-based assessment and visual inspection followed by an archaeological evaluation. Following the acceptance of a project design to meet the requirements of the CCCHES brief for this work, Oxford Archaeology North (OA North) was commissioned to undertake the initial phase of work in June 2005.

The desk-based assessment examined a study area within a radius of approximately 500m of the proposed development site. This revealed a total of 30 sites, most of which related to the post-medieval development of Whitehaven. Two of these sites appeared to be at direct risk from the proposed development: an early eighteenth century bowling green (Site **26**) and a mid-eighteenth century row of terraced buildings known to have been demolished relatively recently (Site **19**). The visual inspection indicated the presence of well-preserved standing remains surviving as the rear boundary of the site.

The evaluation was undertaken in July 2005 and involved the excavation of two small trial trenches within the proposed development site to examine the potential for sub-surface remains. These trenches rapidly uncovered structural remains relating to the row of buildings, including floor surfaces, foundations and a cellar, all at a shallow depth and likely to be impacted upon by any proposed development on the site. During the fieldwork, the site was visited by Jeremy Parsons of CCCHES. Following the results of this initial phase of investigation, which were disseminated in a brief interim report, CCCHES issued a brief for the recording of one of the exposed cellars and the photographic recording of the property boundary wall, which was identified as the remains of the eighteenth century houses. Following acceptance of a project design and costs, OA North were commissioned to undertake this second phase of work, which was undertaken in September 2005.

Targeted exploratory machining to locate a cellar recorded a number of walls and surfaces relating to the mid-eighteenth century terrace known to have stood on the site. Through this operation, it was possible to relate archaeological features to specific structures seen on nineteenth century cartographic sources. One cellar at the northern end of the development site, relating to Number 2 Howgill Street, was emptied of rubble and fully recorded. A programme of photographic recording, to RCHME level 1 standards, was undertaken of both sides of the site boundary.

Although future groundworks associated with any development of the site will have a negative impact on the mid-eighteenth century buried and standing archaeological remains associated with 2-5 Howgill Street (Site **19**), the seriousness of this impact has been partially mitigated through the archaeological recording of a sample of the sub-surface remains and through the photographic recording of the rear boundary wall.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Louise Hetherington for commissioning the project and for her continued support and enthusiasm. Thanks are also due to Jeremy Parsons of Cumbria County Council Historic Environment Service, Jo Mackintosh of the County Historic Environment Record in Kendal, and all the staff of the County Record Office in Whitehaven for their assistance with this project.

The desk-based assessment was undertaken by Phil Jefferson who also conducted the evaluation, assisted by Dave McNicol. Christina Clarke and Jason Clarke undertook the recording of the cellars and the photographic survey. The report was compiled by Stephen Rowland, Phil Jefferson and Christina Clarke. The drawings were produced by Emma Carter, Christina Clarke and Marie Rowland and the finds were examined by Jo Dawson. The project was managed by Stephen Rowland, who also edited the report, together with Alan Lupton.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Cumbria County Council Historic Environment Service (CCCHES) were consulted by Copeland Borough Council regarding a planning application by Louise Hetherington (Planning Application 4/04/2611) for a residential redevelopment at Numbers 1 and 2 Howgill Street, Whitehaven, Cumbria (centred NX 9725 1788; Fig 1). In response, CCCHES issued a brief for an initial programme of archaeological investigation designed to determine the presence, preservation, date and location of archaeological remains within the development site (*Appendix 1*). This programme comprised a desk-based assessment and visual inspection, followed by an evaluation. Louise Hetherington requested that Oxford Archaeology North (OA North) submit a project design (*Appendix 2*) to meet the requirements of the CCCHES brief. Following the acceptance of the project design by CCCHES, OA North was commissioned to undertake the initial phase of work.
- 1.1.2 The desk-based assessment, undertaken in June 2005, comprised a search of both published and unpublished records held by the County Historic Environment Record (CHER) in Kendal, the Cumbria County Record Office in Whitehaven, and the archives and library held at OA North. In addition, a site inspection was carried out on the site of the proposed development, in order to relate the landscape and surroundings to the results of the desk-based assessment. The evaluation, comprising the excavation of two small trial trenches, was also undertaken in June 2005.
- 1.1.3 The positive results of the completed initial scheme of archaeological investigation meant that it was necessary for CCCHES to issue a second brief in August 2005 detailing a programme of mitigative recording of archaeological remains on the site (*Appendix 3*). Accordingly, OA North issued a second project design (*Appendix 4*) for the requested programme of recording of one of the cellars on the site and the photographic recording of the standing remains of an eighteenth century wall. This second programme of work was undertaken in September 2005.
- 1.1.4 This report sets out the results of the desk-based assessment in the form of a short document, outlining the findings, followed by a statement of the archaeological potential and significance using the criteria detailed in PPG 16 (DoE 1990). This is followed by the results of the subsequent evaluation trenching, of the cellar recording and of the photographic recording, a discussion of the results and finally, an assessment of the impact of the proposed development.

2. METHODOLOGY

2.1 PROJECT DESIGNS

- 2.1.1 Project designs (*Appendices 2 & 4*) to meet the full requirements of each of the CCCHES briefs (*Appendices 1 & 3*) were submitted by OA North in response to a request from Louise Hetherington. The project designs were adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 DESK-BASED ASSESSMENT

- 2.2.1 An area of 500m radius centred on the proposed development site was considered as the main detailed study area. Where appropriate, sites within a wider area were briefly considered to allow a greater understanding of the overall historical and archaeological context of the development area (*Section 3*). Sites within the survey area were collated within a gazetteer (*Section 4*) and the overall results analysed (*Section 5*) in accordance with the criteria used to assess the importance of a monument (as detailed in Annex 4 of PPG 16 (DoE, 1990)).
- 2.2.2 ***County Historic Environment Record (CHER):*** the County Historic Environment Record for Cumbria, held in Kendal, was consulted. The CHER consists of a database of known archaeological sites within the county, and is maintained by CCCHES. All sites recorded within the study area were accessed and an entry, including grid reference, sources and brief description was added to the gazetteer (*Section 4*).
- 2.2.3 ***County Record Office (CRO), Whitehaven:*** the County Record Office and Local Studies Library in Whitehaven holds a large number of original documents and maps for Whitehaven and the surrounding areas. It was visited both to consult early maps, which can allow the post-medieval development of the landscape and townscape to be observed, and also to examine other relevant documentary sources, such as deeds and trade directory entries, relating specifically to the development site.
- 2.2.4 ***Oxford Archaeology North:*** OA North has an extensive archive of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out both as OA North and in its former guise of Lancaster University Archaeological Unit (LUAU). These were consulted where necessary.

2.3 VISUAL INSPECTION

- 2.3.1 A visual inspection of the site and its immediate surroundings was undertaken to relate the existing landscape to any research findings and to determine the presence of any potential features of archaeological interest. The site

inspection was also undertaken to identify any areas of potentially significant disturbance to archaeological remains and to highlight any hazards or constraints to the undertaking of the subsequent fieldwork.

2.4 EVALUATION TRENCHING

- 2.4.1 The evaluation was required to examine a minimum of around 8% (equating to 12m²) of the total proposed development area. The small size of the development area and the presence of walls on three sides meant that there were limited options for the safe placement of the single trial trench, measuring 7m long by 1.7m wide. Due to the position of a service cable bisecting the proposed location of the evaluation trench, the trench was eventually excavated in two halves.
- 2.4.2 Under constant archaeological supervision, the overburden and hardcore surface within the trench was removed to the upper surface of the first archaeological horizon by a JCB fitted with a toothless ditching bucket. The archaeological deposits were then cleaned by hand and recorded. Small-scale interventions were located within the trenches to examine underlying deposits and to characterise observed features and phasing. Trenches were located by use of manual survey techniques.
- 2.4.3 All information identified during the course of the site works was recorded stratigraphically on *pro-forma* context sheets, using a system adapted from that used by the Centre for Archaeology Service of English Heritage, with sufficient pictorial record (including plans, digital photographs, colour slides and monochrome contact prints) to identify and illustrate individual features. Primary records were available for inspection at all times. All artefacts were recorded using the same system, and were handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

2.5 CELLAR RECORDING

- 2.5.1 Because it was known that the archaeological remains lay so close to the surface, following a CAT scan survey, a shallow transect was carefully machined across selected parts of the development area in order to locate the features identified during the evaluation. The cellar, likely to be that encountered during the evaluation, was located within an area 3m by 4.14m in the northern part of the site.
- 2.5.2 Once the cellar was located, the overburden and hardcore surface was removed under constant archaeological supervision by a mini digger fitted with a toothless ditching bucket to the first archaeological horizon. The mini digger, again under archaeological supervision, also removed the backfill of the cellar. The archaeological deposits were then cleaned by hand and recorded in detail as outlined in *Section 2.4.3*, above.

2.6 PHOTOGRAPHIC SURVEY

- 2.6.1 A series of perpendicular photographs were taken using 35mm SLR and digital cameras to give complete coverage of both elevations of the wall that formed the rear boundary of the development area. A scale bar of appropriate dimensions was used throughout. Detailed shots were also taken of specific features located within either of these elevations. A complete photographic archive was produced using colour slide, monochrome prints and digital images.

2.7 ARCHIVE

- 2.7.1 A full professional archive has been compiled in accordance with the project designs (*Appendices 2 & 4*), and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). On completion of the project the field archive and a copy of the report will be deposited with the Cumbria County record Office, Whitehaven. Any finds will be deposited with the nearest museum that conforms to the Museums and Galleries Commission (MGC) archiving guidelines (MGC 1992).

3. BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 The development site at 1 and 2 Howgill Street is located at NX 9725 1788, situated around 200 metres south of the main urban centre of Whitehaven (Fig 1). It lies towards the northern end, and on the east side, of Howgill Street, which connects Catherine Street to the south and Irish Street to the north. The site is currently a 150m² rectangular parking area surfaced with hardcore and gravel and is bounded on three sides by existing buildings or property boundaries. The fourth, western, edge opens onto the Howgill Street footpath. The site is level at about 7m aOD.
- 3.1.2 The site lies within the area defined by the Countryside Commission as the West Cumbria Coastal Plain, typified by a landscape of varied open coastline with sections of dunes, shingle and cliffs with gently undulating ground inland (Countryside Commission 1998, 25). Whitehaven itself is situated around the mouth of the Pow Beck, with the main urban growth restrained by the steeply rising hills to the north and south (CCC n.d., 2).
- 3.1.3 The underlying solid geology of Whitehaven consists of mainly of Westphalian Coal Measures with associated limestone and overlain in places by small outliers of Permo-Triassic sandstone (Countryside Commission 1998, 27). On the coast either side of Whitehaven's harbour the Coal Measures rock formations, particularly sandstone, outcrop as substantial cliffs, most notably to the south at St Bees head (*ibid*).

3.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.2.1 **Introduction:** the historical and archaeological background is based principally on secondary sources and is intended to give a general overview of the area to allow greater understanding of the context of the site and the results of the assessment. Where relevant, sites from the Gazetteer (*Section 4*) are referred to, but will be discussed in greater detail in *Section 5*.
- 3.2.2 **Prehistoric:** the earliest known activity within the Whitehaven area is represented by two Mesolithic settlement sites located on the cliffs north of St Bees, c 5km to the south-west of the development area (Hodgkinson *et al* 2000, 68). Evidence of Neolithic activity has been found closer to the study area and comprises two rough-out stone axes found at Howgill and at Meadow View Brickworks (Richardson 1980; CHER 1189 and 11954). Although no longer extant, the Neolithic Yew Bank stone circle was known to have existed to the east of Whitehaven (Burl 1976; CHER 1178). No Bronze Age or Iron Age sites have been identified within the vicinity of the study area during this assessment.
- 3.2.3 **Roman:** although two unprovenienced Roman coins have been recovered from within Whitehaven (Site **25**), there is no current evidence for Roman activity

within the environs of the town itself. The nearest known Roman site is Moresby fort, which lies approximately two kilometres from the centre of Whitehaven on a headland above Parton (Routledge 2002, 7). The fort, potentially identified as the *Gabrocentio* mentioned in the *Notitia Dignitatum* and by inference with the *Gabrosentum* of the Antonine Itinerary, was constructed between AD 128 and AD 138, with evidence suggesting occupation lasted until the fourth century (Shotter 1997; Salway 1981, 177; LUAU 2001, 10 Routledge 2002, 7). Evidence for a cemetery possibly associated with the fort was found at Moresby Hall and two Roman altars are also known from the area (Jefferson 1842, 368; Routledge 2002, 8). The route of a road thought to run between Ravenglass and Moresby would have run relatively close to present day Whitehaven (LUAU 2001, 10).

3.2.4 **Early medieval:** no early medieval remains are known from the development area and, indeed, little is known about the Dark Ages in Cumbria, not least because of a lack of recognisable and datable material culture following the end of Roman administration c410 AD (O'Sullivan 1985). The native British kingdom of Rheged is known to have expanded into the Solway plain by the fifth century and, at its height, is thought to have extended north of the Solway and as far south as the river Duddon (Higham 1986). It is possible that what may have been a short-cist cemetery at Moreseby, c2km to the north of Whitehaven dates to this post-Roman, Early Christian period (O'Sullivan 1985). On the West Cumbrian coastal plain the most common physical remains are of ecclesiastical sites, of which the closest to Whitehaven is the putative monastic site at St Bees, c5km to the south-west. Traditionally, the founding of the monastery is attributed to the mid-seventh century Irish saint Bega and is mentioned in the works of Bede (Colgrave and Mynors 1940). By the mid-seventh century, Cumbria had been incorporated into the kingdom of Northumbria (Kirkby 1962) and an Anglian influence can be seen on local place names (Rollinson 1996). Although there is very little settlement evidence from this period, it has been suggested that curvilinear churchyards (of which around 30 survive in some form in Cumbria and continue in use into the present, including three within 15km of Whitehaven), may well be of Anglo-Saxon origin (O'Sullivan 1985).

3.2.5 From the later ninth century, the Norse exerted a considerable influence on the North West and the impact of their settlement is frequently reflected in place names (Whelan 1860; Routledge 2002, 8). The name Whitehaven itself contains three such Old Norse elements: *hvit-hofud-hafn* (Lee 1998, 92). *Hvit-hofud* is a reference to a white headland, while the *hafn* refers to a haven or harbour; the combined name, therefore, describes a harbour beneath a white headland. The final element, *hafn*, is a remarkably early example of the usage of this element in an English placename (Armstrong *et al* 1971). Other examples of Viking Age activity in the area include concentrations of Scandinavian sculpture around Workington, c 10km to the north of Whitehaven and around Egremont, c 5km to the south (Higham 1985). Other parts of the North West, including the former kingdom of Rheged, returned to British hands, this time in the form of the kingdom of Strathclyde, ruled from Dumbarton (Morris 1973). Thenceforth, Cumbria was disputed between

England and Scotland, and was so poor in 1086 that the area was not assessed for taxation. Whitehaven is not, however, mentioned in the Domesday Book.

- 3.2.6 **Medieval:** A number of twelfth century documents refer to activities in and around Whitehaven. During the early twelfth century, Whitehaven become part of the lands of the Priory of St Bees, which had been re-founded soon after 1120 by William, Baron of Coupland (Routledge 2002, 9; CCC n.d., 5). The neighbouring township of Hothwaite, possibly including land that would later be the site of Whitehaven Castle (Site **09**) (Hay 1987, 15), was also given to the Priory of St Bees by Alice de Rumelly with the rights to cultivate the land, manufacture salt and control the fisheries in the port of Whitehaven (CCC n.d., 5). By this time, Whitehaven had become a township (Hay 1987), the boundaries of which extended from the mouth of the Pow Beck to just south of Howgill Street, before turning east towards the current hospital, before then turning back towards the harbour area and the mouth of the Bransty Beck (CCC n.d., 5). A document of 1172 records that Whitehaven's port was used to furnish shipping for the Neville family of Raby Castle to transport their quota of soldiers for Henry II's conquest of Ireland (CCC n.d., 5).
- 3.2.7 Records from St Bees also provide some evidence for continuing activities during the thirteenth and fourteenth centuries with references to coal mining and quarrying in the Manor of Arrowthwaite along the west side of the Pow Beck and the mention of a vault in Whitehaven used in the handling of coal and quarried material (CCC n.d., 5). Within the survey area, the only medieval archaeological evidence comprises the late thirteenth or early fourteenth century Piscina from St Nicholas Church (Site **28**).
- 3.2.8 **Post-medieval:** Whitehaven's importance appears to have declined in the late middle ages and early post-medieval period, a 1566 survey recording only six fisherman's cottages and a single boat (Cook 1993, 6) and, it was not until 1654 that the right to hold a market in Whitehaven was granted (CCC n.d., 13). Following the dissolution of monastic lands in 1539, the Lowther family bought much of the former manor of St Bees, including Whitehaven, in around 1600, while in 1666 Charles II granted Sir John Lowther all the derelict ground in Whitehaven (Nicolson and Burn 1777, 43). The presence of salt and coal within the local area meant that the town was well-placed for the export of such goods from the Lowther family's estates to Ireland and beyond, in return receiving large volumes of foreign imports (of which tobacco was the most important) (Routledge 2002, 14). Accordingly, the town's first pier was constructed between 1633 and 1634; it is possible that the street grid was laid out soon after. Between 1685 and 1702 the population of Whitehaven virtually tripled from 1089 to 2972 inhabitants, peaking at around 16,000 in 1785 as the town became one of England's seven most important ports outside of London.
- 3.2.9 This growth can be largely attributed to the tobacco trade, which in Whitehaven reached its zenith in around 1740, outstripped only by London, and to the winning and export of coal, in which Whitehaven was second only to Newcastle (Barfoot and Wilkes 1794; COLLIER 1991, 2-3). Slavery, too, was important to eighteenth century Whitehaven's economy, so that 'Whitehaven merchants were probably the fifth largest group of slave traders

in Britain in 1750-1769' (Richardson and Schofield 1992, 184). The wealth generated by trade enabled the construction of a number of municipal buildings, including St Nicholas's Church in 1693 (Site **14**), Trinity Church in 1715 (Site **13**), Whitehaven Castle in 1769 (Site **09**), the Ginns Fever Hospital in 1819 (Site **20**) and the Infirmary in 1830 (Site **11**).

3.2.10 **Post-medieval industries:** the planned nature of the town, the patronage of the Lowther family and the increasing capability of the harbour helped to develop a diverse range of industries, many of which are well-represented within the study area (Fig 2). The significance of coal, exploited in Whitehaven since the Middle Ages until depletion led to the closure of the last pit, the Haig, in 1986 (CCC n.d.), is illustrated by a number of mines around the development area which, by 1750 were producing 200,000 tons of coal a year (Routledge 2002, 24). These sites include the Duke Pit (Site **01** - 300m to the north-west) and the Ginns (Site **24** - 450m to the south) where a post-mill was constructed between 1681 and 1700 to remove water from the coal mines (Tyson 1988, 189) and, at the same site one of the earliest steam pumping engines was leased and set up in 1715 (Jefferson 1842, 399). The Thwaite Pit Coal Mine (Site **08** - 500m to the south-west of the development area) was sunk in 1737, followed closely by the construction of Dr William Brownrigg's laboratory (Site **27** - 300m to the south-west) in 1743 for his investigations into the causes of firedamp in coal mines (Bowd 2003). The exportation of this material is illustrated by Site **07**, the coal hurries on the west strand of the south harbour.

3.2.11 In addition to the local natural resources of coal and salt, spinning, weaving and textile manufacture was important, as well as the production of copperas, glass and pottery. Such industries are well represented within the study area. The Preston Street Pottery (Site **21** - 300m to the south of the development area), one of at least three potteries in Whitehaven, opened in 1813 and was still manufacturing 'brown and black' earthenware in 1847 (Mannix and Whellan 1847, 404). Whitehaven Copperas Works (Site **22**), on the southern edge of the study area, was visited by the Swedish industrial spy Angerstein in 1754 (Berg and Berg 2001, 285-86). Copperas, or green vitriol, utilised pyrites, a probable by-product of coal mining, and was used for numerous industrial processes in the production of paper, tanned hides and textiles. The glassworks (Site **29**) appears to have been in operation between 1732 and 1754 and featured a furnace of innovative design (OA North 2004a).

3.2.12 Trading and ship fitting was a major influence on the town's manufacturing. Within the study area, such industries are represented by the Patent Slip (Site **18**), built in 1822 for hauling ships ashore, a thread manufacturers (Site **30**), built by 1815 and three sawmills (Sites **12**, **15** and **16**). A number of anchor smithies, blockmakers, sail manufacturers and rope-makers were present in the wider town (COLLIER 1991).

3.2.13 Howgill Street would appear to have attracted several education establishments, examples of which are documented within the trade directories. Pigot notes one school in 1823 and two by 1834, both still in existence in 1847 (Mannix and Whellan 1847). The most notable educational establishment on Howgill Street was the Trinity Church National and Sunday

School, first opened in 1852 on the east side of the street and which expanded considerably over the nineteenth century. In 1933 the school took over the old buildings of the former infirmary a short distance down the road on the west side of the street (Routledge 2001, 95).

- 3.2.14 Whitehaven was well-provided for bowling greens with a number being recorded around the edges of the town through the eighteenth and nineteenth centuries. The oldest, Low Bowling Green (Site **26**), was laid out around 1705 and lies within the development area. The lease was surrendered in 1734 and the land was subsequently subdivided into smaller parcels for development, including 62 yards of street frontage on Irish Street and a gap of 8 yards to create Howgill Street (Godwin 1990, 273). The corner plot, 21 Irish Street, covered an area of 11 yards in width by 30 yards depth and, in 1734, is known to have belonged to a widow, Jane Lemon, before the single plot was subdivided in 1741 under the ownership of John Richardson, a carpenter (Collier 1991). Howgill Street's first properties were developed in a piecemeal fashion between 1736 and 1742. It is known from documentary and cartographic sources that 2-5 Howgill Street (Site **19**) had been constructed within the western plots by 1742, an area corresponding exactly to the current development area. Numbers 2-5 would appear to have been a terrace of four buildings, three storeys high and of single cell configuration. The ground plan of at least one of the buildings was recorded by the RCHME (Collier 1991) and several recent photographs of the terrace are known to exist (*Front cover*), showing the buildings in a dilapidated state. The terrace has recently been demolished as a result of wider slum clearance programmes.

3.3 MAP REGRESSION ANALYSIS

- 3.3.1 A number of cartographic sources were consulted during the survey allowing the development of Whitehaven in general and the site in particular to be examined. This provided further information on sites included in the CHER, as well as ascertaining any areas of disturbance within the proposed development area. Although the layout of the town seems to have been planned at an early date, individual plots were generally sold and built upon separately, so that there was no concerted or uniform development programme (Collier 1991).
- 3.3.2 **Andrew Pellin's Map of Whitehaven, 1695** (Fig 3): this map, and Pellins' two later maps of 1699 and 1705, were commissioned to enable informed discussion between the absent Sir John Lowther and his agents (COLLIER 1991). Although there is some damage to the map, it is possible to discern the layout of the existing buildings along with the projected lines of streets and their associated plots of land. The area around the proposed development area appears to be empty, although there are some projections for the future course of Irish Street.
- 3.3.3 **Andrew Pellin's Map of Whitehaven, 1699** (Fig 4): as with Pellin's 1695 plan, nothing appears to be present close to the proposed development area. Within Whitehaven itself, it can be seen that a limited amount of house-building has occurred on previously vacant plots around the town centre.

- 3.3.4 ***Andrew Pellin's Map of Whitehaven, 1705*** (Fig 5): in comparison to the 1699 plan, significant changes have occurred. New streets and a greater degree of infilling has occurred on the southern side of the town and Irish Street appears for the first time. On the southern side of Irish street is the layout of the bowling green (Site 26) which covers the proposed development area. Within the bounds of the green are a number of small buildings, presumably housing the rooms for entertainment (Godwin 1990).
- 3.3.5 ***Hodskinson's 1783 Town Plan of Whitehaven on Thomas Donald's Map of Cumberland, 1774 (Surveyed 1770)*** (Fig 6): Whitehaven was one of three town plans shown on Donald's map of Cumberland (Hindle 2002). Although not showing the detail of individual properties and structures, it does mark the location of built-up areas and groups of buildings, which are shown as hatched lines on either side of the towns streets, with mottling behind to denote backyard plots. The plan shows the location of Howgill Street, the western side of which has largely been developed. Towards the northern end of the east side of the street, a short terrace of buildings, slightly separated from the rear of those properties fronting Irish Street, coincides with the present development area and are the only structures on that side of the street. Unlike many of the town's buildings, including those on the western side of Howgill Street, there is a lack of mottling behind the hatching of the buildings within the development area, possibly indicating that these properties had no rear yards.
- 3.3.6 ***Plan of Whitehaven, 1790, Hutchinson, 1794*** (Fig 7): this map illustrates the town in much greater detail than the 1774 map and shows individual buildings. The terrace at the north end of the east side of Howgill Street can be seen to comprise five similarly small-sized buildings. These buildings very clearly back onto the sides of those on Irish Street, with very little provision for backyard space. As depicted on the 1774 map, the northern side of Number 1 Howgill Street is separated from the rear of Number 21 Irish Street by a narrow yard or alley. Another, slightly larger building has been added to the southern end of the terrace. The rear of this building adjoins further new eastward development to the rear of Irish Street, opposite an area of vacant (formerly meadow) land.
- 3.3.7 ***Plan of Whitehaven, Cadell and Davies, 1815*** (Fig 8): as with the 1774 plan, the level of detail for individual properties on this plan is not high, with development generally shown as continuous and regular areas of hatching flanking each street. The western side of Howgill Street appears relatively unchanged and, although there are minor changes to the shape of the row of buildings on the east, it does not appear to have seen any major development and the gap between the terrace within the development area and the buildings on Irish Street is still present. One of the open areas at the southern end of Howgill Street now contains the site of Bell and Braggs Factory (Site 30), built on former meadow land to the south-east of the development area.
- 3.3.8 ***Wood's Plan of Whitehaven, 1830*** (Fig 9): this plan shows the development area in more detail than the previous map. Although individual properties are shown, their representation is much more stylised than that of the 1790 map, most buildings and plots simply being depicted as hatched rectangles.

Curiously, the terrace within the development area is shown as a row of four rather than five, as on the 1790 map) equal-sized buildings set between the slight gap to the rear of the Irish Street properties to the north and the larger building to the south. There is no further building work along the eastern side of Howgill Street, which remains an area of open land. On the south-western corner of Howgill Street the infirmary (Site 11) is now present and a number of new boundaries and structures exist around the Bell and Co. factory (Site 30).

- 3.3.9 ***Ordnance Survey 1863, First Edition, 10":1 mile*** (Fig 10) the highly detailed First Edition OS map of Whitehaven shows further developments within the Howgill Street area. The land to the rear of Howgill Street and Irish Street would appear to be occupied by a number of small properties around Fisher Yard, which may have existed as early as 1790, but does not seem to have been named as such at that point. The Infirmary (Site 11) can be seen to have increased in size and on the eastern side of the street the original row of buildings have been added to by the construction of an entrance to a timber yard and the Trinity Church National and Sunday School. Within the development area, the configuration of the buildings within the terrace is different to that indicated on Wood's map of 1830. Rather than four equal-sized properties, five are now shown, which, while equal in width, the northern two are slightly longer while the southern three appear to have short yards with possible outbuildings. The small yard that separates the rear of the Irish Street properties from the Howgill Street terrace is still present, but the map shows it to be separated from Howgill Street by a wall and possibly to contain outbuildings or lean-to structures. A pump is also indicated against the northern wall of Number 1 Howgill Street.
- 3.3.10 ***Ordnance Survey 1865, First Edition, 25":1 mile*** (Fig 11): this larger scale map shows no change within the area of the proposed development; however, two further buildings have been added to the south of the Trinity National and Sunday School.
- 3.3.11 ***Ordnance Survey 1899, Second Edition, 25":1 mile*** (Fig 12): this map is broadly similar to the 1865 edition. There are no notable changes within the development area itself, but of particular significance to the preservation of at least part of the Howgill Street terrace is the incorporation of Number 1 with an adjoining property on Irish Street, by building across the back alley. Within the surrounding area, the Trinity Church National and Sunday School has been extended northward to occupy a formerly vacant plot on Howgill Street, while the two timber yards, that to the south of the infirmary and that to the rear of Howgill Street and Irish Street, are served by a tramway which runs parallel to Richmond Terrace (formerly Cricketfield Lane) and along the newly-built Barracks Road. The west side of Mill Street has also been developed, suggesting an increasingly residential character for this part of the town
- 3.3.12 ***Ordnance Survey 1925, Third Edition, 25":1 mile*** (Fig 13): as with the 1899 map, no changes are shown in the general layout of the proposed development area. There have, however, been one or two local changes to the buildings of Howgill Street and Irish Street. Principal among these is the expansion of the school into the area formerly occupied by the Timber Yard. All of the

timberyard structures have been demolished and replaced by large new buildings on Barracks Road and Irish Street. The old school building remains, but it is uncertain whether its function has been retained. Also of relevance is the possible modification or rebuilding of the building that bounds the southern edge of 2-5 Howgill Street. The building seems to have been extended to the east to incorporate all of what was formerly the backyard of the property.

- 3.3.13 ***Ordnance Survey 1938, Fourth Edition, 25":1 mile*** (Fig 14): the proposed development area still appears to have had no fundamental changes to the general layout of the buildings. Within the wider context of Howgill Street, the infirmary has become a school and the second plot to the south of 2-5 Howgill Street, which was empty in 1899, is now marked as yet another school.
- 3.3.14 ***Ordnance Survey 1:10,000, current edition (1990)*** (Fig 2): the current edition map lacks a lot of the detail of the previous editions as no property boundaries are shown. It does, however, suggest that a number of changes have taken place since 1938. The development site is still shown as being occupied by buildings but it would appear to be the case that any buildings within the two long plots to the south of the development area have been demolished, leaving a large gap to the rear of the Irish Street properties and the start of the remaining properties on the east side of Howgill Street. Further, there would appear to be some modification to the former Trinity Church National School building, adjoining it to several other structures in the area.

3.4 ARCHAEOLOGICAL INTERVENTIONS

- 3.4.1 No previous archaeological work has been undertaken within the proposed development area, although a number of archaeological investigations have occurred within Whitehaven. An excavation of the old fort in 1978 revealed evidence of the 1741 defences and some of its ground plan (CCC n.d., 3; Taylor and Richardson 1979). In 1999 a watching brief was undertaken by OA North in their former guise of Lancaster University Archaeological Unit (LUAU) during wastewater improvement works between Whitehaven and Parton, which revealed no significant archaeological remains (OA North 2004a). In 2004 a desk-based assessment was undertaken by OA North on land at Preston Street, approximately 300 metres south of the current development area (OA North 2004b) revealing the importance of the industrial heritage of the area. Also in 2004, OA North undertook a desk-based assessment and evaluation of land at Castle Mews, the site of the former Riding School (Site 10), which revealed structures and surfaces possibly relating to the nineteenth century buildings of the Riding School (OA North 2004a). This was subsequently followed in 2005 by limited excavation in that area, which did not discover any further features of significance (OA North 2005).

3.5 SITE VISIT

- 3.5.1 The site visit identified the standing remains of a stone-built wall running off the back of the Irish Street properties along the rear boundary of the development area. The wall, originally stone-built but latterly modified in brick and stone, is likely to represent the rear property boundary of the recently demolished terrace of 2-5 Howgill Street (Site **19**). The north end of the wall contained both a ground and first floor fireplace, with the iron grate still remaining in the lower fireplace, indicating that at least one of the Howgill Street Buildings had been extended to completely fill the plot. The northern edge of the development site was defined by an existing building that has been incorporated into the Irish Street properties. This consists of a structure separated from the Irish Street frontage by a yard with a blank wall against the site topped by a single pitched roof. This configuration very closely matches the results of the map regression analysis and the building is likely to be either the original Number 1 Howgill Street, surviving in a heavily modified state, or, an extension built on the site between 1865 and 1899.
- 3.5.2 The development site consisted of a flat area of gravel covered temporary car parking with patches of grass and small undergrowth around the edges. Remnants of concrete and stone footpath or side alley were present along its southern edge. There were no visible signs of services within the development area although manholes and service covers on the street suggest there may be services running along the street frontage.
- 3.5.3 Of interest to the development area in general was the fact that the current configuration of buildings on the east side of Howgill Street bears little resemblance to earlier cartographic representations. It is highly likely that all of the buildings south of the development area have been recently built, albeit in a complementary style to much of Whitehaven's historic architecture.

4. GAZETTEER OF SITES

Site number	01
Site name	Duke Pit Fan House, Colliery
NGR	NX 9697 1806
Site type	Colliery
Period	Post-medieval (Victorian)
CHER No	4166
Stat. Des. No.	Scheduled Monument (SM27782)
Sources	CHER; Marshall & Davies-Shiel 1977
Description	Duke Pit stood immediately east of Wellington pit and was originally designed to have the appearance of a medieval castle. The fan house consists of a nineteenth century vaulted brick and sandstone structure around the Guilbal fan (revealed during collapse in 1969), which was used for the ventilation of the Duke Pit Coal Mine. The building measures approximately 20m square and its scheduled status also includes a number of associated upstanding and buried remains.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	02
Site name	Ornamental Stone Base
NGR	NX 9766 1778
Site type	Ornamental Stonework
Period	Post-medieval
CHER No	N/A
Sources	OA North 2004a
Description	Ornamental stone base (possibly for fountain) in three segments observed during archaeological works on south side of Whitehaven Castle. Lowest segment 2m diameter, second 1m and upper is octagonal in form with carvings on the faces. Possibly moved to this spot during as a result of recent renovations at Whitehaven Castle.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	03
Site name	Somerset House, Duke Street
NGR	NX 9768 1812
Site type	Building
Period	Post-medieval (Georgian)
CHER No	5459
Stat. Des. No.	Listed Grade II*- 26195
Sources	CHER, OA North 2004a; Pevsner 1967
Description	An eighteenth century three-storied building of coursed stone with a Georgian gothic porch and three-light windows with small panes and stone mullions on each floor.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	04
Site name	Newton Foundry
NGR	NX 9720 1780
Site type	Foundry
Period	Post-medieval (Georgian)
CHER No	5512
Sources	CHER; OA North 2004a; OS First Edition 1865
Description	The site and remains of the former Newton Foundry, a “gothic” style structure which existed in 1815, and lies upon the site of the earliest known foundry in Whitehaven.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	05
Site name	Nelson Terrace Windmill
NGR	NX 9685 1785
Site type	Windmill
Period	Unknown
CHER No	11964
Sources	CHER; OS First Edition 1865
Description	Site of a windmill marked on the First Edition Ordnance Survey map, also marked close-by is the position of a well.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	06
Site name	Royal Cumbria Military Barracks
NGR	NX 9736 1780
Site type	Barracks
Period	Post-medieval
CHER No	11967
Sources	CHER; OA North 2004a; OS First Edition 1865
Description	Location of the former Royal Cumbria Military Barracks, built on the site of the Bell and Co thread factory. The barracks was divided into a guardroom, two offices, an orderly room, a block of four cells and a large armoury. There was another small block attached to the main block, plus a band room in the south-west corner of the yard, a magazine in the south-east corner and a bake house against the south wall.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	07
Site name	Coal Hurries on West Strand
NGR	NX 9696 1823
Site type	Railway
Period	Post-medieval
CHER No	12836
Sources	CHER; OS First Edition 1865
Description	Site of Coal Hurries for the transportation of coal onto waiting ships.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	08
Site name	Thwaite Pit Coal Mine
NGR	NX 9684 1758
Site type	Colliery
Period	Post-medieval (Georgian)
CHER No	12840
Sources	CHER
Description	Substantial site covering the Thwaite Pit Coal Mine, first sunk in 1737.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	09
Site name	The Flatt/Whitehaven Castle
NGR	NX 9772 1784
Site type	Country House/Hospital
Period	Post-medieval
CHER No	12841
Stat. Des. No.	Listed Grade II- 26205
Sources	CHER; Cadell & Davies 1815; Wood 1830; OS First Edition 1865; Mannix & Whellan 1847; Pevsner 1967; OA North 2004a
Description	In 1675 a mansion known as the Flatt owned by Sir George Fletcher of Hulton was bought and improved/extended by Sir John Lowther. In 1769 it was rebuilt in current

	form by Sir James Lowther, Earl of Lonsdale, who renamed it Whitehaven Castle (Pevsner 1967). Mannix and Whellan Directory of 1847 suggest that it is traditionally believed to be on the site of an ancient ruin, possibly a stone circle.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	10
Site name	Whitehaven Riding School
NGR	NX 9771 1776
Site type	Riding School
Period	Post-medieval
CHER No	12842
Sources	CHER; OA North 2004a; OS First Edition 1863
Description	Site of a Riding School adjacent to Whitehaven Castle marked on the 1863 First Edition Ordnance Survey map
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	11
Site name	Whitehaven Infirmary
NGR	NX 9722 1781
Site type	Hospital
Period	Post-medieval (Regency)
CHER No	12843
Sources	CHER; OS First Edition 1863
Description	Formerly a house owned by Thomas Hartley, the Whitehaven and West Cumberland Infirmary was opened on the 1st May 1830. Further wards were paid for in 1857 and it was replaced as a hospital by Whitehaven Castle in 1924. The grounds appear to have belonged to the Grammar School by 1962.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	12
Site name	Richmond Terrace Sawmill
NGR	NX 9724 1778
Site type	Saw Mill
Period	Post-medieval
CHER No	12844
Sources	CHER; OA North 2004a; OS First Edition 1865
Description	Site of a sawmill marked on 1865 First Edition Ordnance Survey mapping off Richmond Terrace, located behind the Infirmary.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	13
Site name	Trinity Church
NGR	NX 9745 1792
Site type	Church
Period	Post-medieval (Georgian)
CHER No	12845
Sources	CHER; Cadell & Davies 1815; OS First Edition 1865; OA North 2004a
Description	Trinity Church and associated graveyard was constructed by 1715 by James Lowther and other inhabitants. It was demolished in 1949.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	14
Site name	St Nicholas Church
NGR	NX 9741 1814
Site type	Church

Period	Post-medieval
CHER No	12846
Stat. Des. No.	Listed Grade II- 26176
Sources	CHER; Pellin 1695; OS First Edition 1863; Hay 1987; OA North 2004a
Description	Old chapel dedicated to St Nicholas is recorded in 1642, which was replaced in 1693 by a newer building by Sir John Lowther and some local inhabitants. This was further enlarged by 1746 with a fine interior. In 1883 a new church was built; however, the main building was destroyed by fire in 1971 leaving only the tower standing.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	15
Site name	Catherine Street Sawmill and Granary Yard
NGR	NX 9751 1792
Site type	Saw Mill
Period	Post-medieval
CHER No	12847
Sources	CHER; OA North 2004a; OS First Edition 1863
Description	Sawmill and granary shown on the large scale 1863 First Edition Ordnance Survey map. During reign of George III two field guns were apparently stored here and taken annually to the quay to celebrate the King's birthday.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	16
Site name	Irish Street Sawmill
NGR	NX 9733 1786
Site type	Saw Mill
Period	Post-medieval
CHER No	12848
Sources	CHER; OA North 2004a; OS First Edition 1863
Description	A sawmill and timber yard situated on Irish Street, recorded as owned by J and W Jackson in 1883.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	17
Site name	Scotch Street Steam Mill
NGR	NX 9759 1821
Site type	Steam Mill
Period	Post-medieval
CHER No	12850
Sources	CHER; OA North 2004a; OS First Edition 1863
Description	Site of a steam-powered corn mill probably run by a Hamilton in 1847.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	18
Site name	Patent Slip
NGR	NX 9715 1821
Site type	Shipyard
Period	Post-medieval (1822)
CHER No	12853
Sources	CHER; OS First Edition 1863
Description	The patent slip was a device designed for hauling ships up for repair work without the need for a dry dock. The Whitehaven slip was constructed for Lord Lonsdale by Mr Peile around 1822 and was the most complete and extensive at the time.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	19
Site name	1-5 Howgill Street
NGR	NX 9725 1788
Site type	Building
Period	Post-medieval - c1741
CHER No	N/A
Sources	Hodkinson 1774; Hutchinson 1790; Wood 1830; Mannix & Whellan 1847; OS First Edition 1863; OS Second Edition 1899; Collier 1991; Site Visit
Description	A short terrace of houses at the north end of the eastern side of Howgill Street. Where detail is shown, all cartographic sources (including Hutchinson 1774 and OS First Edition 1863) suggest the presence of five buildings, with the exception of Wood's 1830 map, which shows only four within the same area. Photographs of the buildings (Collier 1991) suggest that the three-storeyed structures of Numbers 2-5 were of similar build, although more unique features seem to have been incorporated on some (for example, the scroll-pedimented door frame of Number 4, attributed by Collier (1991) to c1740). Buildings originally of single-cell construction (Collier 1991). It is difficult to be certain whether Number 1 was part of the same construction as Numbers 2-5, but certainly appears to be present by 1790, with the first accurate cartographic representation of these buildings, and may also be present by 1774. The plot was part of 21 Irish Street, which measured 11 yards wide by 30 yards deep, granted to Jane Lemon 16th October 1734. The plot was sub-divided by 1741, with the part on Howgill Street owned by John Richardson, a carpenter (Collier 1991). The terrace is illustrated on the 1742 block plan and, in the census of 1762, is recorded as occupied by John Richardson, another carpenter, and two sailors (<i>ibid</i>). In 1847 No.1 was occupied by R Butler, whose trade is noted as foreman. By 1899, the area occupied by Number 1 seems to have been incorporated into a property on Irish Street, with the result that either the original building was heavily modified, or, was demolished and rebuilt. This building survives, defining the northern boundary of the development site. The development site was formerly occupied by Numbers 2-5, which have been demolished since the survey for the current edition OS map. Remnants of structural elements of these former buildings are visible along the current rear boundary of the site. These include two fireplaces (one still containing an iron grate) at ground and first floor level in the north-west corner.
Assessment	The locations of Numbers 2-5 are likely to coincide with the development area and it is likely that the rear boundary of the site relates to these buildings. Any development on the site is likely to have a serious negative on any buried archaeological remains associated with this terrace of houses and also upon the surviving standing remains.

Site number	20
Site name	Ginns Fever Hospital
NGR	NX 9732 1749
Site type	Infectious Diseases Hospital
Period	Post-medieval (Georgian)
CHER No	12881
Sources	CHER; OA North 2004a; OA North 2004b; Wood 1830
Description	Fever Hospital opened April 1819 as an isolation ward for long-term patients with contagious diseases. The building was loaned free of charge by the Earl of Lonsdale and stayed in operation until 1830 when it was replaced by the Infirmary (Site 11).
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	21
Site name	Preston Street Pottery (also known as Glass House pottery or Yellow Pottery)
NGR	NX 9728 1755
Site type	Pottery
Period	Unknown
CHER No	12882
Sources	CHER; OA North 2004a; OA North 2004b; Wood 1830

Description	Pottery apparently established in 1813 by Goulding and Tunstal (possibly they originated from Staffordshire). Later joined by John Trousdale who appears to have been in charge by 1829. By 1847 Edward Lewis had taken over. Pottery produced is described as being brown and black. Some moulded wares were also produced here, and some of the produce went for export.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	22
Site name	Copperas Dye Extraction Factory
NGR	NX 9731 1740
Site type	Dye Works
Period	Post-medieval (Georgian)
CHER No	14881
Sources	CHER; OA North 2004a; OA North 2004b
Description	The site of the Copperas Works in the Ginns area of Whitehaven possibly established in 1718 and sold c1820.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	23
Site name	Fountain, Lowther Street
NGR	NX 9760 1793
Site type	Fountain
Period	Post-medieval
CHER No	18953
Sources	CHER; OA North 2004a
Description	The only surviving drinking fountain from seven, set up in 1859. Set in the wall of grounds on the south-western side of Lowther Street close to Whitehaven Castle. It consists of an iron structure approximately 1.5 metres in height and 0.75 metres wide within a frame 0.23 metres thick. The Arms of the Lord of the Manor can be seen on the structure.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	24
Site name	Windmill, The Ginns
NGR	NX 9726 1740
Site type	Windmill
Period	Post-medieval
CHER No	19092
Sources	CHER; OA North 2004b
Description	Record of a post-mill intended to remove water from coal mines. Very little is known about it, including its exact location, except in correspondence between Sir John Lowther and Thomas Tickell to confirm its construction between 1681 and 1700.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	25
Site name	Coins, Whitehaven
NGR	NX 9700 1800
Site type	Findspot
Period	Roman
CHER No	19102
Sources	CHER
Description	Two roman coins of Constantine I found at an unknown location within Whitehaven.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	26
Site name	Bowling Green, Irish Street
NGR	NX 9718 1786
Site type	Bowling Green
Period	Post-medieval
CHER No	19115
Sources	CHER; Godwin 1990, Pellin 1705
Description	Site of a former bowling green. Known as Low bowling Green, it was Whitehaven's oldest bowling green laid out in around 1705 and probably closing around 1734-6. This site covered an area of 70 yards frontage and 80 yards depth and contained rooms for entertainment along with a bowling green. Once the lease for the land ran out, it was divided into properties along Irish Street and Howgill Street and associated properties were created at this time.
Assessment	The proposed development lies within the bounds of the former bowling green, although structures shown on the 1705 map appear to be away from the development footprint, the green and any subsidiary features may be affected by the development.

Site number	27
Site name	Possible Site of Dr Wm. Brownrigg's Laboratory
NGR	NX 9710 1760
Site type	Laboratory
Period	Post-medieval
CHER No	19932
Sources	CHER
Description	Recently surveyed derelict building on Castle Row, Newhouses which may be the remains Of Dr William Brownrigg's laboratory, constructed in 1743.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	28
Site name	Piscina Find, St Nicholas Church
NGR	NX 9744 1819
Site type	Findspot
Period	Medieval
CHER No	40290
Sources	CHER
Description	Broken but complete medieval piscina found in the grounds of St Nicholas Church in 2003, in use as a flower planter. The stone object, once used for rinsing the chalice and paten following mass, has been damaged and weathered over time. Probably relates to an earlier church in the location rather than St Nicholas itself and stylistically could date to the late thirteenth or early fourteenth centuries.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	29
Site name	Old Glass House, The Ginns
NGR	NX 9731 1745
Site type	Glassworks
Period	Post-medieval (Georgian)
CHER No	40823
Sources	CHER; Hodkinson 1774; Cadell & Davies 1815; OA North 2004a
Description	A building shown as the "Old Glass House" on plans of 1774 and 1815 but no longer present in 1830. Apparently opened in 1732.
Assessment	The site lies outside the area of the proposed development and will not be affected.

Site number	30
Site name	Bell and Co. Thread Factory
NGR	NX 9737 1780
Site type	Factory
Period	Post-medieval
CHER No	N/A
Sources	OS First Edition 1863; OA North 2004a
Description	A factory first shown on 1815 map of Whitehaven as “Bell and Braggs Factory”, by 1830 renamed as Joseph Bell and Company, directories around this period record it as a thread manufacturer. By 1863 First Edition Ordnance Survey the factory had become part of the Royal Cumbria Military Barracks (Site 06)
Assessment	The site lies outside the area of the proposed development and will not be affected.

5. SIGNIFICANCE OF THE REMAINS

5.1 INTRODUCTION

5.1.1 The desk-based assessment identified 30 sites within the survey area, 27 (Sites **01**, **03-18** and **20-29**) of which were previously recorded in the CHER. Two sites were identified during previous archaeological investigations (Sites **02** and **30**), whilst the remaining site was identified during this assessment and site visit (Site **19**).

5.1.2 One scheduled monument was identified within the study area (The Duke pit Fan House -Site **01**) and three listed buildings were also recorded within the CHER listing (Sites **03**, **09** and **14**). A further 110 listed buildings have been identified within the survey area, five of which are situated on Howgill Street, including Numbers 10-12, 14&15, and 17&18 (LBN 26238-42).

Period	No of sites	Sites
Prehistoric	0	
Roman	1	Coins, Whitehaven (Site 26)
Medieval	1	Piscina Find, St Nicholas Church (Site 29)
Post-medieval	28	Duke Pit Fan House, Colliery (Site 01), Ornamental stone base, Whitehaven Castle (Site 02), Somerset House, Duke Street (Site 03), Newton Foundry (Site 04), Nelson Terrace Windmill (Site 05), Royal Cumbria Military Barracks (Site 06), Coal Hurries on West Strand (Site 07), Thwaite Pit Coal Mine (Site 08), The Flatt/Whitehaven Castle (Site 09), Whitehaven Riding School (Site 10), Whitehaven Infirmary (Site 11), Richmond Terrace Sawmill (Site 12), Trinity Church (Site 13), St Nicholas Church (Site 14), Catherine Street Sawmill and Granary Yard (Site 15), Irish Street Sawmill (Site 16), Scotch Street Steam Mill (Site 17), Patent Slip (Site 18), 1-5 Howgill Street (Site 19), Ginns Fever Hospital (Site 20), Preston Street Pottery (Site 21), Copperas Dye Extraction Factory (Site 22), Fountain, Lowther Street (Site 23), Windmill, The Ginns (Site 24), Bowling Green, Irish Street (Site 26), Possible Site of Dr Wm. Brownrigg's Laboratory (Site 27), Old Glass House, The Ginns (Site 29), Bell and Co. Thread Factory (Site 30)
Unknown	0	

Table 1: Summary of sites by period

5.2 CRITERIA

- 5.2.1 There are a number of different methodologies used to assess the archaeological significance of sites; that to be used here is the 'Secretary of State's criteria for scheduling ancient monuments' which is included as Annex 4 of PPG 16 (DoE 1990). The sites previously listed (*Section 4*, above) were each considered using the criteria, with the results below.
- 5.2.2 **Period:** the Roman period is represented by a single findspot site (Site **26**) consisting of two Roman coins from an unknown location within Whitehaven. Roman activity is known within the wider area, so in general terms, Site **16** is of no particular significance. However, the fact that these coins represent the only such activity from Whitehaven, gives this find some local significance. The medieval period is also represented only by a single find, a piscina (Site **29**) from St Nicholas Church. Although Whitehaven is known to have been a port by at least the twelfth century, there is very little evidence for such activity. Any finds that relate to this part of the town's history must, therefore, be of local significance. All of the remaining sites revealed during the assessment relate to the post-medieval period. The Duke pit (Site **02**) is a listed monument, and is therefore of national significance. The high proportion of listed buildings within the area relates to the eighteenth century character of the town, reflecting its trading and coal mining hey-day. Such buildings, along with the contemporary churches (Sites **13** and **14**) should be seen as having regional significance. The same is true of many of the industrial sites and their related features which date to this significant period in Whitehaven's history (Sites **07**, **08**, **17**, **18**, **22**, **24**, **27** and **29**). The remainder of the sites dating to the later nineteenth century can be seen as less significant in terms of date.
- 5.2.3 **Rarity:** the glass works (Site **29**) is of possible national significance because of its rare, innovative and transitory design. Only two other examples of eighteenth century coal-fired glasshouses have been excavated in the North West, located at Bickerstaffe in Lancashire and Denton in Greater Manchester (Vose 1994). The early date of establishment of the Copperas Works (Site **22**) makes it of regional rarity and the Preston Street pottery (Site **21**) is also considered to be of regional rarity because of a combination of its relatively early date and the quality of wares produced by it, a number of which were exported (OA North 2004a).
- 5.2.4 The relative local abundance of sites related to local industries, such as coal mining and sea trade, mean the remainder of the sites within the study area can only be considered typical for the area. The large numbers of eighteenth and early nineteenth century listed buildings in the study area is a reflection of their overall national rarity and significance. Although locally they cannot be considered rare, many are under threat from dereliction (as in the case of 2-5 Howgill Street - Site **19**). Other sites, such as the schools, and the infirmary, where still extant, would have been present in most towns, and can, therefore, be seen to have only very local significance.
- 5.2.5 **Documentation:** although many of the CHER sites within the development area are no longer extant, some of their history and development can be traced through such documentary evidence. In broad terms, there is a large amount of

documentation available for the post-medieval development of the study area and Whitehaven generally, including cartographic sources and correspondence between the Lowthers and their agents. Such documentation is of particular relevance to those earlier buildings lying within the planned streets of the town and also for those industries that were specifically encouraged by the Lowthers. There are also a number of entries in trade directories and newspapers. A number of old and archive photographs exist of sites during their use or prior to demolition, such as the Infirmary (Site **11**), the Coal Hurries (Site **07**), Trinity Church (Site **13**) and 2-5 Howgill Street (Site **19**). The amount of documentation, other than cartographic sources, that relate specifically to the development area is quite limited. These include a few references to both the bowling green (Site **26**) (Godwin 1990) and to 2-5 Howgill Street, already cited (*Section 4*). However, such documents date quite closely the construction of these sites and, combined with photographs and some limited representative recording of 2-5 Howgill Street, there is sufficient data to lend these sites a high level of local significance.

- 5.2.6 **Group Value:** the unique position of Whitehaven, a town planned and patronised by one aristocratic family, means that many of the earlier urban, industrial and maritime features of the seventeenth and eighteenth centuries can be considered to have group value of national significance extending beyond physical or any other direct relationships. Collectively, the listed buildings within the heart of the town have a group value that may be considered of national importance, given Whitehaven's status as Britain's first planned town. The earliest industrial features located around the Ginns area, including the Old Glass House (Site **29**), the Copperas Works (Site **22**), the post mill (Site **24**) etc, have significant group value in terms of the early industrial heritage of Whitehaven. Within the development area, the houses of 2-5 Howgill Street (Site **19**) have locally significant group value, as they would appear to be of one build. As part of the wider eighteenth century fabric of Whitehaven, they can be considered to be regionally significant. Again, the bowling green (Site **26**), indicative of wealth and leisure, can be considered to have moderate group significance with other early eighteenth century municipal elements of the town.
- 5.2.7 **Survival/Condition:** the majority of sites within the study area do not survive as above ground remains. The industrial sites, including those which have some extant remains, may have substantial sub-surface remains such as flues or shafts. It is not possible to say how well-preserved these remains could be, particularly in areas of more recent development.
- 5.2.8 While elements of the buildings associated with the bowling green (Site **26**) may be preserved as sub-surface remains outside of the development area, it is extremely likely that within the development area, the bowling green surface would be extremely hard to recognise, as it would have been severely truncated by later building activity. The results of the site visit would suggest that, despite the recent demolition of Numbers 2-5 Howgill Street, the rear walls of these properties currently survives. Since there would appear to have been no ground disturbing activities on the site since the demolition, it is possible that sub-surface features, such as foundations or cellars may survive

in a good state of preservation. As such, the surviving remains can be considered to have some local significance.

- 5.2.9 **Fragility/Vulnerability:** it is difficult to gauge the fragility of most of the sites within the study area, as the majority are likely only to survive as below ground remains. Such remains are probably fairly stable and, although not threatened by the current proposed development, could be vulnerable to ground disturbance in their vicinities. Within the scope of the current development area, the below ground remains of 2-5 Howgill Street (Site **19**) and any such remains of the bowling green (Site **26**) are vulnerable to development on the site. Ground disturbing activities, such as the installation of services and the construction of foundations is likely to have a negative impact on any buried archaeological remains, while any building work on the site would have an effect on the rear wall of the property, potentially removing this feature in its entirety. As such, this wall gains some measure of protection from the fact that it also forms the property boundary of buildings fronting Irish Street, which could potentially hinder demolition or modification.
- 5.2.10 **Diversity:** none of the individual sites identified within the study area display a high degree of diversity. Moderate diversity is displayed by the infirmary, which became a school (Site **11**), the Irish Street sawmill (Site **16**), which also became a school and the Bell and Co Thread Factory (Site **30**), which would appear to have become a barracks. However, such diversification is generally late in date and not always archaeologically traceable, even within those sites that are still extant. A moderate significance can be attributed to the diversity of sites within the development area: only two sites are represented, they share no relationship beyond that of their physical location and, within the development area, any features relating to the bowling green (Site **26**) would be very hard to identify archaeologically.
- 5.2.11 **Potential:** as previously indicated, within the development area, there is little potential for encountering the earliest known feature to have occupied the site, the early eighteenth century bowling green (Site **26**). There is, however, more potential for finding elements of Numbers 2-5 Howgill Street (Site **19**), which are known to partially survive as standing remains but may also survive as below-ground remains. Although stray finds of Roman and medieval material (Sites **25** and **28**, respectively) have been found within the town, the potential for finding such remains within the development area seems fairly slight. Given the paucity of such remains from Whitehaven in general, Prehistoric remains would be even less likely to occur within the development area.

5.3 SIGNIFICANCE

- 5.3.1 Within the proposed development area, the two sites can be considered to be of local significance, rather than regionally or nationally important. This significance relates partly to the fairly low diversity within the development site. The early date of the bowling green (Site **26**), laid at a time when Whitehaven was approaching its economic zenith and the fact that there is associated documentary evidence, would lend this site a fair amount of local significance. However, this significance is tempered by the fact that there is

very little potential for the identification of any preserved remains associated with this site. Site **19**, the remains of 2-5 Howgill Street is more important in terms of preservation and potential for archaeological remains. Further significance is gained by the moderate amount of documentary evidence associated with these buildings, which gives an accurate date for their construction, as well as providing information about the nature of eighteenth century development in Whitehaven. Also of significance is the fact that the single cell structures of 2-5 Howgill Street represent the dwellings of less affluent citizens, many examples of which (including the site in question) were removed during slum clearance (Collier 1991) and, therefore, contrast with the larger numbers of higher status houses surviving as listed buildings within the historic centre of the town.

- 5.3.2 Outside of the development area, the significance of the majority of sites within the study area is less easy to ascertain. The Duke pit (Site **02**) is a scheduled monument and must, therefore, be of national significance. The glassworks (Site **29**) is considered to be of regional, and potentially national, significance due to its rarity, group value, survival and potential. The pottery (Site **21**) is considered to be of regional significance on the basis of its rarity and potential. The other sites are considered to be of local significance, although the copperas works (Site **22**) may possibly be considered as being of regional significance (OA North 2004a).

6. EVALUATION RESULTS

6.1 INTRODUCTION

Prior to the commencement of excavation, the area of the evaluation trench was CAT-scanned for buried services and a power cable running across the trench was located. Because the limited space within the development area restricted the complete relocation of the trench, the original location was retained, but the trench was divided into two parts: 1A to the north, measuring 4m in length, and 1B to the south, measuring 3m. Both parts were 1.7m wide and orientated approximately north/south (Fig 15).

6.2 TRENCH 1A

- 6.2.1 The upper deposit covering Trench 1A consisted of a hardcore and gravel surface (Context **1**) which varied in depth from 0.05m to 0.15m. This directly overlay archaeological remains. These consisted of a cellar at the northern end of the trench (wall **3** and backfill **2**). The backfill mainly comprised brick and modern rubble, including wood and plastic. This is likely to relate to the recent demolition of structures on the site. Backfill **2** was loosely packed, which meant it was only excavated to a depth of 0.90m below ground level and was then stepped to prevent collapse. Removal of backfill **2** did allow more of the structure of cellar wall **3** to be observed, including the top of a niche (Plate 2). Wall **3** was constructed from what appeared to be the local reddish-grey stone bonded with mortar and its internal face covered in whitewash.
- 6.2.2 Cellar wall **3** would appear to be the earliest structural element within the trench, as a second stone wall, **4**, appeared to abut it and would, therefore, be a later addition or possibly alteration (Plate 3). This north/south oriented wall was also constructed of stone, at least to ground level, where several bricks appear to have been added later. Excavation of a small sondage adjacent to this wall showed the foundations stepped out slightly before having waste mortar and brick dumped into the gaps around the foundations. Examination of the mapping suggests that this could be one of the rear walls of the buildings and is most clearly shown on the 1863 OS map.
- 6.2.3 Abutting these walls was a stone-flagged surface, **5**, which had been substantially fractured, although the individual flags were still *in situ* (Plate 3). Initially thought to be a yard surface, it is now more likely to be an internal floor of one of the buildings formerly existing on the site. One of the flags was removed to excavate a small sondage and to investigate underlying deposits. Immediately under the flagged surface was mottled brown silty-sand **6**, containing small fragments of stone and brick. Two pieces of pottery, which appear to have come from a ceramic toilet, were recovered from layer **6**. This deposit directly overlay a sterile looking silty-sand, **7**, which contained numerous water-worn cobbles. It is unclear whether this deposit was natural or had been brought in from elsewhere to level the land.

6.3 TRENCH 1B

- 6.3.1 As with Trench 1A, the area of Trench 1B, (Plate 4), was covered in a thin layer of hardcore, **1**, immediately overlying the surviving structural remains. The earliest of these was a north/south oriented stone wall, **9**, of similar construction to those seen in Trench 1A. This also would appear to be the rear wall of the original properties on the site, with features to the west being internal and to the east external. The internal features consist of another heavily fractured stone slab surface, **12**, composed of a different material to surface **5**, seen in Trench 1A. Surface **12** was truncated by a single-skinned brick wall, **10**, which ran north-west/south-east before terminating at the rear wall, **9**. The purpose of more modern wall **10** is unclear, but its style does not suggest that it was load-bearing. Wall **10** was abutted at the northern end of the trench by the edge of a concrete layer or surface, **11**, again, probably of relatively modern date.
- 6.3.2 A carved stone slab with an iron pipe around which a shallow gully had been carved, **13**, lay against the east side of wall **9** and represents either the base of a drain or possibly a pump. To the north of **13** was a relatively modern layer of black tarmac, **8**, which could either be a renewal of the yard surface or a passage-way that used to run behind the properties that formerly occupied the site. On the south side of **13** a sondage was excavated to examine underlying deposits. Due to the constraints caused by the size and placement of the trench, this only revealed one deposit, **14**, a mottled dark brown silty-loam containing numerous inclusions of stone and charcoal. Two sherds of pottery, of eighteenth to nineteenth century date, were also recovered from this deposit. It is unclear whether this deposit was the result of build-up of material within the yard, or is just backfill of a foundation trench.

7. CELLAR RECORDING

7.1 INTRODUCTION

Following the discovery of well-preserved archaeological remains on the site, it was deemed necessary by CCCHES that a targeted programme of recording be undertaken of the sub-surface remains of one of the cellars preserved on the site. This section details the results of this recording in relation to the results of the previous evaluation (*Section 6*). This phase of work involved the partial re-excavation and extension of each of the evaluation trenches and, for the sake of simplicity, the nomenclature of Trench 1A and 1B is retained, even though the limits of the trenches in this second phase do not completely coincide with their predecessors.

7.2 EXTENSION AND RECORDING OF TRENCH 1A

7.2.1 During this phase of recording, an area measuring roughly 5m by 4m was opened within the known area of evaluation Trench 1A (Fig 15). Cellar wall **3** was re-found and cellar backfill **2** was removed to reveal an intact cellar, **15**, measuring 2.60m (interior) wide, 3.20m long and 1.60m deep (Plate 5). The structure of the cellar was made of local reddish-grey stone bonded with mortar and the internal face was covered in plaster and whitewash. The south wall of the cellar, **3**, had an alcove located 1.3m from the eastern cellar wall and 0.5m above the cellar floor. The alcove was 0.5m wide, 0.45m high and 0.36m deep. Similar alcoves were set at analogous locations on the eastern and northern cellar walls. A coal chute, 0.5m wide, 0.6m high and of unknown depth (it was unexcavated to accommodate health and safety constraints), was located at the eastern end of cellar south wall **3**.

7.2.2 The western wall of the cellar contained a set of seven well-worn yellowish-grey sandstone spiral steps, forming a quadrant of a circle (Plate 6). The steps were 1.04m long and *c* 0.22m at their widest part. The top step had a small niche set in the top, which may have been used to attach some sort of metal work, possibly a hand rail and the bottom step was set into the cellar floor. Within the western wall was a void extending beneath and behind the steps, which may have had a utilitarian use but it was not completely excavated due to health and safety reasons. The floor of the cellar was flagged with the same reddish-grey stone as that of the ground floor paving (surface **5**, identified during the evaluation) and that from which the walls are built, with the addition of the occasional brick. The flags to the south end of the room are more fragmented than the ones to the north end of the room.

7.3 EXTENSION AND RECORDING OF TRENCH 1B

7.3.1 The area of Trench 1B was uncovered while removing hardcore surface **1** to find a cellar to record in fulfilment of the CCCHES brief. As such, although there was no requirement to fully investigate the features uncovered during exploratory machining in the southern area of the development site, the

following results have been summarised for the sake of completeness. North/south aligned wall **9**, identified during the evaluation, was found to adjoin with east/west aligned structure **16** (Fig 15). Structure **16** is interpreted as a main dividing wall between two properties, with a perpendicular internal wall (for property number 4) running northwards at a distance of 3m from the eastern end of the main dividing wall and roughly 1.5m to the west of north/south aligned wall **9**.

- 7.3.2 The area either side of wall **9** was paved with reddish-grey sandstone flags, that on the east side identified as context **12** during the evaluation and as context **17** on the western side during the current stage of recording. The southern extent of the latter area of paving was not found, but did extend beyond the southern limit of wall **16**. Wall **16** terminated at modern concrete block with a drain inserted into it, roughly 1.75m to the west of the site boundary. Within flagged surface **17** was a single line of bricks, **18**, 1.1m long and running east/west, with a corresponding scar on the site boundary wall. Immediately to the north of brick wall **18** was another concrete block with a small slot running north/south. The concrete block was not fully exposed so it is uncertain what it may have been used for, but does look fairly modern.

8. PHOTOGRAPHIC SURVEY RESULTS

8.1 INTRODUCTION

- 8.1.1 A photographic survey of both elevations of the development area rear boundary wall was undertaken to RCHME level 1, as outlined in *Recording Historic Buildings, A Descriptive Specification, Third Edition* (RCHME 1996).

8.2 ELEVATION 1

- 8.2.1 Elevation 1 faced west, was 15m in length and was recorded with four shots taken perpendicular to the wall using 1m and 2m scale bars. These shots show the general layout of the elevation and its features (Plates 8-11).
- 8.2.2 The survey also took close-up shots of features on the elevation, with a scale bar where possible. These features are listed in Table 2.

Features	Property Number
Ground floor fireplace (plate 15)	2
First floor fireplace	2
Possible joist hole with larger surrounding blocks	2
Three possible joist holes vertically aligned	2
Scar of outbuilding wall	4

Table 2 - Summary of features recorded in close-up during the photographic survey

8.3 ELEVATION 2

- 8.3.1 Elevation 2 faced east and was the reverse of Elevation 1. This elevation was recorded with only three perpendicular shots because, as the wall had been rendered, there was less detail to record. A 2m scale bar was used (Plates 12-14).

9. CONCLUSION

9.1 DISCUSSION OF RESULTS

- 9.1.1 The desk-based assessment has shown that the majority of historically significant activity recorded on the CHER as occurring within the development area is the result of the post-medieval growth of the town and its industries. Although documentary evidence and archaeological findings indicate a medieval, or possibly early medieval, foundation for Whitehaven, the majority of features associated with any such activity are likely to be concentrated in the area of the harbour, a little further to the west than the current development area. Any such remains are also likely to have been damaged or destroyed by the rapid post-medieval growth of the town, the planned streets of which are focussed upon the harbour.
- 9.1.2 Within the development area itself, it is plain that the remains of 2-5 Howgill Street, a mid-eighteenth century terrace of houses, survive as sub-surface remains on the site at a very shallow depth immediately below the current hardcore surface. Demolition would appear to have truncated these structures at floor level, so that many of the original flagstone surfaces survive, along with foundations, at least one cellar and considerable evidence for later alterations within the former yard areas of the buildings. It is probable that original features and alterations survive within those as yet uninvestigated parts of the buildings on the street frontage. Although exploration below the archaeological remains has been limited, it would appear that the buildings themselves were built directly onto natural deposits, and the potential for encountering earlier remains during any further works, as suggested in the desk-based assessment seem very low.
- 9.1.3 Collectively, the desk-based assessment, evaluation and recording has improved an understanding of the nature and development of historical activity within the development area. The bowling green, Site 26, laid in 1705 and closed in 1734, had been replaced by urban development by 1742. As suspected, no evidence for the bowling green could be identified during field work, and the same is likely to be true of any future work in the area, except, perhaps, in those parts occupied by the green's associated buildings. Although the cartographic sources are not always clear, or consistent, it is highly likely that the four houses of 2-5 Howgill Street were constructed as a single terrace in 1741-2 and that number 1 Howgill Street, which still survives outside the development area, was perhaps a slightly later addition between 1742 and 1770. The interpretation of Number 1 Howgill Street as a separate entity to that of Numbers 2-5 is based on the fact that documentary sources would appear to treat these buildings separately, but also because the style of this structure is very different. However, later modification cannot be discounted, particularly given the incorporation of Number 1 Howgill Street into Number 20 Irish Street during the later nineteenth century.
- 9.1.4 Both the cartographic sources and the archaeological evidence suggest that the buildings of 2-5 Howgill Street underwent considerable change from their

original, single-celled form, as depicted on Hutchinson's map of 1790 when compared with the 1863 OS First Edition. However, such changes cannot be dated any more accurately, as none of the intervening maps are sufficiently detailed, and one, Wood's 1830 map, seems incorrect. For example, it is not likely that the buildings of 1-5 Howgill Street were demolished and replaced by four equal-sized properties, as a cursory reading of Wood's map would suggest, before again being replaced by five structures by the time of the survey for the 1863 First Edition OS map. It is more likely that Wood's map is inaccurate, showing only 2-5 Howgill Street and forgetting about Number 1. In all probability, Number 1 was present in 1830, because the cartographic depictions of this structure in 1790 and 1863 are identical.

9.1.5 The most obvious alteration to the buildings is that all would appear to have been extended. The 1790 map would suggest that each of the properties were of equal dimensions, with about two thirds of the plot accounted for by the buildings and the remainder of the plot left as yard space. The RCHME survey of Number 4 indicates that the buildings were originally *c* 5.5m deep, each with a projecting semi-circular Newell stair (Collier 1991). The 1863 OS map would give the impression that each of the properties had been extended to fully incorporate the Newell stair, in the cases of Numbers 3-5 by between 1.5m and 2.5m. In the case of Number 2, the house had been extended to occupy the full depth of the plot by 1863. This seems to have resulted in the heightening of the rear boundary wall in brick and stone and the insertion of the two fireplaces seen at the northern end of the rear property boundary during the photographic survey. The differing patterns of brickwork and types of material would suggest as many as five phases of alteration associated with this extension and insertion. The location of cellar **15** means that it must have belonged to Number 2, but the cellar, like the extension, is highly likely to be a later feature. Indeed, both cellar **15** and the extension would appear to be associated and probably contemporary, as, once the extent of the original building is accounted for, it is plain that the area of the cellar must originally have lain within the back yard, an unusual position for an original feature. Another indication that the cellar is a later addition is simply the fact that none of the other buildings had cellars in this location. Given the general uniformity of the structures, the provision of a cellar in one should probably be expected in the rest.

9.1.6 A number of other features were encountered during the evaluation and recording that can be related to structures seen most clearly on the 1863 OS map. Wall **3**, identified during the evaluation, is likely to be the extended wall dividing Numbers 2 and 3, so that paved surface **5**, on the south side of wall **3**, relates to Number 3. The position of wall **4**, the extended rear wall of Number 3, is exactly as depicted on the 1863 OS map, 2m beyond the location of the original rear wall of this property. Similarly, wall **9** must be the extended rear wall of Number 4, again positioned as on the 1863 OS map. Wall **16** divides Numbers 4 and 5, the terminus appearing exactly as it does on the OS map, reflecting the fact that Number 4 would appear to have gained part of Number 5's yard space, with the corresponding boundary wall lying *c* 1m to the south of the original property boundary, and thus outside of the evaluation and recording trenches. Even wall **18** can be seen on the 1863 map, and relates to a

possible lean-to outhouse built within the back yard of Number 4 against the rear property boundary.

10. IMPACT

10.1 IMPACT

- 10.1.1 The desk-based assessment has indicated the presence of known historical activity within the development area, in the form of an early eighteenth century bowling green (Site **26**) and of a mid-eighteenth century terrace of houses (Site **19**). The programme of archaeological field investigation found that the majority of archaeological remains of Site **19**, though truncated at floor level, survive in a good state of preservation at a shallow depth and with very little disturbance below the former ground level. Such remains, although only investigated within the eastern half of the site, close to the rear boundary wall, can be expected to exist in this condition across the entire site. Moreover, the rear property boundary can be seen to survive in good condition and to contain a number of elements reflecting the historical development of the site.
- 10.1.2 Any below-ground works will have a deleterious effect on the buried archaeological remains known to exist in the area. Similarly, it is possible that future building work could lead to the damaging, demolition, incorporation, modification or obscuring of the eighteenth century rear property boundary. The impact of such development has been reduced in the case of the rear boundary wall by completing the programme of photographic recording detailed in this report. The same is true of those archaeological features within the eastern part of the development site, which have been recorded during the evaluation and the later phase of cellar recording. It might also be claimed that the impact of any development on this eastern area is somewhat mitigated by the accurate mapping of this part of the site.
- 10.1.3 It is probable that any groundworks within the western half of the site, closest to Howgill Street itself, would encounter further archaeological remains relating to the original ground plans and internal features of the structures of 2-5 Howgill Street. Such internal features, unlike those external features found during archaeological investigations to the rear of the properties, are not depicted on any contemporary cartographic sources. However, the internal features of Number 4 would appear to have been recorded by the RCHME (Collier 1991), and the same may be true of Numbers 2, 3 and 5. If this was the case, then the impact of any development on this western area of the site might also be considered to be partially mitigated, although any subsurface remains relating to modified or removed original features would be more seriously impacted upon.

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APPENDIX 1: PHASE 1 PROJECT BRIEF

1. SITE DESCRIPTION AND SUMMARY

Site: 1 & 2, Howgill Street, Whitehaven

Grid Reference

BRIEF FOR AN ARCHAEOLOGICAL EVALUATION

Planning Application

AT 1 & 2 HOWGILL STREET, WHITEHAVEN

Area approximately 1.5 hectares

CUMBRIA

Detailed proposals and tender are invited from appropriately resourced, qualified and experienced archaeological consultants to undertake the archaeological project outlined by this Brief and to produce a report on that work. The work should be under the direct management of either an Associate or Member of the Institute of Field Archaeologists or equivalent. Any response to this Brief should follow IFA Standard and Guidance for Archaeological Field Evaluation. No fieldwork may commence until approval of a specification has been issued by the County Archaeology Service.

Issued by the

County Archaeology Service

Environment Unit, Community Economy and Environment

2. PLANNING BACKGROUND

Cumbria County Council's Archaeology Service was consulted by Copeland Borough Council regarding a planning application for a development at 1 & 2 Howgill Street, Whitehaven.

The proposed scheme is an area designated for archaeological survey in Cumbria as of high archaeological importance, and because of the nature of the proposed development, planning consent requiring a scheme of archaeological work to be undertaken. The nature of this work will be an archaeological evaluation to assess the nature and potential of the site. This Brief deals solely with this phase.

This advice is given in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) with policy 26 of the County Structure Plan, and with policy ENV46 of the Copeland Local Plan.

3. ARCHAEOLOGICAL BACKGROUND

Whitehaven is the earliest port on the west coast of England. The site is located in a part of the town that developed in the early part of the 18th century.

Date of Brief: 23 November 2004

4. SCOPE OF THE PROJECT

4.1 The evaluation should aim to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.

This Design Brief is only valid for 1 year after the above date. After this period the County Archaeology Service should be contacted. Any specification resulting from this Brief will only be considered for the same period.

4.2.1 A desk-based assessment of the existing resource, to be undertaken before any work commences on site. This should include an assessment of primary and secondary maps and documents relating to the site, to set the evaluation results in their geographical, topographical, archaeological and historical context. Records and aerial photographs held by the County Sites and Monuments Record in Kendal as well as records held by the County Records Office at Whitehaven should be consulted.

4.2.2 A visual inspection of the site. This should involve a walkover of the site noting any surface features of potential archaeological interest, areas of potential disturbance, and hazards and constraints to undertaking further archaeological work on site (including the siting of live services, Tree Preservation Orders and public footpaths).

4.2.3 The excavation of one trial trench measuring 7m in length to adequately sample threatened available area, and the investigation and recording of deposits and features of archaeological interest identified within the

1. SITE DESCRIPTION AND SUMMARY

Site: 1 & 2 Howgill Street, Whitehaven

Grid Reference: NX 9725 1788

Planning Application No.: 4/04/2611

Area: approximately 150 square metres

Detailed proposals and tenders are invited from appropriately resourced, qualified and experienced archaeological contractors to undertake the archaeological project outlined by this Brief and to produce a report on that work. The work should be under the direct management of either an Associate or Member of the Institute of Field Archaeologists, or equivalent. Any response to this Brief should follow IFA Standard and Guidance for Archaeological Field Evaluations, 1994. No fieldwork may commence until approval of a specification has been issued by the County Archaeology Service.

2. PLANNING BACKGROUND

- 2.1 Cumbria County Council's Archaeology Service (CCCAS) has been consulted by Copeland Borough Council regarding a planning application for 6 one bed flats at 1 & 2 Howgill Street, Whitehaven.
- 2.2 The scheme affects an area designated by the Extensive Urban Survey of Cumbria as of high archaeological importance, and because of this a condition has been placed on planning consent requiring a scheme of archaeological work to be undertaken at the site. The first phase of this work will be an archaeological evaluation to assess the nature and potential of the site. This Brief deals solely with this phase.
- 2.3 This advice is given in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning), with policy 26 of the County Structure Plan, and with policy ENV46 of the Copeland Local Plan.

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 Whitehaven is the earliest post-medieval planned town in England. The site is located in a part of the town that developed in the early part of the 18th century.

4. SCOPE OF THE PROJECT

4.1 Objectives

- 4.1.1 The evaluation should aim to determine, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.

4.2 Work Required

- 4.2.1 A desk-based assessment of the existing resource, to be undertaken before any work commences on site. This should include an assessment of primary and secondary maps and documents relating to the site, to set the evaluation results in their geographical, topographical, archaeological and historical context. Records and aerial photographs held by the County Sites and Monuments Record in Kendal as well as records held by the County Records Office at Whitehaven should be consulted.
- 4.2.2 A visual inspection of the site. This should include a walkover of the site noting any surface features of potential archaeological interest, areas of potentially significant disturbance, and hazards and constraints to undertaking further archaeological work on site (including the siting of live services, Tree Preservation Orders and public footpaths).
- 4.2.3 The excavation of one trial trench measuring 7m in length to adequately sample the threatened available area, and the investigation and recording of deposits and features of archaeological interest identified within the

trench. All features must be investigated and recorded unless otherwise agreed with the County Archaeology Service. Initial topsoil removal/demonstrably modern overburden can be undertaken by machine, but subsequent cleaning and investigation must be by hand.

4.2.4 The evaluation should provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment should also be provided, wherever possible.

4.2.5 The following analyses should form part of the evaluation, as appropriate. If any of these areas of analysis are not considered viable or appropriate, their exclusion should be justified in the subsequent report.

- A suitably qualified specialist should assess the environmental potential of the site through the examination of suitable deposits, including: (1) soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features, and; (2) the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits.
- Advice is to be sought from a suitably qualified specialist in faunal remains on the potential of sites for producing bones of fish and small mammals. If there is potential, a sieving programme should be undertaken. Faunal remains, collected by hand and sieved, are to be assessed and analysed, if appropriate.
- The advice from a suitably qualified soil scientist should be sought on the whether soil micromorphological study or other analytical techniques will enhance understanding site formation processes of the site, including the amount of truncation to buried deposits and the preservation of deposits within negative features. If so, analysis should be undertaken.

5. SPECIFICATION

5.1 Before the project commences a project proposal must be submitted to, and approved by, the County Archaeologist.

5.2 Proposals to meet this Brief should take the form of a detailed specification prepared in accordance with the recommendations of *The Management of Archaeological Projects*, 2nd ed. 1991, and must include:

- ❖ A description of the excavation sampling strategy and recording system to be used
- ❖ A description of the finds and environmental sampling strategies to be used
- ❖ A description of the post excavation and reporting work that will be undertaken
- ❖ Details of key project staff, including the names of the project manager, site supervisor, finds and environmental specialists and any other specialist sub-contractors to be employed
- ❖ Details of on site staffing, expressed in terms of person days
- ❖ A projected timetable for all site work and post excavation work

5.3 Any significant variations to the proposal must be agreed by the County Archaeologist in advance.

6. REPORTING AND PUBLICATION

6.1 The archaeological work should result in a report, this should include as a minimum:

- ❖ A site location plan, related to the national grid
- ❖ A front cover/frontispiece which includes the planning application number and the national grid reference of the site
- ❖ The dates on which the fieldwork was undertaken
- ❖ A concise, non-technical summary of the results
- ❖ An explanation of any agreed variations to the brief, including justification for any analyses not undertaken (see 4.2.5)
- ❖ A description of the methodology employed, work undertaken and the results obtained
- ❖ Plans and sections at an appropriate scale showing the location and position of deposits and finds located
- ❖ A list of, and dates for, any finds recovered and a description and interpretation of the deposits identified

- ❖ A description of any environmental or other specialist work undertaken and the results obtained

- 6.2 Three copies of the report should be deposited with the County Sites and Monuments Record within two months of completion of fieldwork. This will be on the understanding that the report will be made available as a public document through the County Sites and Monuments Record.
- 6.3 Should further archaeological work result from the evaluation, the results of the evaluation will need to be made available for inclusion in a summary report to a suitable regional or national archaeological publication.
- 6.4 Recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation should **not** be included in the report. Such recommendations are welcomed by the County Archaeology Service, and may be outlined in a separate communication.
- 6.5 Cumbria SMR is taking part in the pilot study for the Online Access to Index of Archaeological Investigations (OASIS) project. The online OASIS form at <http://ads.abds.ac.uk/project/oasis> must therefore also be completed as part of the project. Information on projects undertaken in Cumbria will be made available through the above website, unless otherwise agreed.

7. THE ARCHIVE

- 7.1 An archive must be prepared in accordance with the recommendations of *The Management of Archaeological Projects*, 2nd ed. 1991, and arrangements made for its deposit with an appropriate repository. A copy shall also be offered to the National Monuments Record.
- 7.2 The landowner should be encouraged to transfer the ownership of finds to a local or relevant specialist museum. The museum's requirements for the transfer and storage of finds should be discussed before the project commences.
- 7.3 The County Archaeology Service must be notified of the arrangements made.

8. PROJECT MONITORING

- 8.1 One weeks notice must be given to the County Archaeology Service prior to the commencement of fieldwork.
- 8.2 Fieldwork will be monitored by the Assistant Archaeologist on behalf of the local planning authority.

9. FURTHER REQUIREMENTS

- 9.1 It is the archaeological contractor's responsibility to establish safe working practices in terms of current health and safety legislation, to ensure site access and to obtain notification of hazards (eg. services, contaminated ground, etc.). **The County Archaeology Service bears no responsibility for the inclusion or exclusion of such information within this Brief or subsequent specification.**
- 9.2 All aspects of the evaluation shall be conducted in accordance with the Institute of Field Archaeologist's *Code of Conduct* and the IFA's *Standard and Guidance for Archaeological Field Evaluations*.
- 9.3 Human remains must be left *in situ*, covered and protected when discovered. No further investigation should normally be permitted beyond that necessary to establish the date and character of the burial, and the County Archaeology Service and the local Coroner must be informed immediately. If removal is essential, it can only take place under appropriate Home Office and environmental health regulations.
- 9.4 The involvement of the County Archaeology Service should be acknowledged in any report or publication generated by this project.

10. FURTHER INFORMATION

For further information regarding this brief, contact

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For further information regarding the County Sites and Monuments Record, contact

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As part of our desire to provide a quality service to all our clients we would welcome any comments you may have on the content or presentation of this design brief. Please address them to the Assistant Archaeologist at the above address.

APPENDIX 2: PHASE 1 PROJECT DESIGN

1 AND 2 HOWGILL STREET, WHITEHAVEN, CUMBRIA

Archaeological Desk-Based Assessment and Evaluation Project Design

Oxford Archaeology North



February 2005

Louise Hetherington

OA North Tender No: t2371
NGR: NX 9725 1788 (centred)
Planning Application No: 4/04/2611

1. INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 Louise Hetherington (hereafter ‘the client’) has requested that Oxford Archaeology North (OA North) submit proposals for an archaeological investigation at 1 and 2 Howgill Street, Whitehaven, Cumbria (centred NX 9725 1788). The client proposes to redevelop the site for residential use, and consequently Cumbria County Council Archaeology Service (CCCAS) has been consulted by Copeland Borough Council regarding the planning application (Planning Application Number 4/04/2611). In response to this CCCAS have issued a brief requesting a desk-based assessment and visual inspection, followed by an evaluation as the first phase of work. Due to the site being within an area of high archaeological potential, determination of the impact of the proposed development on any archaeological remains is required prior to any development on site. The following document represents a project design to carry out the brief desk-based assessment and evaluation, and has been prepared in accordance with the CCCAS brief.

1.2 ARCHAEOLOGICAL BACKGROUND

- 1.2.1 During the later medieval period, Cumbria was divided into several administrative wards by Henry I, one of which, Allerdale above Derwent, became modern day Copeland, with Whitehaven as its principal town (Routledge 2002, 9). The monastery at St Bees was refounded in c1120 as a Benedictine house, with Whitehaven becoming part of the lands of the monastery (*ibid*).
- 1.2.2 The first reference to Whitehaven as a harbour is in 1172, when the port was used by the Neville family to transport their quota of soldiers for Henry II’s conquest of Ireland (Anon n.d.). Whitehaven, however, remained relatively insignificant, with a 1566 survey recording only six fisherman’s cottages and a single boat (Cook 1993, 6).
- 1.2.3 Whitehaven is the earliest post-medieval planned town in England. This is mainly due to the Lowther family’s deliberate policy of independent development for Whitehaven, which led to industries as varied as chemical manufacture, spinning, weaving, textiles and glass manufacture as well as coal and pottery industries. However, the development of Whitehaven owes much to the Lowther’s concern with the extraction of coal (Fletcher 1878, 270). Christopher Lowther lay the foundation stone for a new pier in 1633 to ensure a safe harbour for the ships which were involved in the export of coal, mainly to Ireland (Routledge 2002, 14). In 1666, Charles II granted Sir John Lowther all the derelict ground in Whitehaven (Nicolson and Burn 1777, 43), which enabled Sir John to have a free hand in determining the future expansion of the town. The importance of the coal industry remained a constant, and many important mining innovations were introduced at Whitehaven, such as at Saltom Pit (Jefferson 1842, 399).
- 1.2.4 By 1750, the collieries of Whitehaven were producing 200,000 tons of coal a year (Routledge 2002, 24), with writers declaring that ‘the coal mines at this place are perhaps the most extraordinary of any in the known world’ (Nicolson and Burn 1777, 43). Coal remained important for about the next two hundred years, although ultimately the depletion of the coal reserves led to a decline in mining and a decline in industry in general in Whitehaven (Countryside Commission 1998, 29).
- 1.2.5 The increasing wealth of Whitehaven brought with it a number of structures, some of which were paid for by generous benefactors. In 1769, Sir James Lowther, who was later to be made The Earl of Lonsdale, had the Flatt rebuilt following a fire to the eighteenth century residence now known as Whitehaven Castle. More than 200 years after the Lowthers had initially purchased the castle, the large wall around the castle and grounds was removed, opening up the park to the people of Whitehaven (Anon n.d.).

- 1.2.6 In 1923 the park was officially opened, along with the unveiling of the Cenotaph. A roll of honour containing the names of the fallen plus a local newspaper were encased in a lead casket and buried in the foundations. A year later, in 1924, the Earl of Lonsdale sold the castle, which was donated to the town along with monies to carry out necessary repairs and alterations. The castle was duly modified and became an infirmary. However, in 1951, due to its inadequacies, an architect was appointed to come up with the plans for the West Cumberland Hospital, which was opened in 1964. The castle infirmary and the new hospital coexisted until 1986, when the infirmary had to close. Today, following extensive renovation, the castle in Whitehaven has been converted into private accommodation (Anon n.d.)

1.3 OXFORD ARCHAEOLOGY NORTH

- 1.3.1 OA North has considerable experience of excavation of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 24 years, including work in Whitehaven, Carlisle, Appleby, Kendal, Penrith, and other towns in Cumbria. Evaluations, assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

2 OBJECTIVES

- 2.1 The following programme has been designed to evaluate the archaeological deposits affected by the proposed development of the site, in order to determine their extent, nature and significance. To this end, the following programme has been designed, in accordance with a brief by CCCAS, to provide a desk-based assessment, rapid identification survey and evaluation. The results will provide information as to whether further investigation is required prior to the development taking place. The required stages to achieve these ends are as follows:
- 2.2 **Desk-Based Assessment:** to undertake a desk-based assessment of the existing resource including primary and secondary maps and documents.
- 2.3 **Archaeological Evaluation:** to undertake evaluation trenching of a sample of the proposal area to determine the quality, extent and importance of any archaeological remains on the site.
- 2.4 **Report and Archive:** an evaluation report will be produced for the client within eight weeks of completion of the fieldwork. A site archive will be produced to English Heritage guidelines (1991) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3 METHOD STATEMENT

3.1 DESK-BASED ASSESSMENT

- 3.1.1 A desk-based assessment will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the timescale of the project.
- 3.1.2 **Documentary and cartographic material:** this work will include collation and assessment of information at the Cumbria Sites and Monuments Record in Kendal and the County Record Office in Whitehaven, as well as appropriate sections of County histories, early maps, and such primary documentation (tithe and estate plans etc.) as may be reasonably available. Particular emphasis will be upon the early cartographic evidence which has the potential to inform the post-medieval occupation and land-use of the area. Any photographic material lodged in the Sites and Monuments Record or County Record Office will also be studied.

- 3.1.3 Any published documentary sources and unpublished documents will also be examined where relevant. The study will examine any place and field name evidence for the site and its environs.
- 3.1.4 This work will involve visits and or correspondence searches of the following repositories: Cumbria Sites and Monuments Record in Kendal, County Records Office in Whitehaven, and the OA North research archive.
- 3.1.5 A desk-based compilation of geological (both solid and drift), pedological, topographical and palaeoenvironmental information will be undertaken. It will be based on published geological mapping and any local geological surveys in the possession of the county council or the client.

3.2 VISUAL INSPECTION

- 3.2.1 A visual inspection of the site will be undertaken to:
- relate the existing landscape to any research findings and note any features of potential archaeological interest.
 - identify any areas of potentially significant disturbance to surviving archaeological remains.
 - identify any hazards and constraints to undertaking further archaeological work on site, especially the proposed evaluation trenching. These include the siting of live services and Tree Preservation Orders.

3.3 ARCHAEOLOGICAL EVALUATION

- 3.3.1 The programme of archaeological evaluation will involve trial trenching to determine the presence or absence of archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation.
- 3.3.2 The evaluation is required by to examine 7m of linear trench, 1.7m wide, totalling 12m², which represents c 8% of the development site. The location of this trench will be determined by the results of the desk-based assessment, and in approval with CCCAS.
- 3.3.3 Should it be necessary to use a breaker to penetrate a concrete slab or other surface this will be costed as a variation, together with any unforeseen delays that may result. The topsoil, subsoil, and recent overburden deposits will be subject to careful mechanical excavation (with a toothless ditching bucket) down to the depth of the first significant archaeological deposits under constant archaeological supervision. The deposits will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. Thereafter, all excavation will proceed by hand in a stratigraphic manner. The trenches will not be excavated deeper than c1.2m to accommodate health and safety constraints, or less if the deposits are soft or unstable. Any requirements to excavate below this depth will involve stepping out the trench, and recosting.
- 3.3.4 Trenches will be located by use of GPS equipment, which is accurate to +/- 0.25m, or using a TST (Total Station Theodolite). Altitude information will be established with respect to Ordnance Survey Datum, using a known Bench Mark or spot height.
- 3.3.5 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All

excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.

- 3.3.6 All information identified in the course of the site works will be recorded stratigraphically, using a system adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, monochrome contacts and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.3.7 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice, following current Institute of Field Archaeologists guidelines, (Institute of Field Archaeologists 1992) in order to minimise deterioration.
- 3.3.8 **Environmental Sampling:** environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insects, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified, and will be subject to the agreement of CCCAS and the client.
- 3.3.9 Advice will also be sought as to whether a soil micromorphological study, or any other analytical techniques, will enhance the understanding of the site formation processes, including the amount of truncation to buried deposits and the preservation of deposits within negative features. Should this be required the costs for analysis have been provided as a contingency.
- 3.3.10 **Faunal remains:** if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA North's specialist in faunal remains, and subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.
- 3.3.11 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. The CCCAS Archaeologist and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations.
- 3.3.12 **Treatment of finds:** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.
- 3.3.13 **Treasure:** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 3.3.14 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording, if an appropriate sample is retained on advice from the recipient museum's archive curator.

- 3.3.15 **Reinstatement:** it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. Following completion of the evaluation, the trench will be backfilled with the material removed in its excavation. Any other form of land reinstatement will be the responsibility of the client, unless otherwise instructed, which will be costed as a variation.
- 3.3.16 **Contingency plan:** a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the Costings document and would be in agreement with the client.
- 3.3.17 The evaluation will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, an impact assessment will also be provided.

3.4 REPORT AND ARCHIVE

- 3.4.1 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further three copies submitted to the Cumbria SMR within eight weeks of completion. The report will include:
- a front cover to include the planning application number and the NGR
 - a site location plan, related to the national grid
 - the dates on which the fieldwork was undertaken
 - a concise, non-technical summary of the results
 - a description of the methodology employed, work undertaken and results obtained
 - plans and sections at an appropriate scale, showing the location of features
 - other illustrations as appropriate
 - a description of any environmental, finds, or other specialist work undertaken, and the results obtained
 - the report will also include a complete bibliography of sources from which data has been derived.
 - a copy of this project design in the appendices, and indications of any agreed departure from that design
- 3.4.2 This report will be in the same basic format as this project design; a copy of the report can be provided on CD, if required.
- 3.4.3 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (Management of Archaeological Projects, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context. All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists.

- 3.4.4 The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria SMR (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the Carlisle County Record Office. The material archive (artefacts and ecofacts) will be deposited with an appropriate museum following agreement with the client.
- 3.4.5 **Collation of data:** the data generated will be collated and analysed in order to provide an assessment of the nature and significance of the known surface and subsurface remains within the designated area. It will also serve as a guide to the archaeological potential of the area to be investigated, and the basis for the formulation of any detailed field programme and associated sampling strategy, should these be required in the future.
- 3.4.6 The Arts and Humanities Data Service (AHDS) online database project Online Access to index of Archaeological Investigations (OASIS) will be completed as part of the archiving phase of the project.
- 3.4.7 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4 HEALTH AND SAFETY

- 4.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A risk assessment will be completed in advance of any on-site works and copies will be made available on request to all interested parties.
- 4.2 **Fencing/hoarding requirements:** it is assumed that the client will arrange for the site to be protected from public access. However, if this is not possible it is the client's responsibility to inform OA North prior to commencement of site works. Should 'Heras' fencing or similar be required this will be costed as a variation.
- 4.3 Any known contamination issues or any specific health and safety requirements on site must be made known to OA North by the client or main contractor on site to ensure all procedures can be met.
- 4.4 Similarly, any drawings or knowledge of live cables or services that may pose a risk to OA North staff during evaluation must be made known to the project manager of OA North before site work. This will ensure the risk is dealt with appropriately. The site will be scanned using a Cable Avoidance Tool (CAT scanner) in advance of the commencement of the site works.
- 4.5 Should areas of previously unknown contamination be encountered on site the works will be halted and a revision of the risk assessment carried out. Should it be necessary to supply additional PPE or other contamination avoidance equipment this will be costed as a variation.

5 WORK TIMETABLE

- 5.1 **Desk-Based Assessment:** this element is expected to take approximately six days to complete, including the visual inspection of the site, and the preparation of notes to be included in the

final evaluation report. A plan of the proposed location of trenches will be compiled and forwarded to CCCAS.

- 5.2 **Archaeological Evaluation:** it is anticipated that this element will require approximately one day to complete.
- 5.3 **Report and Archive:** an evaluation report will be submitted within eight weeks of the completion of the fieldwork. However, should an interim statement be required this can be issued within two weeks but instruction must be received from the client prior to completion of the fieldwork.
- 5.4 **Written Instruction:** OA North can execute projects at very short notice once written confirmation of commission has been received from the client. One to two weeks notice would be sufficient to allow the necessary arrangements to be made to commence the task and inform CCCAS.

6 PROJECT MONITORING

- 6.1 **Access:** liaison for site access during the evaluation will be arranged with the client unless otherwise instructed prior to commencement of the archaeological investigation.
- 6.2 Whilst the work is undertaken for the client, the County Archaeologist will be kept fully informed of the work and its results, and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with CCCAS in consultation with the client.

7 STAFFING PROPOSALS

- 7.1 The project will be under the direct management of Tim Carew (OA North project manager) to whom all correspondence should be addressed.
- 7.2 All elements of the archaeological investigation will be supervised by either an OA North project officer or supervisor experienced in this type of project. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.
- 7.3 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist Christine Howard-Davis BA MIFA (OA North project officer). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England. However, she has specialist knowledge regarding glass, metalwork, and leather, the recording and management of waterlogged wood, and most aspects of wetland and environmental archaeology.
- 7.4 Assessment of any palaeoenvironmental samples which may be taken will be undertaken by Elizabeth Huckerby MSc (OA North project officer). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey. Assessment of any faunal material will be undertaken by Andrew Bates MSc (OA North Supervisor).

8 BIBLIOGRAPHY

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APPENDIX 3: PHASE 2 PROJECT BRIEF

BRIEF FOR AN ARCHAEOLOGICAL RECORDING PROGRAMME

AT 1 & 2 HOWGILL STREET, WHITEHAVEN

CUMBRIA

Issued by the

County Historic Environment Service

Environment Unit, Economy, Culture and Environment



COUNTY COUNCIL

Date of Brief: 31 August 2005

This Design Brief is only valid for 1 year after the above date. After this period the County Historic Environment Service should be contacted. Any specification resulting from this Brief will only be considered for the same period.

1. SITE DESCRIPTION AND SUMMARY

Site: 1 & 2 Howgill Street, Whitehaven

Grid Reference: NX 9725 1788

Planning Application No.: 4/04/2611

Detailed proposals and tenders are invited from appropriately resourced, qualified and experienced archaeological contractors to undertake the archaeological project outlined by this Brief and to produce a report on that work. The work should be under the direct management of either an Associate or Member of the Institute of Field Archaeologists, or equivalent. No fieldwork may commence until approval of a specification has been issued by the County Historic Environment Service.

2. PLANNING BACKGROUND

- 2.1 Cumbria County Council's Historic Environment Service (CCCHES) has been consulted by Copeland Borough Council regarding a planning application for 6 one bed flats at 1 & 2 Howgill Street, Whitehaven.
- 2.2 The site has been the subject of an archaeological evaluation which revealed the remains of a row of 18th century houses that were demolished in the 1980's (OAN, 2005, *Results of an Archaeological Desk-Based Assessment and Evaluation at 1 & 2 Howgill Street, Whitehaven, Interim Statement*, unpublished document). This brief must be read in conjunction with that statement. These remains will be disturbed by the proposed development and consequently a programme of further archaeological works is required comprising: (i) a photographic record of the upstanding 18th century wall and; (ii) the recording of one of the cellars.
- 2.3 This advice is given in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) and with policy ENV46 of the Copeland Local Plan.

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 Whitehaven is the earliest post-medieval planned town in England. Cartographic evidence indicates that the site was first developed in the mid to late 18th century when a row of five houses were constructed. To the rear of the site is a wall that is likely to have originated from four of the five 18th century houses. The evaluation revealed that floor surfaces and a cellar from these dwellings survive below ground.

4. SCOPE OF THE PROJECT

4.1 Objectives

- 4.1.1 To record the historic fabric of one of the surviving cellars.
- 4.1.2 To photographically record the upstanding 18th century wall to the rear of the plot.

4.2 Work Required

- 4.2.1 Demonstrably modern overburden and demolition debris within the interior of the cellar may be removed by machine. The surviving fabric of the cellar should then be recorded to an appropriate standard. Whether the recording comprises only a photographic record or includes a measured survey will be dependant upon the nature of the surviving fabric. This decision will be made once the cellar is clear of demolition debris
- 4.2.2 To carry out a photographic record of both sides of the upstanding 18th century wall to the rear of the plot. This should consist of the requirements of a 'Photographic Survey' as described by the Royal Commission on the Historic Monuments of England *Recording Historic Buildings, A Descriptive Specification*, 3rd edition, 1996.

5. SPECIFICATION

- 5.1 Before the project commences a specification must be submitted to and approved by the County Historic Environment Service.
- 5.2 Proposals to meet this Brief should take the form of a detailed specification prepared in accordance with the recommendations of *The Management of Archaeological Projects*, 2nd ed. 1991, and must include:
- ❖ A description of the methods of observation and recording system to be used
 - ❖ A description of the post excavation and reporting work that will be undertaken
 - ❖ Details of key project staff, including the names of the project manager, site supervisor, finds and environmental specialists and any other specialist sub-contractors to be employed
 - ❖ Details of on site staffing, e.g. the number of people to be employed on site per day
 - ❖ A projected timetable for all site work and post excavation work (through to final publication of results)
- 5.3 Any significant variations to the proposal must be agreed by the County Historic Environment Service in advance.

6. REPORTING AND PUBLICATION

- 6.1 The archaeological work should result in a report, this should include as a minimum:
- ❖ A site location plan, related to the national grid
 - ❖ A front cover/frontispiece which includes the planning application number and the national grid reference of the site
 - ❖ A concise, non-technical summary of the results
 - ❖ A description of the methodology employed, work undertaken, and the results obtained
 - ❖ Plans and sections at an appropriate scale
 - ❖ A list of, and dates for, any finds recovered and a description and interpretation of the deposits identified
 - ❖ The dates on which the project was undertaken
- 6.2 Three copies of the report should be deposited with the County Historic Environment Record within six months of completion of fieldwork. This will be on the understanding that the report will be made available as a public document through the County Historic Environment Record.
- 6.3 A summary report should be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork. If archaeological remains of significance are identified, one or more full reports should also be submitted to a suitable journal or other publication in due course.
- 6.4 Cumbria HER is taking part in the pilot study for the *Online Access to Index of Archaeological Investigations* (OASIS) project. The online OASIS form at <http://ads.ahds.ac.uk/project/oasis> must therefore also be completed as part of the project. Information on projects undertaken in Cumbria will be made available through the above website, unless otherwise agreed.

7. THE ARCHIVE

- 7.1 An archive must be prepared in accordance with the recommendations of *The Management of Archaeological Projects*, 2nd ed. 1991, and arrangements made for its deposit with an appropriate repository. A copy shall also be offered to the National Monuments Record.
- 7.2 The landowner should be encouraged to transfer the ownership of finds to a local or relevant specialist museum. The museum's requirements for the transfer and storage of finds should be discussed before the project commences.

7.3 The County Historic Environment Service must be notified of the arrangements made.

8. PROJECT MONITORING

8.1 One weeks notice must be given to the County Historic Environment Service prior to the commencement of fieldwork.

9. FURTHER REQUIREMENTS

9.1 It is the archaeological contractor's responsibility to establish safe working practices in terms of current health and safety legislation, to ensure site access and to obtain notification of hazards (eg. services, contaminated ground, etc.). **The County Historic Environment Service bears no responsibility for the inclusion or exclusion of such information within this brief or subsequent specification.**

9.2 The Code of Conduct of the Institute of Field Archaeologists must be followed.

9.3 The involvement of the County Historic Environment Service should be acknowledged in any report or publication generated by this project.

10. FURTHER INFORMATION

For further information regarding this Brief, contact

Jeremy Parsons
Assistant Archaeologist
Cumbria County Council
County Offices
Kendal
Cumbria LA9 4RQ
Tel: 01539 773431
Email: Jeremy.Parsons@cumbriacc.gov.uk

For further information regarding the County Historic Environment Record, contact

Jo Mackintosh
Historic Environment Records Officer
Cumbria County Council
County Offices
Kendal
Cumbria LA9 4RQ
Tel: 01539 773432
Email: jo.mackintosh@cumbriacc.gov.uk

As part of our desire to provide a quality service to all our clients we would welcome any comments you may have on the content or presentation of this design brief. Please address them to the Assistant Archaeologist at the above address.

APPENDIX 4: PHASE 2 PROJECT DESIGN

**1&2 Howgill Street,
Whitehaven**

CUMBRIA

**Photographic Recording
and Recording of Cellars
Project Design**



Oxford Archaeology North

September 2005

Louise Hetherington

OA North Tender No: t2550

NGR: NX 9725 1788

Planning Application No: 4/04/2611

1 INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Louise Hetherington (hereafter ‘the client’) proposes to enable the redevelopment of the site of 1 and 2 Howgill Street, Whitehaven, Cumbria (centred NX 9725 1788) for residential use and, consequently, Cumbria County Council Historic Environment Service (CCCHES) has been consulted by Copeland Borough Council regarding the planning application (Planning Application Number 4/04/2611). Following the results of a desk-based assessment and an evaluation undertaken by Oxford Archaeology North (OA North) in July 2005, CCCHES issued a brief requesting a further programme of mitigative archaeological recording to be undertaken in advance of development at the site. The client has invited OA North to submit a project design in accordance with the CCCHES brief. The following document represents a proposal for a programme of archaeological recording comprising the photographic survey of an eighteenth century wall and the recording of one of several eighteenth century cellars known to be preserved within the development area.

1.1.2 Whitehaven is situated on the West Cumbrian Coastal Plain, around the mouth of the Pow Beck, with the main urban growth restrained by the steeply rising hills to the north and south (CCC, n.d.; 2). Howgill Street itself runs in a north/south direction and adjoins Irish Street, to the south-west of the historic town centre. The development area comprises a small rectangle of approximately 150m², covered in hardcore and gravel and used as a parking area. It is bounded on three sides with existing buildings or property boundaries, whilst the fourth, western, edge is open onto the footpath along Howgill Street. The site is level at about 7m aOD.

1.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

1.2.1 During the later medieval period, Cumbria was divided into several administrative wards by Henry I, one of which, Allerdale above Derwent, became modern day Copeland, with Whitehaven as its principal town (Routledge 2002, 9). The monastery at St Bees was refounded in c1120 as a Benedictine house, with Whitehaven becoming part of the lands of the monastery (*ibid*). The first reference to Whitehaven as a harbour is in 1172, when the port was used by the Neville family to transport their quota of soldiers for Henry II’s conquest of Ireland (Anon n.d.). Whitehaven, however, remained relatively insignificant, with a 1566 survey recording only six fisherman’s cottages and a single boat (Cook 1993, 6).

1.2.2 Whitehaven is the earliest post-medieval planned town in England. This is mainly due to the Lowther family’s deliberate policy of independent development for Whitehaven, which led to industries as varied as chemical manufacture, spinning, weaving, textiles and glass manufacture, as well as pottery and coal industries, the latter of which was most significant (Fletcher 1878, 270). The coal trade, particularly to Ireland, precipitated the commencement of the construction of a new pier in 1633 and, by 1750, the collieries of Whitehaven were producing 200,000 tons of coal a year (Routledge 2002). Until depletion of the coal reserves in the twentieth century (Countryside Commission 1998, 29), the importance of the coal industry remained a constant and many important mining innovations were introduced at Whitehaven, such as at Saltom Pit (Jefferson 1842, 399).

1.2.3 The desk-based assessment undertaken by OA North in July 2005 identified a number of features of significance within the development area, including an early eighteenth century bowling green and a terrace of five houses (Numbers 1-5) likely to have been built some time during the mid- to late eighteenth century. Combined with a visual inspection of the development area, the desk-based assessment indicated that, during the nineteenth century, the most northerly of these houses (Number 1) had been incorporated into a property fronting Irish Street, while Numbers 2-5, which formerly stood on the development area, had been demolished in the 1980s. Only the rear wall of these properties survived as above-ground remains. A single evaluation trench, measuring 12m by 1.7m, was excavated to a depth of 1.2m within the development area, and indicated that surfaces and cellars pertaining to

Numbers 2-5 survived as below-ground remains; any development on the site was likely to have a negative impact on the survival of these archaeological remains. No evidence of earlier archaeological features were encountered during the evaluation.

1.3 OXFORD ARCHAEOLOGY NORTH

- 1.3.1 OA North has considerable experience of investigation of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 24 years. Evaluations, desk-based assessments, building surveys, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

- 2.1 The following programme has been designed in accordance with a brief by CCCHES to record the standing remains of the eighteenth century wall and to record a representative sample of the surviving cellars known to be present on the site and which will otherwise be affected by development of the site. The required stages to achieve these ends are as follows:
- 2.2 **Photographic Record and Survey:** a photographic record and description of both sides of the upstanding eighteenth century wall.
- 2.3 **Record of one Cellar:** to supervise the removal of backfill from one cellar, representative of several that are likely to be preserved on the site, and record the historic fabric.
- 2.4 **Report and Archive:** a report on the programme of work will be produced for the Client within eight weeks of completion of the fieldwork. A site archive will be produced to English Heritage guidelines (1991) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3. METHOD STATEMENT

3.1 PHOTOGRAPHIC RECORDING

- 3.1.1 The photographic record of the upstanding eighteenth century wall will include the recording of both elevations and will meet the requirements of a 'Photographic Survey' as described by the Royal Commission on the Historic Monuments of England *Recording Historic Buildings, A Descriptive Specification, 3rd edition*, 1996. An indexed photographic record will include colour slide and monochrome prints, using a 35mm SLR camera with an appropriate lens and scale. Where appropriate, descriptive notes will be made to aid interpretation.

3.2 RECORDING OF ONE CELLAR

- 3.2.1 **Methodology:** a programme of field observation will accurately record the location, extent, and character of the surviving historic fabric of one cellar representative of up to four cellars that potentially survive as below-ground remains on the site. Using the results of the evaluation as a guide, a mechanical excavator fitted with a toothless ditching bucket, will, under strict archaeological supervision, remove in selected areas spits of the uppermost layers of hard standing in order to define the limits of the cellars.

- 3.2.2 Once the cellar has been defined, any backfill will be carefully removed by the machine before, circumstances permitting, all elements of the emptied cellar will be cleaned by hand using trowels, hoes, brushes or shovels, as appropriate. Should it be determined at any time that the structure of the cellar is not safe, excavation will cease and recording will be undertaken as appropriate and within health and safety guidelines. All information identified in the course of the site works will be recorded stratigraphically, using a system adapted from that used by Centre for Archaeology Service of English Heritage and recorded on *pro-forma* recording sheets. Dependent on the nature of the surviving fabric, appropriate and sufficient pictorial records will be made (plans, sections, monochrome contacts and colour photographs) to identify and illustrate individual features and their accurate location (either on plan and/or section, and as grid co-ordinates where appropriate). Primary records will be available for inspection at all times
- 3.2.3 *Treatment of finds:* all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines. All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.
- 3.2.4 *Contingency plan:* in the event of significant archaeological features being encountered during the fieldwork, discussions will take place with the County Archaeologist or his representative, as to the extent of further works to be carried out. All further works would be subject to a variation to this project design. In the event of environmental/organic deposits being present on site, it would be necessary to discuss and agree a programme of palaeoenvironmental sampling and or dating with the Planning Archaeologist.
- 3.2.5 *Reinstatement:* it is assumed that there will be a basic requirement for reinstatement. Following completion of the recording and agreement with the client, the cellar will be backfilled using the material removed from it before being graded and compacted with the machine.
- 3.3 **REPORT AND ARCHIVE**
- 3.3.1 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further three copies submitted to the Cumbria HER within eight weeks of completion. It is proposed that the results of this stage of the project will be combined with those of the desk-based assessment and evaluation to create a single volume. The report will include:
- a front cover to include the planning application number and the NGR
 - a site location plan, related to the national grid
 - the dates on which the fieldwork was undertaken
 - a concise, non-technical summary of the results
 - a description of the methodology employed, work undertaken and results obtained
 - a discussion of the results within the context of the local area
 - plans and sections at an appropriate scale, showing the location of features
 - other illustrations and photographic plates showing, as appropriate, features of interest or to demonstrate the absence of archaeological features.
 - a description of any environmental, finds, or other specialist work undertaken, and the results obtained

- a list of, and dates for, any finds recovered and a description and interpretation of the deposits identified
 - the report will also include a complete bibliography of sources from which data has been derived.
 - a copy of this project design and the CCCHES brief in the appendices, and indications of any agreed departure from that design
- 3.3.2 This report will be in the same basic format as this project design; a copy of the report can be provided on CD, if required.
- 3.3.3 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (Management of Archaeological Projects, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context. All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists.
- 3.3.4 The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the County Record Office, Kendal. The material archive (artefacts and ecofacts) will be deposited with an appropriate museum following agreement with the client.
- 3.3.5 The Arts and Humanities Data Service (AHDS) online database project Online Access to index of Archaeological Investigations (OASIS) will be completed as part of the archiving phase of the project.
- 3.3.6 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. HEALTH AND SAFETY

- 4.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A risk assessment will be completed in advance of any on-site works and copies will be made available on request to all interested parties. The risk assessment will be updated, as appropriate, during the course of the site works, and will be monitored by the project manager.
- 4.2 **Fencing/hoarding requirements:** it is assumed that there will be a basic requirement for HERAS fencing to protect the site from public access during the course of any groundworks and the cost for this as been included.
- 4.3 Any known contamination issues or any specific health and safety requirements on site must be made known to OA North by the client to ensure all procedures can be met.

4.4 Similarly, any drawings or knowledge of live cables or services that may pose a risk to OA North staff during evaluation must be made known to the project manager of OA North before site work. This will ensure the risk is dealt with appropriately. The site will be scanned using a Cable Avoidance Tool (CAT scanner) in advance of the commencement of the site works.

4.5 Should areas of previously unknown contamination be encountered on site the works will be halted and a revision of the risk assessment carried out. Should it be necessary to supply additional PPE or other contamination avoidance equipment this will be costed as a variation.

5. WORK TIMETABLE

5.1 **Photographic Survey:** this will take one day to complete in the field.

5.2 **Recording of one cellar:** it is estimated that this element will take a maximum of two days to complete.

5.3 **Report and Archive:** a report on the fieldwork will be submitted within eight weeks of the completion of the fieldwork. However, should an interim statement be required this can be issued within two weeks but instruction must be received from the client prior to completion of the fieldwork.

5.4 **Written Instruction:** OA North can execute projects at very short notice once written confirmation of commission has been received from the Client. One to two weeks notice would be sufficient to allow the necessary arrangements to be made to commence the task and inform CCCHES.

6. PROJECT MONITORING

6.1 **Access:** liaison for site access during the fieldwork will be arranged with the client unless otherwise instructed prior to commencement of the archaeological investigation.

6.2 Whilst the work is undertaken for the client, the County Archaeologist will be kept fully informed of the work and its results, and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with CCCHES in consultation with the Client.

7. STAFFING PROPOSALS

7.1 The project will be under the direct management of Stephen Rowland (OA North project manager) to whom all correspondence should be addressed.

7.2 All elements of the archaeological investigation will be supervised by either an OA North project officer or supervisor experienced in this type of project. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

7.3 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist Christine Howard-Davis BA MIFA (OA North finds manager). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England.

8. BIBLIOGRAPHY

Anon, n.d. www.whitehaven.ukf.net

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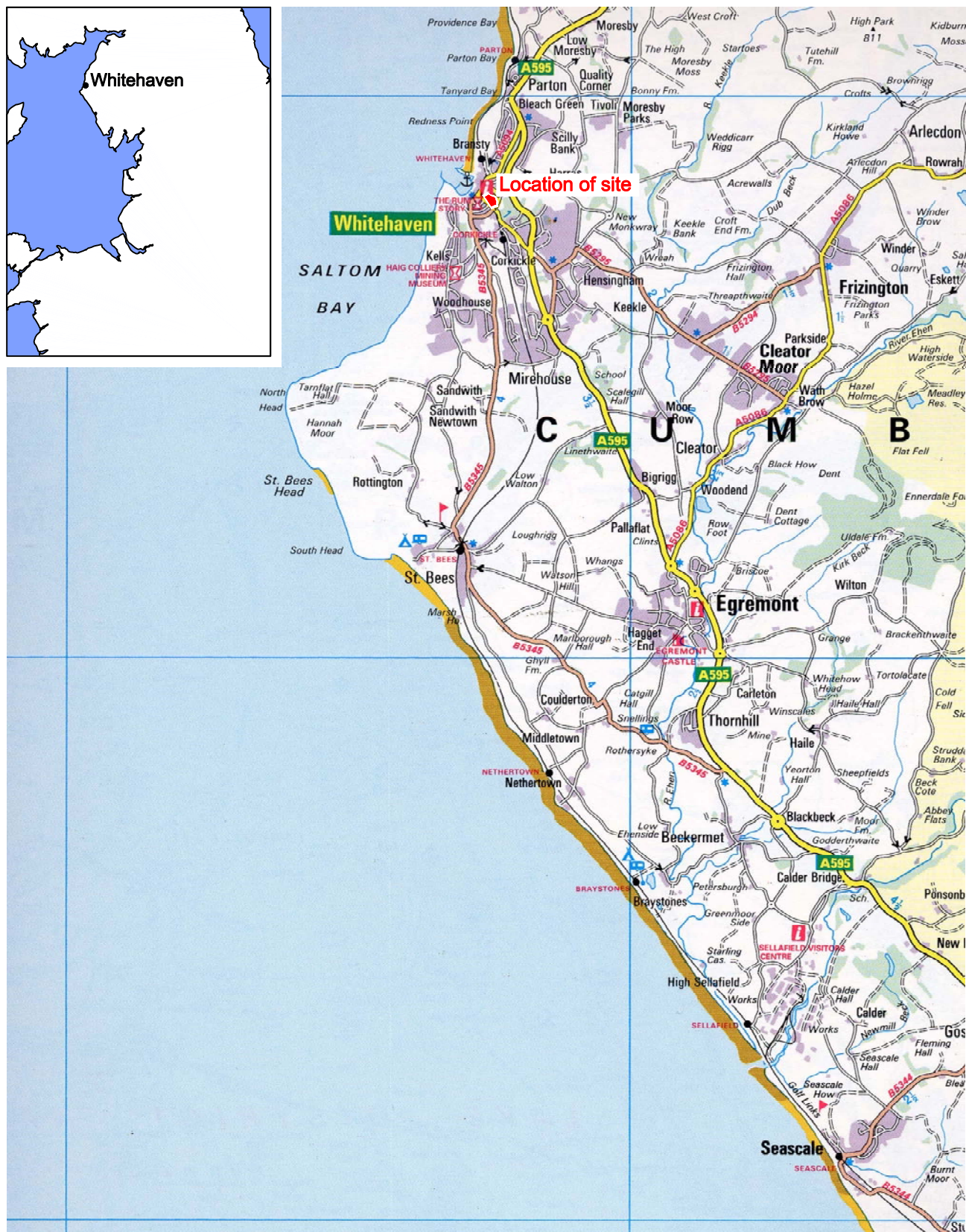
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APPENDIX 5: TABLE OF CONTEXTS

Context Numbers	Description
1	Hardcore modern surface
2	Cellar backfill
3	Southern wall of cellar 15
4	Back wall of property number 3
5	Interior flagged floor of property number 3
6	Brown sand below flagged floor 5
7	Yellowish brown sand under 6 , possible natural
8	Tarmac
9	Back wall of property number 4
10	NW-SE single brick wall within property number 4
11	Concrete floor within property number 4
12	Interior flagged floor of property number 4
13	Drain/pump in yard of property number 4
14	Blackish brown silt, possible backfill for foundation trench or build-up of yard material
15	Cellar, with the southern wall 3
16	Dividing wall between properties 4 and 5 , interior wall within number 4 and back wall (9) of number 4
17	Exterior flagged surface of the yard of property numbers 4 and 5
18	Possible single brick wall of outbuilding of property of number 4



based upon the Ordnance Survey 1:100,000
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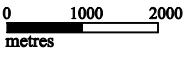


Figure 1: Location map

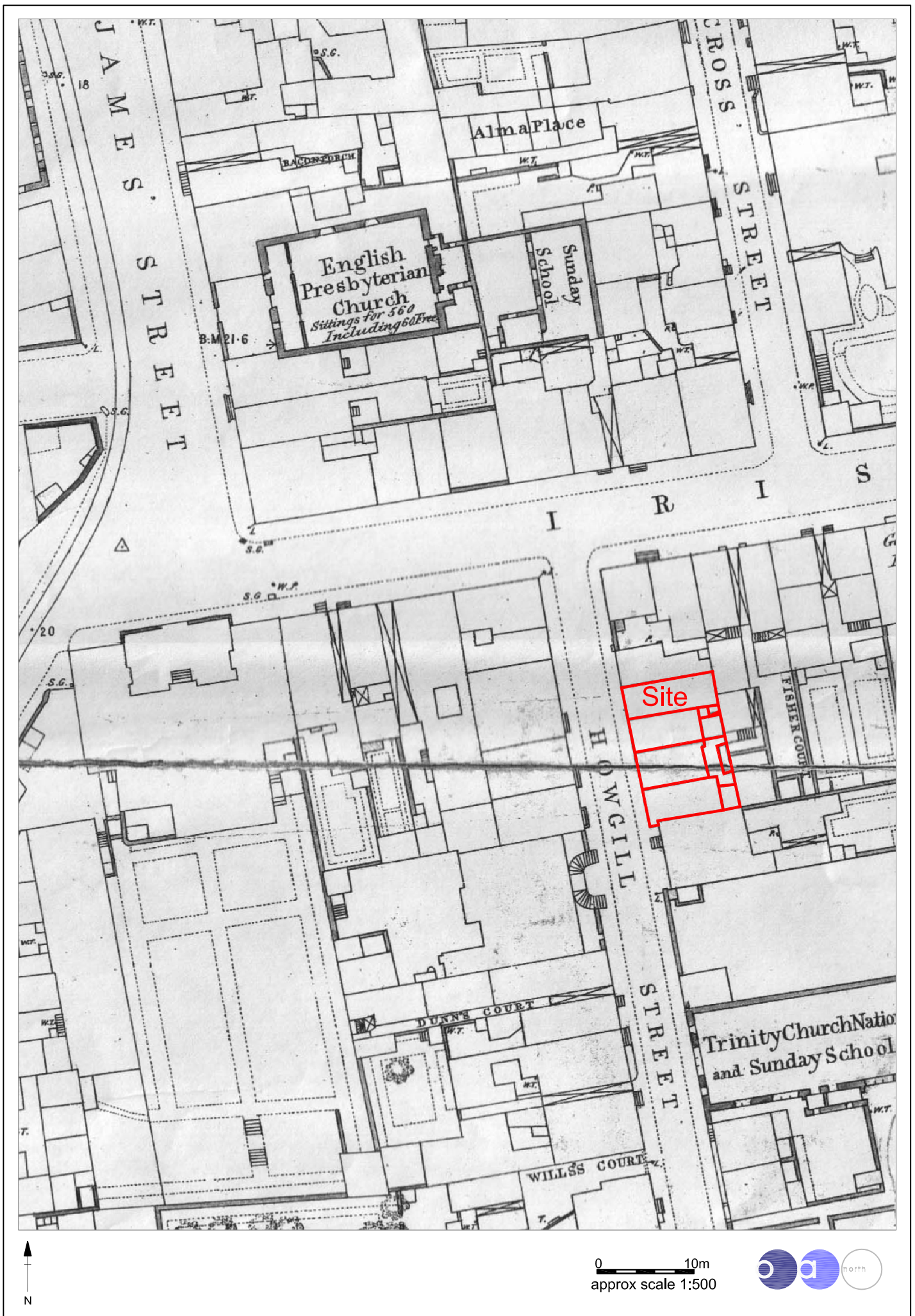


Figure 10: Detail from OS First Edition 6 inch: 1 mile, 1863



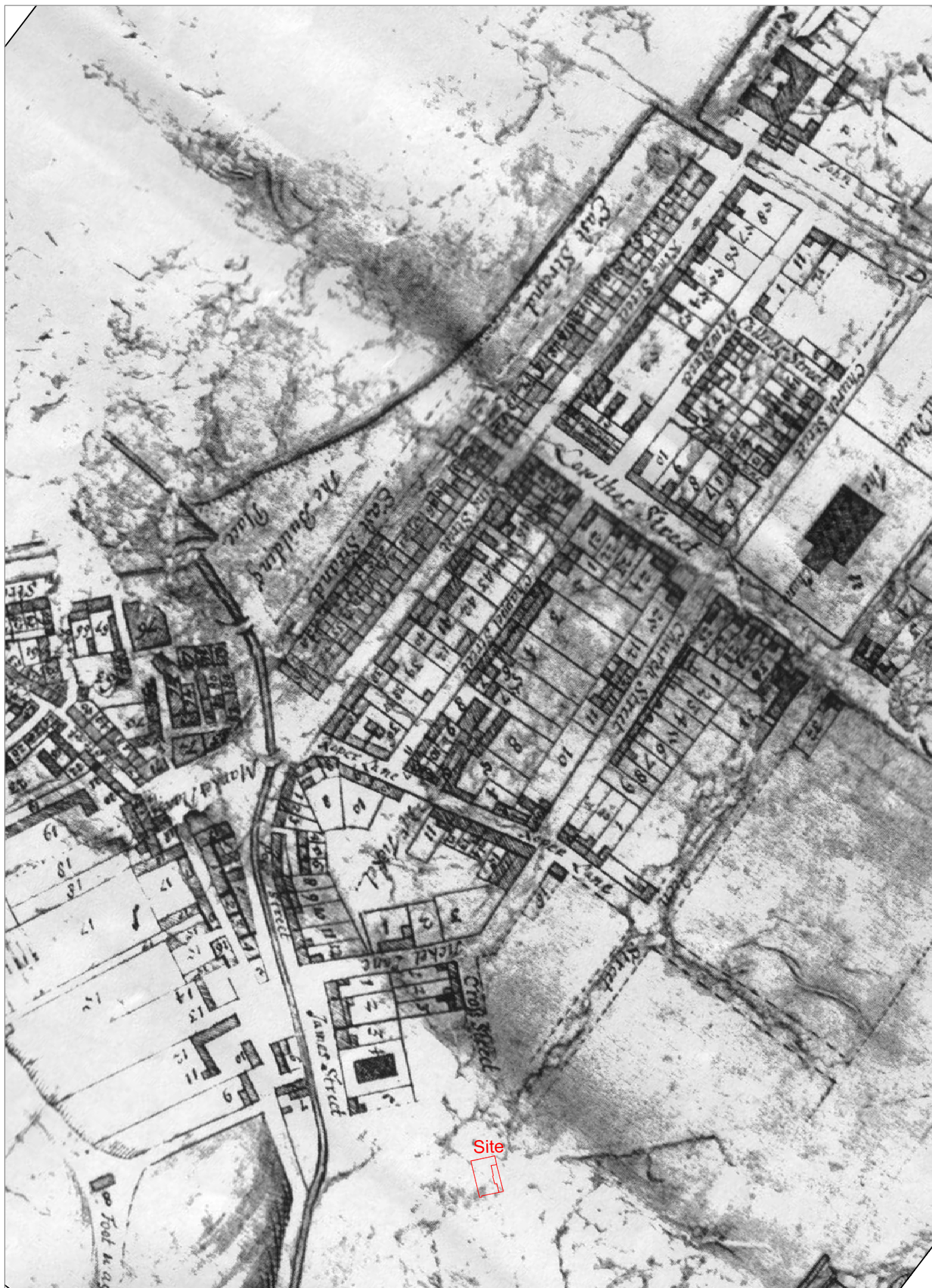
Figure 11: Detail from OS First Edition 25 inch: 1 mile, 1865



0 200m
Scale 1:10,000



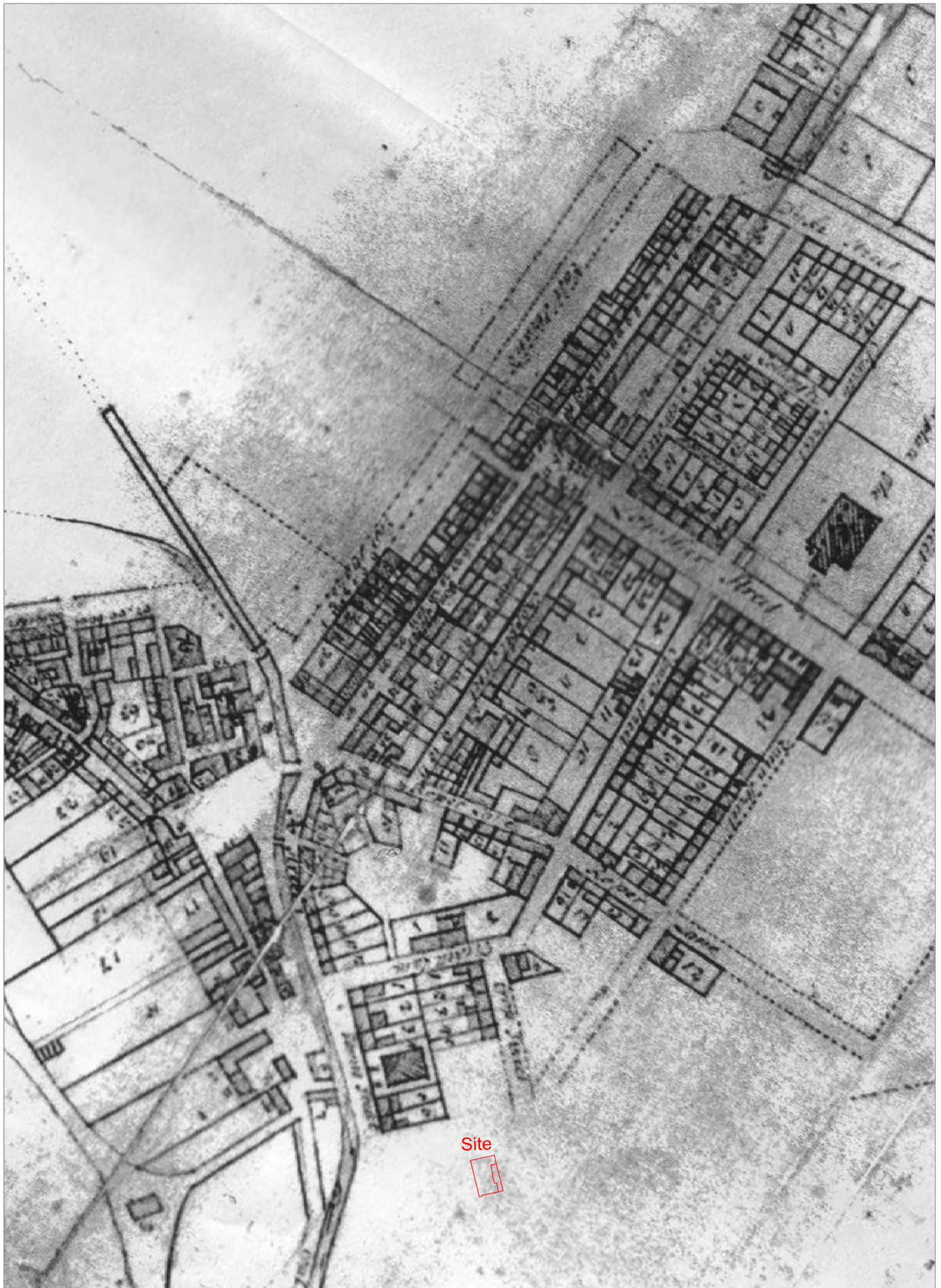
Figure 2: Plan of gazetteer sites



0 50m
approx scale 1:2000



Figure 3: Pellin's 1695 plan of Whitehaven



0 50m
approx scale 1:2000



Figure 4: Pellin's 1699 plan of Whitehaven



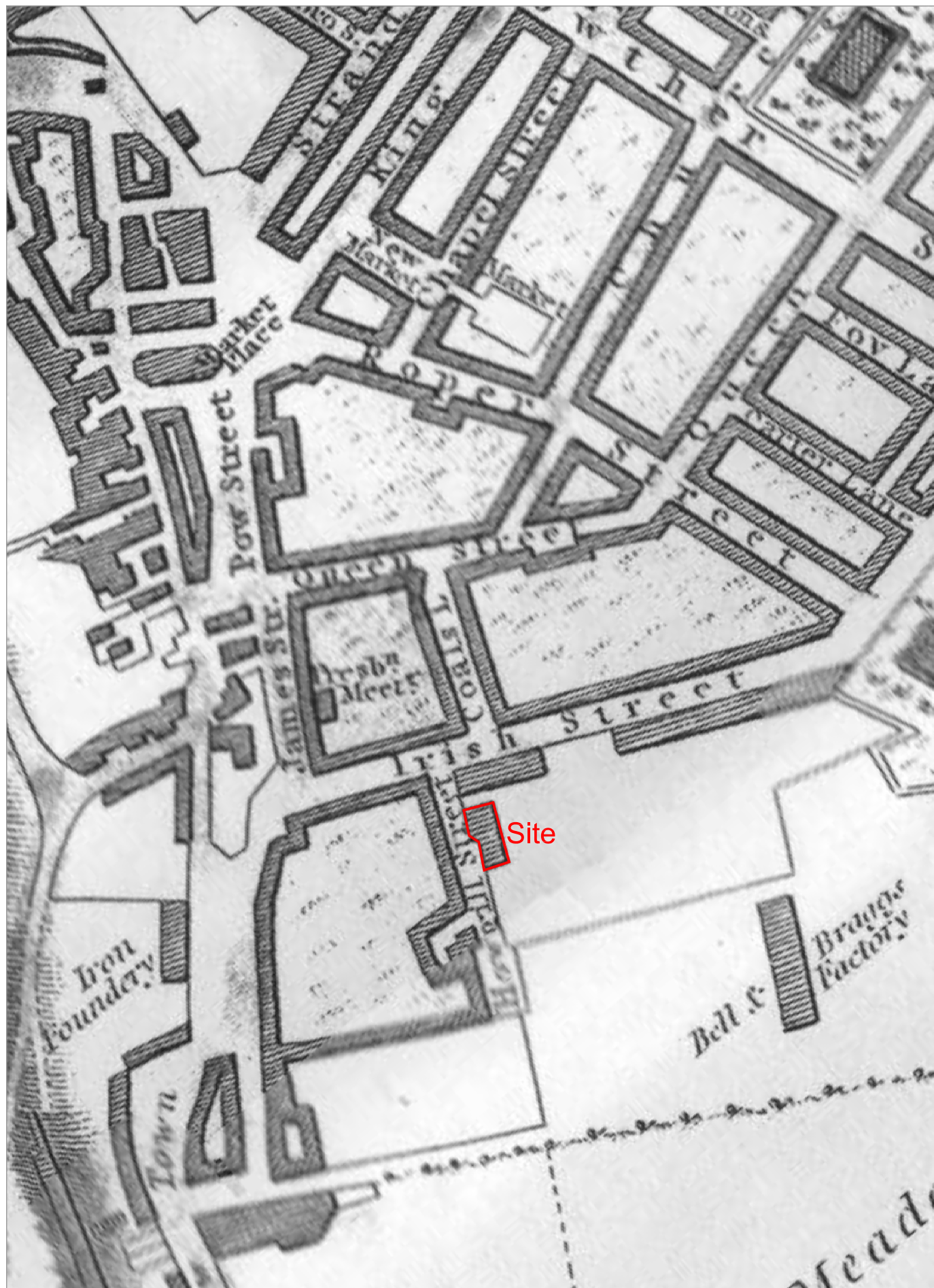
Not To Scale



Figure 6: Plan of Whitehaven, 1770; from 'Whitehaven: 1660-1800' by S. Collier for the Royal Commission on the Historical Monuments of England.



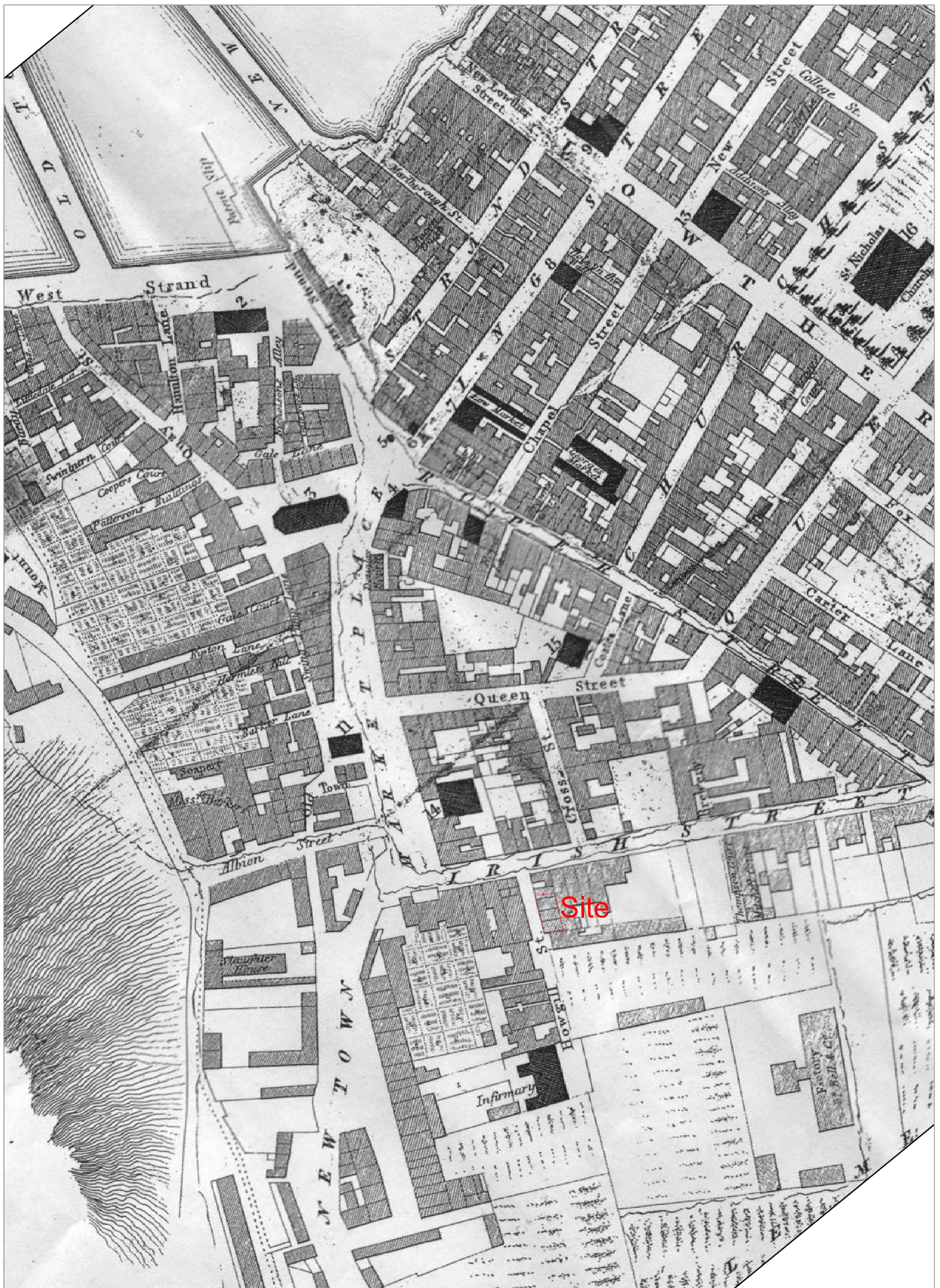
Figure 7: Hutchinson's Plan of Whitehaven, 1790; from 'Whitehaven: 1660-1800' by S Collier for the Royal Commission on the Historical Monuments of England



0 50m
approx scale 1:2000



Figure 8: Detail from Cadell and Davies' 1815 map of Whitehaven



0 50m
approx scale 1:2000



Figure 9: Detail from Wood's Plan of Whitehaven, 1830



0 20m
approx scale 1:1000



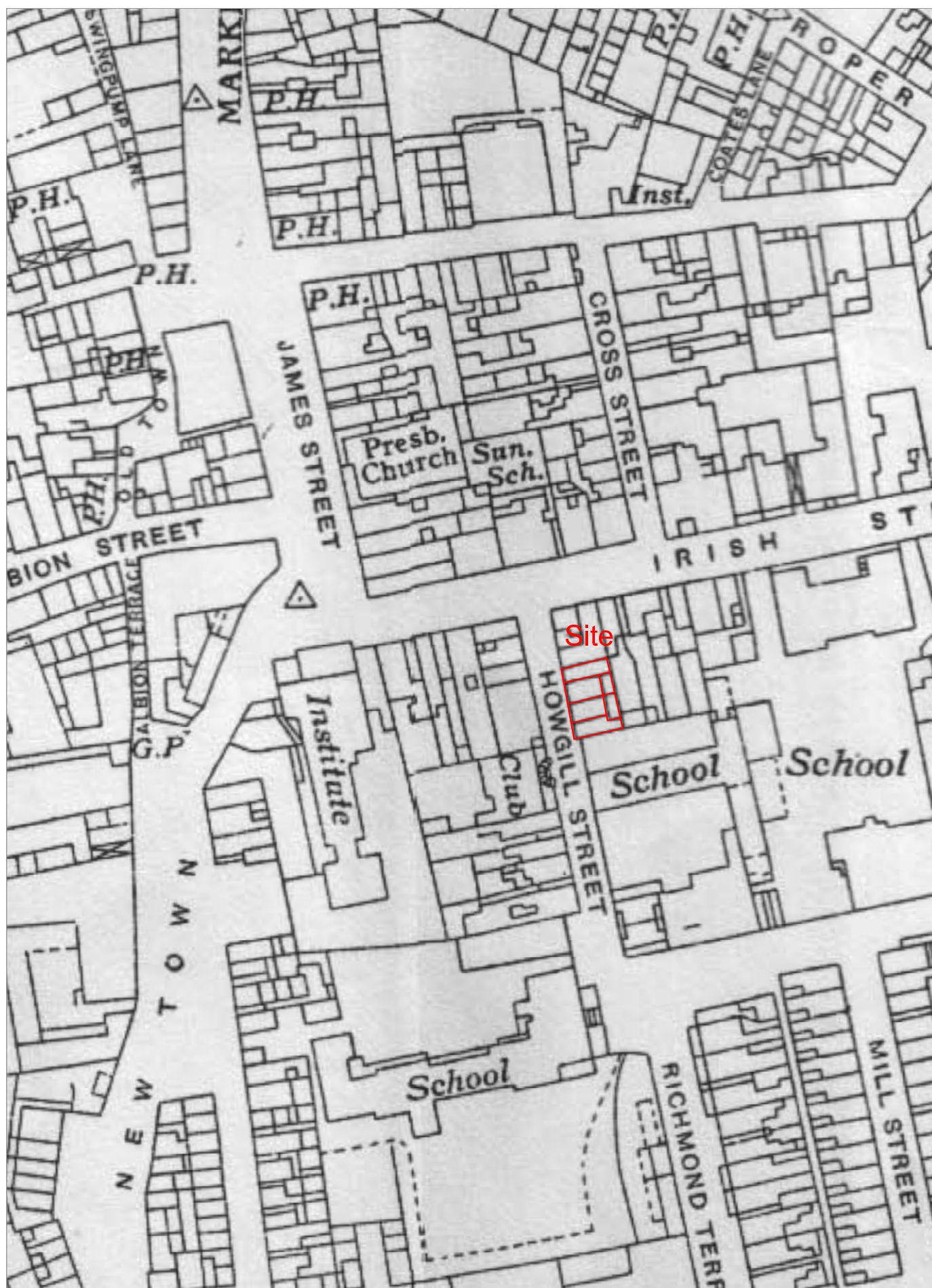
Figure 12: Detail from OS Second Edition 25 inch: 1 mile, 1899



0 20m
approx scale 1:1000



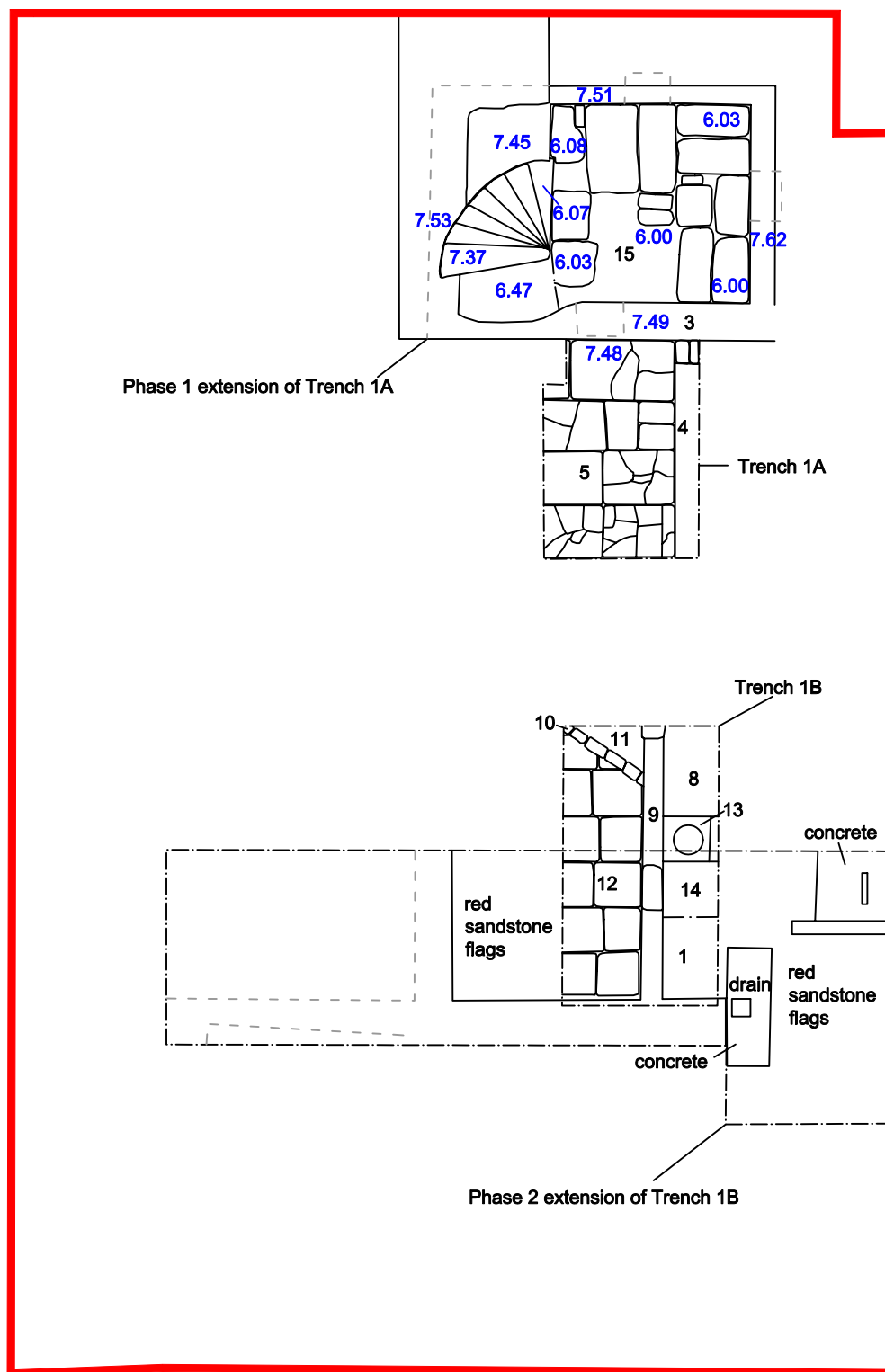
Figure 13: Detail from OS Third Edition 25 inch: 1 mile, 1925



0 20m
approx scale 1:1000



Figure 14: Detail from OS Fourth Edition 25 inch: 1 mile, 1938



Key:
 6.07 levels
 10 context
 — site boundary

0 2.5m
 Scale 1:75



Figure 15: Trench plan of internal features



Plate 1: General overview of site



Plate 2: Trench 1A (Phase 1) showing cellar wall (3)



Plate 3: Trench **1A** (Phase 1) showing floor (5) and wall (4)



Plate 4: Trench **1B** (Phase 1) showing floor (12) and wall (9)



Plate 5: Overview of cellar (*15*) in trench **1A** (Phase 2)



Plate 6: Stone steps on western side of cellar (*15*) in trench **1A** (Phase 2)



Plate 7: Trench **1B** (Phase 2) showing dividing wall (**I6**) of properties 4 and 5



Plate 8: Photographic survey of west-facing elevation of the property boundary wall



Plate 9: Photographic survey of west-facing elevation of the property boundary wall



Plate 10: Photographic survey of west-facing elevation of the property boundary wall



Plate 11: Photographic survey of west-facing elevation of the property boundary wall



Plate 12: Photographic survey of east-facing elevation of the property boundary wall



Plate 13: Photographic survey of east-facing elevation of property boundary wall



Plate 14: Photographic survey of east-facing elevation of property boundary wall



Plate 15: Close up of ground floor fireplace of property Number 2