

June 1997

# PARTON ENVIRONMENTAL IMPROVEMENTS Cumbria

**Archaeological Evaluation Report** 

Commissioned by:

**Cumbria County Council** 

**Environment and Design** 

# Parton Environmental Improvements West Cumbria

Archaeological Evaluation Report

Checked by Project Manager.		
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Passed for submission to client.		
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This report is the product of the hard work of a number of people. Documentary research was by Caron Newman, supplemented by Michael Trueman who also produced the site gazetteer and overview. The sites were surveyed by Jonny Godfrey, and trial trenching was by David Hodgkinson, the fieldwork being assisted by Graham Motteshead. The CAD drawings were generated by Jane Robson. The report was written by Michael Trueman, Caron Newman and David Hodgkinson and was edited by Christine Howard-Davis, Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

# **EXECUTIVE SUMMARY**

This report presents the results of an archaeological evaluation, based on a topographic survey combined with field survey and trial trenching, of two industrial sites in Parton, to the north of Whitehaven in Cumbria. The first is a former coal mine and brickworks, dating from the 1820s, at Bank Yard Road (NX 9785 2020) and the second is a former brewery, dating from before 1815, at Foundry Road (NX 9808 2055). The remains are contained within two distinct plots of land, the southern plot (Area B) containing the remains of the coal mine, brickwork's and associated housing and the northern plot (Area D) containing the remains of the brewery.

The work comprised a desk-top study to collate existing information on both areas, a programme of outline survey to identify the extant surface remains of the industrial landscapes, a limited programme of targeted trial trenching to investigate the subsurface survival, and a fabric survey of upstanding walls which will be affected by the reclamation proposals.

Area B, Coal Mine and Brickworks: The southern end of Area B, known as the brickworks, was first developed some time after 1815. A drift mine was cut into the base of the cliff beneath the site in 1827 and a map of 1835 depicts this drift mine and adjoining mine shaft next to a large building on the site. The mine continued in use until 1863, but the building is shown on successive maps up to the Ordnance Survey 3rd edition of 1925. At some date after this the building was demolished. Photographs from early this century show the building with a large chimney. No maps or documents have been found which identify the building's function; however, oral evidence from local inhabitants confirms it was used as a brickworks. From the 1st edition maps onwards (1863) until the third edition OS map (1925) there were structures in the northern part of Area B which in plan appear to be domestic housing.

The evaluation trenching revealed the remains of a number of large industrial features, in particular the presence of a large sandstone-constructed flue with an associated cobble surface and a sloping ceramic tiled surface which contained runnels for drainage. Other features included brick floor surfaces with associated internal and external walls. Although the trial trenching confirmed the form of the structures, the nature of any industrial processes which were undertaken on the site was elusive. There was an abundance of coal and associated debris on the site, but material which would confirm the use of the site as a brickworks was not evident.

Area D, Brewery: The brewery is first shown on a map of 1815, and has entries in trade directories from 1829 onwards; the first recorded owner in 1829 was John Harrison & Co. By 1847 the brewery was owned by William Aldrich, described as brewer and maltster, and by 1879 the company was in the hands of Joseph Dalzell. Documents in the Cumbria Record Office (Whitehaven) show that it expanded and prospered, continuing in the hands of the same family at least until the 1920s.

Three evaluation trenches were excavated in this area and the southernmost of these revealed a large cellar. The southernmost wall of the cellar formed part of a culvert for a piped stream, noted in the topographic survey. The cobbled yard surface was also

investigated and it was evident that no previous activity had taken place on the site prior to the construction of the brewery.

Assessment of Importance: From the investigations carried out, it is clear that the remains as a whole represent a very important element of Patron's industrial history, and a significant element of the West Cumberland coal mining landscape. On the very edge of Area B, the remains of an engine house and associated coal pit shaft may be of national importance.

**Recommendations:** It is considered that the earthwork survey provided for an adequate mitigative record of the earthworks and spoil mounds and therefore there was no requirement for more detailed topographic survey. The fabric survey similarly provides a mitigative record; however, there is one wall, adjacent to the domestic housing in Area B, which will be affected by the proposals, but which was not required to be surveyed as part of the evaluation. It is therefore recommended that this also be subject to a fabric survey.

The consolidation of the main revetment wall will have an adverse affect upon the remains of the adjacent industrial buildings and it is recommended that an archaeological excavation be undertaken along the full length of this wall to provide a mitigative record of the archaeological structures and deposits prior to their destruction.

# 1. INTRODUCTION

- An archaeological evaluation was undertaken by Lancaster University Archaeological Unit (LUAU), on behalf of Cumbria County Council, ahead of a programme of landscaping of a former brickworks at Bank Yard Road (NX 9785 2020) and a former brewery at Foundry Road (NX 9808 2055), both in Parton, north of Whitehaven, Cumbria.
- 1.2 The aim of the work was to assess the impact that the landscaping proposals would have upon the archaeological remains within the affected areas. This was achieved by undertaking a desk-top study, a programme of surface survey, fabric survey and evaluation trenching within both areas.
- 1.3 The desk-top study, which was carried out in advance of the field survey and trial excavations, was undertaken between 8th and 14th April 1997. The fieldwork was undertaken between 14th and 23rd April 1997.
- 1.4 This report sets out the results of the work as a gazetteer in conjunction with a methodology statement, a textual description of the desk based and field results, and an assessment of the impact that the proposed development will have upon the archaeological resource.

# 2. METHODOLOGY

#### 2.1 **PROJECT DESIGN**

- 2.1.1 A project design (*Appendix 2*) was submitted by LUAU in response to a request for an archaeological evaluation of the proposed landscape development of the brewery and brickworks. It was designed in response to a project brief (*Appendix 1*) by the County Archaeologist for Cumbria.
- 2.1.2 The project design provided for an initial archaeological assessment involving a desk-top survey, a topographic survey, and a fabric survey of selected elements; this was followed by a programme of evaluation trial trenching. The work has been carried out entirely in accordance with the project design and the results are presented in this report.

#### 2.2 **DESK-TOP SURVEY**

2.2.1 Existing archaeological information was obtained from the Cumbria Sites and Monuments Record (SMR). Manuscript maps and selected other documents were studied in the Cumbria Record Offices in Carlisle and Whitehaven, along with published antiquarian sources and trade directories. A visit was also paid to the Beacon Centre in Whitehaven, which holds a photographic archive. The tithe map was examined (WRO YPR 15/104 1838), but the enclosure map contained no information of relevance to this study. Numerous documents are contained in the Lonsdale archives (D/Lons), in Carlisle Record Office; this included plans relating to Parton and many of these were examined, although only a few contained material pertinent to this study.

#### 2.3 TOPOGRAPHIC SURVEY

- 2.3.1 The field survey was undertaken to evaluate the area of the proposed landscaping by non-intrusive methods and also to mitigate for the destruction of the resource by the development. This involved the production of a Level 2 topographic survey (LUAU 1993) of the study area which incorporated hachured interpretative drawings of the earthworks, and defined the extent of all surface archaeological features in relation to the main topographic elements. It was produced in conjunction with both an objective and an interpretative description of individual features. For Area B those elements have been included, in full, in the landscape gazetteer (*Section 9*), whereas Area D of less complexity and the feature descriptions have been incorporated within the general site description (*Section 5*).
- 2.3.3 The archaeological features were located by systematic ground reconnaissance. Both archaeological and significant topographic detail were surveyed using a total station and data-logger and the data was transferred into a CAD system (FastCAD). The archaeological detail was drawn up in the field with respect to field plots of the survey data and these edits were then drawn onto the raw survey data within the CAD system. The archaeological digital data was

subsequently superimposed with base digital topographic data provided by Cumbria County Council.

#### 2.4 FABRIC SURVEY

- 2.4.1 The fabric survey involved the recording of upstanding elements of Areas B and D which will be affected by the proposed reclamation development; it included the external elevations of Structure 5.4 and both faces of the main earth-retaining wall. A single small upstanding wall (D4) was recorded within the area of brewery. The drawing is incorporated within the archive but is not presented within the present report.
- 2.4.2 **Photographic Survey:** A general semi-oblique photographic record was produced of all the affected external elevations and in addition general oblique detail photography was undertaken of relevant and significant features. Some of the smaller elevations were recorded by rectified photography and were subsequently digitised into a CAD system.
- 2.4.3 **Drawn Survey:** The survey recorded the outlines of all significant stones, quoins, ashlars, the outlines of the walls and masonry breaks, but not individual stones. Most of the elevations were recorded using a Leica reflectorless total station, which generates a laser beam and is able to extract a distance measurement by its reflection from wall surfaces. The distance measurement is accurate to +-6mm and the recording involves tracing the laser beam around architectural features. The digital information is transferred from a data logger into a CAD system and paper plots are output to enable the enhancement of the digital record by hand survey techniques. The hand survey amendments are then transferred back into the CAD system which offers the flexibility to enhance, manipulate, and model the graphical data output to generate the final drawings. The elevation drawings were output at 1:50. The remaining drawings were prepared by rectified photography (Section 2.4.2).

#### 2.5 TRIAL TRENCHING

- 2.5.1 A programme of trial excavation was formulated to target features of possible archaeological significance that were identified from the surface survey. The County Archaeologist requested that the trenches investigate an area of approximately 5% of the study area, which was to be achieved through the excavation of six trenches at Area B, each measuring 15m in length, and two trenches in Area D each measuring 7.5m in length. In practice, and on the basis of surface conditions, safety considerations and machine access, 10 trenches were excavated, seven in Area B and three in Area D. All the trenches were located to examine surface features apart from Trench 6, which tested a blank area.
- 2.5.2 Turf, topsoil and subsoil were separated during the excavation and replaced in reverse order to ensure that the reinstatement was to as high a standard as possible, although the amount of rubble present precluded perfect results.

- 2.5.3 The excavation was initially undertaken by a mechanical excavator (a JCB 3CX) fitted with a 1.8m toothless ditching bucket, and was followed by manual excavation for the purpose of examining archaeological detail. Excavation was undertaken to the top of natural subsoils or made up ground in the area of the large terrace. The trenches were then mechanically backfilled.
- All excavation was carried out stratigraphically, whether by machine or by hand, and recorded in an appropriate manner. The recording methods employed by LUAU accord with those recommended by English Heritage's Central Archaeology Service (CAS). Recording was in the form of *pro forma* Trench Sheets for each trench, which recorded the orientation, length, and depth of machining, and described the nature of the topsoil, subsoil (where applicable), and geological deposits. Where potential features were observed they were sampled manually, with a full textual, drawn, and photographic record being maintained. Any finds recovered were retained and recorded by either the trench number or, where appropriate, by the context number of the deposit from which they were recovered.
- 2.5.5 The positions of the trenches were recorded by total station and were subsequently plotted onto the completed topographic survey plan (Fig 6).

#### 2.6 GAZETTEER OF SITES

- 2.6.1 **Documentary Gazetteer:** The collated information on the site and its immediate environs is presented in the form of a gazetteer (Section 8), in conjunction with an annotated map at 1:10,000 scale showing the locations of the sites, expressed, where possible, as eight-figure National Grid References (Fig 2). A summary description of each site is provided in conjunction with a reference to the source of the information (SMR, cartographic, documentary, field inspection, and trial excavation) and other references as appropriate. An assessment has been given of the interpretation and archaeological potential of the site. Other sites within and around the village, which were considered to be of background relevance, are mentioned in the text with appropriate SMR references.
- 2.6.2 **Site Components:** A gazetteer of component features of the brickworks site (Area B) was compiled (*Section 9*). This is a product of site observation and reflects a basic description of the features and assesses their context within the overall site. The features relate to the main site plan (Fig 4). The brewery site was of a less disparate nature and it was possible to incorporate the gazetteer description within the main descriptive text (*Section 5*).

#### 2.7 ARCHIVE

2.7.1 A full archive of the desk-top survey, field inspection, and trial trenches has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited

with the County Record Office with a copy of the report given to the CSMR. A copy of the archive will also be available for deposition with the National Monuments Record in Swindon.

#### 2.8 HEALTH AND SAFETY

2.8.1 Both Lancaster University and LUAU maintain Safety Policies, the latter based on the SCAUM (Standing Conference of Unit Managers) *Health and Safety Manual* (1991). In keeping with current Health and Safety at Work Regulations, prior to commencing on-site work, a risk assessment for each activity was completed. Due regard was given to all Health and Safety considerations during all aspects of the project, with information having been gained from the client regarding services. However, it is LUAU's standard practice to scan the positions of all trenches for underground cables using a Uscan meter. No services were revealed during the course of the evaluation programme.

# 3. TOPOGRAPHIC AND HISTORICAL CONTEXT

#### 3.1 GEOLOGY AND TOPOGRAPHY

- 3.1.1 The village of Parton is a coastal settlement, backed by a steep hill or cliff. The soils are coarse and loamy, overlying clayey deposits (OS Soil Survey 1983). The underlying solid geology comprises Carboniferous Limestone with productive Coal Measures, including Micklam Fireclay deposits. To the east are Coal Measure deposits of Whitehaven Sandstone, comprising mottled and grey shales with thin coals. There are numerous surface faults within the area of the village (OS Geological Map 1983, Sheet 28).
- 3.1.2 The Cumberland coalfield covers an area of 86-90 square miles, which borders the coast from Whitehaven in the south to Maryport in the north, and then extends inland in a thin strip almost to Wigton (Daysh 1938, 21). The main seam in the Parton area is the Six Quarter or Lickbank seam.

#### 3.2 HISTORICAL BACKGROUND

- 3.2.1 Information on the origins and early history of Parton is very sparse. It is a township within the parish of Moresby, and served as its port for fishing vessels. Although there are numerous references in trade directories to it being more ancient than Whitehaven (Parson and White 1829, 229; Mannix and Whellan 1847, 353; etc) the first documentary evidence for its existence is dated 1566, in a report by Commissioners appointed to survey ports, creeks and harbours in Cumberland. They describe Parton as a port exporting fish to Chester and Liverpool in small vessels, called pickerdes (Wood 1988, 1).
- 3.2.2 Collieries were already well-established in Moresby parish in the seventeenth century, and the owners shipped out their coal through Parton. This was taking place in direct competition with other mines in the area owned by Sir John Lowther, who, late in the same century, attempted to gain a monopoly by buying up as much of the coal-bearing land as he could, and thus concentrating ownership in his own hands (CRO D/Lons/W1/66 1718). In response to Sir John's predatory business dealings, the remaining coal mine owners, merchants, and ship owners proposed the construction of a new pier in Parton in order to avoid paying export duties through Sir John Lowther's port at Whitehaven (Wood 1988, 9). Lowther, however, succeeded in persuading the King to grant to him the land at Parton between the high and low water marks, thus gaining control of the port in 1678. Despite this constraint, William Fletcher, Lord of the Manor of Moresby, attempted to build a pier two years later. Lowther not only obtained a perpetual injunction against him, but also went on to gain trading preferment for his own port of Whitehaven. By 1681 he had made further development of the port at Parton legally impossible. Subsequently, as Lowther's own business needs made a port at Parton desirable, he relented and allowed other coal owners to repair the pier at Parton. When they proposed obtaining an Act of Parliament to allow the enlargement of the harbour, however, he refused to join them, and in 1706 an

Act was passed to enlarge Parton harbour (Wood 1988, 10). Mismanagement and poor investment meant that the pier was destroyed by storms in 1718 and needed to be rebuilt.

- 3.2.4 Caught up in the intense battle between a small number of local families for control of the coal trade on the west coast of Cumbria, Parton was again refurbished and for a while, with a new pier and larger harbour, the quantity of coal exported from Parton was greatly increased, even exceeding that from Whitehaven (Parson and White 1929, 229). In 1794, however, Parton was described by the antiquarian Hutchinson as a little haven, whose chief export was still coal (Hutchinson 1794, 94). By the following year, a great storm had again washed the pier away, and Parton sank back to relative obscurity, becoming again just a fishing village (Mannix and Whellan 1847, 353).
- 3.2.5 *Cumbria Sites and Monuments Record:* There are 26 sites marked on the Sites and Monuments Record (SMR) within the vicinity of Parton. Several of these are Roman sites including a road, a fort, burials and a settlement, with associated find spots and features. There are also two prehistoric burial mounds and finds, as well as a medieval church and tower house. The post-medieval harbour and pier are marked, as is the brickworks. A detailed list of all the sites is contained in the gazetteer and the sites are shown on Figure 2.

# 4. DOMESTIC HOUSING, THE COAL MINE AND BRICKWORKS (AREA B)

#### 4.1 Introduction

- 4.1.1 This plot of land is situated at the southern end of the village. On a plan of 1815, the northern third of the plot is shown with (presumably) domestic buildings (CRO D/Lons/W Plans 1815) with fields to the south. Later the southern part of the site was transformed into a coal mine, the 'Parton Drift', which began in 1827. It was used as a coal exit for the 'Countess Mine' which was opened in 1832 and is shown on map of Parton by William Gawthorp (1835: Fig 3); the site expanded until the mines were closed in the 1860s. The site appears on later maps as a coal depot. There appears to have been a brickworks on the site, a common juxtaposition, as coal measures often incorporate refractory clays, as well as providing a cheap source of fuel (D Cranstone pers comm). The domestic dwellings to the north of the plot developed and underwent a series of changes between 1815 and 1899 (OS 2nd edition map (Fig 4), as more housing was built, encroaching on gardens, and during the same period a meeting hall was erected.
- 4.1.2 The report presented below summarises the historical evidence alongside the evidence from site visits to describe the surviving surface elements of the site (Fig 5). Evidence from the evaluation excavations, undertaken to examine specific features, is presented separately.

#### 4.2 **DOMESTIC HOUSING**

- 4.2.1 Originally, on the 1815 map, the domestic housing was shown as a single plot, although it was subsequently divided into three. The three smaller plots, which appear to follow a rough chronological progression, are discussed below. The principal areas and components are shown on Fig 5).
- 4.2.2 **Area 1**: at the extreme north of the site is a terrace of buildings (1.1), in the angle between Bank Yard Road and Parton Brow. They were possibly built in the late eighteenth century, and are shown as a single block on the map of 1815, but had been subdivided into three by 1835. At that time a sub-plot and other portions of the site were assigned to a Mr Harrison. Their gardens (1.2) lie to the immediate south. Today the area is reduced to foundations, covered with brick and stone rubble and overgrown with vegetation.
- 4.2.3 **Area 2**: south of the terrace described above, a set of buildings (2.1), running north/south, is shown on maps from 1815 onwards. These were presumably houses facing onto Parton Brow. The sequence of maps suggests additions and alterations during their lifetime, especially to the west. A second set of buildings (2.2), running east/west, are also likely to be stone-built domestic houses set side-on to Parton Brow. Both sets of buildings lie to the immediate west of the Parton Brow boundary wall (2.6), which does not appear on maps until after 1815; it is first shown on the 1835 map.

- 4.2.4 A substantial garden-plot (2.3) lies to the west of these houses, apparently crossed by a number of paths. It seems that at a later date (after 1835 but before 1863) the garden plot began to be encroached upon by the extension of a single house (2.4). A pair of houses (2.5) were built in the southern part of the original plot, also between 1863 and 1899. All of these structures were stone-built.
- 4.2.5 Today the structures have largely been demolished, although there are some foundations surviving on the surface, particularly on the higher eastern side of the area; in the case of Structure 2.1, its western and northern walls survive up to 3m in height. The western side of Area 2 is now uneven, derelict ground.
- 4.2.6 **Area 3**: To the south of Area 2 was another building, again likely to be a domestic dwelling, but this time probably oriented upon Bank Yard Road. Whilst its age is not clear, it may well date to before 1815 although it was not mapped until 1863. By 1899 the plot had been divided in two, with a garden (3.2) lies to the east, and is shown crossed with paths. A later substantial stone wall (3.4) stands on the line of one of the earlier subdivisions within the garden.
- 4.2.7 By 1899 (after 1863) a brick-built 'Meeting Hall' (3.3) was built in the southwest corner of the garden plot, which stands alongside the surviving Methodist Church; it is likely to have been connected with church activities. During the same period a row of four brick-built terraced houses (3.4) was erected at the eastern edge of the site, facing Parton Brow. The property boundary wall of this terrace (3.5) still stands to the immediate east.
- 4.2.8 Again, the majority of the structures have been demolished although foundations remain for the housing and for the Meeting Hall. There are substantial walls in the garden which may represent revetting or terracing. The erection of terraced houses (3.4) in brick upon substantial stone footings may be of significance.

#### 4.3 THE COAL MINE AND BRICKWORKS

- 4.3.1 The former coal mine occupies the southern two-thirds of the plot and lies above a massive stone revetment. The site appears to have been unoccupied until after the first couple of decades of the nineteenth century, since the plan of 1815 the area is shown as a field held by a Mr H Bragg, with a tan yard on the eastern side next to the foreshore. This tan yard is shown on later maps as lying at the base of the revetment. The map of 1815 does not give any indication of the presence of a cliff, and it is likely that originally the field sloped steeply down to the foreshore. Indeed, an early eighteenth century plan of a design for Parton harbour depicts the area in one corner and it is described there as a great hill rather than as a cliff (CRO D/Lons/W8/101). It is probable that the hillside was terraced back and revetted when the site was developed.
- 4.3.2 Although none of the historical maps label the site, a variety of documentary evidence strongly implies that it was the 'Parton Drift' and 'Parton Mine'. John Peile, manager of the Lowther mines, began the Parton Drift for drainage

purposes in 1827 (Wood 1988, 118-19). However, it had been planned earlier as an advert for workers to cut a new drift mine and to build a breast wall was published in the *Cumberland Pacquet* newspaper on 18th January 1820 (BC neg. 85).

- 4.3.3 Following the construction of the drift mine in 1827, work began on a new mine shaft to the east of Parton in 1832, called 'Countess Pit' (at NGR NX 982 204; see Moore 1968, 372; Wood 1988, 118). The sinking of Countess Pit cost £20,000 and was not complete until 1836, when coal was first raised from it. The Parton Drift, in addition to providing drainage, served as the outlet from Countess Pit, as well as Moresby Pit. Coal was raised from Bannock, Main and Six Quarters seams to the level of the Parton Drift, then taken along the drift to Parton Mine where it was hauled 10 fathoms (60', or 18.3m) to the surface (Moore 1968, 372), presumably ready for transport on a waggonway.
- 4.3.4 A plan by William Gawthorp, dated 1835, is the first to show a mine on this site (WRO 310/MS 276 1835)(Fig 3). Although the mine name is not specified, a 'Drift Entrance' and a 'Pit' are labelled, the latter aligned with a square building to its immediate south. In addition the line of the revetment is clearly shown, together with the outline of a complex of buildings running east/west between the pit shafts and the revetment. There is also a small reservoir; a road entrance to the mine from Parton Brow; and a 'Waggon Way From Whitehaven Harbour', leading past a 'Lodge' building, through a yard area and into the west end of the building complex.
- 4.3.5 This arrangement is repeated on the tithe map of 1838 (WRO YPR 15/104 1838), and, very importantly, it is fleshed out by two watercolour paintings of the site, dating from *c*1840 (Fig 16 courtesy of Jim Hewitson). They clearly indicate the large building complex to have been tall and gabled and also show the square building to the south of the pit shafts as a three-storey gabled building with a large chimney in its west wall. A further notable feature is the depiction of wagons being hauled by a pony along the waggonway. In addition to this evidence, accounts of coal production refer to the drift yard and pit, as well as to a tar works and coke ovens. However, there is no indication of where these were located (CRO D/Lons/W7/1/132; D/Lons/W7/1/149).
- 4.3.6 A similar layout to the early maps is shown on the OS 1st edition map of 1863 and the OS 2nd edition map of 1899 (Fig 4), again without naming the site, but with some important developments. Parton Drift and the Countess mine ceased production in 1863 (Wood 1988, 119) and it is therefore significant that the 1863 map labels the area a 'Coal Depot' rather than a mine, and shows the waggonway replaced by sidings for the 'Whitehaven Junction Railway' (built in 1847; Joy 1983). It also shows a second, high-level reservoir, some small additions to the main building complex, and some spoil heaps to the north. By 1899 the sidings yard had been expanded on its west side (behind the lodge building), the upper reservoir was no longer marked, and the shafts are labelled 'Old Shaft (Coal)'. There is also a notable change in the sidings area with the addition of two square structures, one west and one south of the lower reservoir. Photographs of Parton from 1900 and 1905 (BC neg. 964, neg. 973) do not have these new structures in their field of view. However they do show

- the revetment and the, still standing, building complex behind, with a large chimney towards the east end (this chimney is not depicted on the c1840 water-colours and was presumably a later addition).
- 4.3.5 The Countess Pit ceased production in 1863, but it appears likely that the buildings at Parton Drift continued in use. The 1899 map is the first to refer to an 'old' shaft at the site, but with the buildings apparently still intact and with extensive sidings that imply continued use; not until 1925 do the buildings appear ruined. None of the documents consulted suggest any use other than as a coal mine or depot. It is, however, well known locally that there was a brickworks on the site, and apparently at least one of Parton's older inhabitants remembers it operating (Mr Jennings and J Lancaster pers comm). It is not uncommon for brickworks to be associated with mining, as fireclay could be extracted with the coal (Daysh 1938, 49), and it may be that there was a brickworks on the site from its first opening as a coal mine. Alternatively the brickworks may be an addition or a re-use of redundant mine buildings. In a survey of industrial facilities in West Cumberland, Daysh (1938, 49) states that shales and clays from the coal measures were used to make refractory and building bricks, clearly associating the collieries with brickmaking. At the time of Daysh's survey, however, Whitehaven brickworks was the only one still working, although there had been others in the area.
- 4.3.6 **Area 4**: the central area of the site appears, in the main, to be occupied by a substantial, and possibly quite late, revetment wall (4.1) holding back coal waste. More coal waste (4.2) is retained by a curved revetment wall further to the south. Today the coal spoil and its retaining walls remains unaltered.
- 4.3.7 **Area 5**: the colliery buildings lie to the south of the study area and were in part constructed on top of the large platform revetted by walls 4.2 and 5.5. There was a long gabled building (5.1), erected between 1815 and 1835 and presumably closer to the latter date, which appears on all maps after 1835, as well as in paintings of c 1840 (Fig 16), and photographs taken at the turn of the twentieth century. A waggonway ran through the western end of the building, and there was a series of subdivisions at the eastern end, adjacent to the pit shafts. This was almost certainly intended to house colliery workshops and stores, and was possibly later altered for use as a brickworks. The field visit noted a pair of stone chambers with angled bases, which might have been intended to hold clay.
- 4.3.8 To the immediate north of the main quarry building is a large enclosed area (5.2) which is first shown on the 1835 map, although at that time there were no features within it. Later (1863) there are small square features along the north side of the enclosure and a long rectangular structure to the south, with the waggonway running through the enclosure. By 1899 the track had fallen from use, and there were more square structures on the west side of the enclosure. By 1900 it seems that there was a large chimney in this area. The enclosure survived, although the buildings within had been demolished and a large bank of rubble had accumulated at the north side.

- 4.3.9 A square structure (5.6) shown on the 1899 map might possibly be the floor of a brick kiln. To the south of these buildings is a substantial stone-built dam (5.3: Fig 12). A blocked opening at its base may be the original outlet, and there is a culvert running to the immediate rear of the dam, possibly from the base of revetment 5.7.
- 4.3.10 Rectilinear feature 5.4 (Figs 11-13), shown first on the 1899 map, is of uncertain function. The east gable survives to its original height and contains a splayed doorway. The southern side incorporates circular stone features with flues to the west. The western part of the structure has three arched recesses (brick over stone walling). To the immediate south, within the area of railway sidings, is another brick-vaulted chamber.
- 4.3.11 The western edge of the study area was formed by a massive stone revetment (5.5) (Figs 9 and 10). At the base are two blocked arched openings the northernmost of which aligns with the 'Drift Entrance' marked on the 1835 map. The southern entrance may have related to the reservoir.
- 4.3.12 The buildings in this area are relatively well-preserved, and in the case of 5.4, standing almost to their original height. Elsewhere they have been demolished and some, at least, have been cleared of rubble.

#### 4.4 EVALUATION TRENCHES

4.4.1 Seven trenches were dug in order to evaluate specific features on the site, with the intention of sampling the range and quality of archaeological deposits across the site. Their location, alignment and size is presented below in tabular form and are shown on Fig 6.

Trench	NGR	Alignment:	<b>Dimensions</b>	Max. Depth
1	NX 9783620200	east/east	24.3m x 1.8m	0.82m
2	NX 9784920180	north/south	14m x 1.8m	0.62m
3	NX 9784120162	east/west	17.3m x 1.8m	0.83m
4	NX 9784020155	east/west	4.3m x 1.8m	1.09m
5	NX 9783420217	east/west	12m x 1.8m	1.2m
6	NX 9784020263	north/south	19.5m x 1.8m	1.6m
7	NX 9785220295	north-west/south-east	9.2m x 1.8m	0.80m

#### 4.5 TRENCH 1

- 4.5.1 Trench 1 was excavated on an approximate east/west axis and was specifically sited to inspect a number of east/west aligned features, identified by the topographic survey. It was excavated to a maximum depth of 0.82m. A deeper sondage was excavated at the western end of the trench in order to establish the precise nature and depth of the made-up ground (Fig 7).
- 4.5.2 At a depth of 0.82m, a very well-compacted coarse pinkish sandstone rubble contained within a sandy clay matrix was identified. This material was very clean and comprised sandstone blocks of varying sizes, all with a regular

appearance. Immediately above the rubble deposit was a grey, gritty silty sand, 0.12m in depth, which contained occasional specks of yellow and pink sandstone. This was overlain by a very mixed deposit of dark grey ash, cinder and coal containing a large amount of broken bricks and worked masonry. This deposit had a maximum depth of 0.21m.

- 4.5.3 The industrial deposit provided the bedding for well constructed cobble surface, formed by close packed oval cobbles (average size 0.20m x 0.10m). This created a surface with a north/south trending pattern, although there was no evidence for runnels or gutters.
- 4.5.4 The cobble surface was contemporary with a large, well-constructed sandstone, trough-like feature, aligned east/west, which measured 10.6m by 2.1m. This feature interpreted as a flue, was constructed from closely set and well-finished sandstone blocks which had a distinctive flat topped triangular profile. The blocks on the northern side were generally of better quality and this external side was rusticated. To the west the flue appeared to terminate at the cobbled surface, but the poorly preserved eastern end had no obvious terminus.
- 4.5.5 The flue had been filled with a very compacted deposit of sandstone rubble. The structure was overlain by a deposit of mixed, gritty, sandy loam which contained abundant demolition rubble, including plaster, brick and building stone fragments. The topsoil was of varying depths throughout the trench, from 0.25m in the west to 0.03m in the east above the flue.

#### 4.6 TRENCH 2

- 4.6.1 Trench 2 (Fig 8) was orientated north/south and was 14m long; it was located to inspect the nature of a series of linear earthworks. Naturally occurring deposits were not established within this trench due to the amount of complex archaeological features revealed and deposits of made-up ground relating to the revetted terrace.
- 4.6.2 The earliest deposit investigated, underlying many of the features in the trench, was very grey clay sand.
- 4.6.3 Sandstone wall and associated brick floors: at the southern end of the trench a series of brick floor surfaces and a single large well-constructed sandstone wall were revealed; all appeared to be contemporary. The sandstone wall (0.90m wide) was orientated north/south, it had a sandstone rubble core and was faced with well-dressed sandstone blocks. It was clearly contemporary with an extensive brick surface, which stepped slightly down to the north. Within the southern/uppermost brick floor there was a distinctive depressed area which appeared to drain into a strip of bare soil between the upper and middle brick floors. This strip of soil corresponded with a gap in an alignment of well-finished sandstone blocks which ran perpendicular to the large north/south wall; the alignment was c 0.30m wide, and the gap in it c 0.90m. The northernmost and lowest brick surface was 1.2m in width; it did not contain

- any evidence for drainage channels, although the bricks were set perpendicular to one another.
- 4.6.4 **Square brick-built box**: a number of other features in the northern part of the trench overlay the grey sandy clay. A square brick-built box was revealed 5.2m from the southern edge of the trench. The western side of the structure was badly damaged and ran beyond the excavated area, but the box was estimated to be c = 0.60m square.
- 4.6.5 **Brick walls and other features**: a well-built brick wall was encountered 0.40m further to the north, on the eastern side of the trench. It ran approximately north-west for some 2.8m. On its southern side there was a return to the east. To the north of this wall, 8.5m from the southern edge of the trench, there was an insubstantial (a single brick wide) wall surviving to at least two courses. This ran east/west, and was butted by a north/south aligned 2.3m long brick trough-like feature on its northern side. The base of the feature, which lay 0.10m below the upper course of bricks forming the wall, was badly damaged, which prevented any identification of its function.
- 4.6.6 **Sandstone foundations**: to the north of the brick trough, was a pair of large, square sandstone blocks which had been cemented together to form a substantial base or foundation pad. There was evidence for a second sandstone block revealed in the west-facing section of the trench, potentially carrying the alignment to the east. The blocks were within topsoil, and the precise nature of this feature was never established.
- 4.6.7 *Later deposits*: the brick floors in the southern part of the trench were overlain by 0.20m of dark grey mixed loam, which was in turn overlain by 0.18m of dark greyish brown rubble. The rubble deposit was overlain, as was the remainder of the features in the northern section of the trench, by yellowish sandstone rubble, averaging 0.40m thick, but in some areas no more than 0.05m thick. This was overlain by a mixed loam topsoil.

## 4.7 TRENCH 3

- 4.7.1 Trench 3 was excavated on an east/west axis, to the west of, and perpendicular to, Trench 2. It was sited to investigate the nature of a potential brick surface, which was partly visible at surface level, and also the nature of its relationship with the north/south sandstone wall investigated in Trench 2 (4.7.3).
- 4.7.2 *Early linear feature:* deposits earlier than the brick surface were only accessible in the western corner of the trench, where there was a deposit of mixed loam. A sondage was excavated through this to a maximum depth of 0.82m, at which level a deposit of medium brown loam was established. This deposit was cut by a narrow linear feature, 0.50m wide and 0.20m deep, on a north-west/south-east alignment. The feature had steep sides (60° from horizontal) and a flat base. It had a single fill, a black gritty loam. The feature was overlain by a deposit (0.37m deep) of light yellow brown sandstone rubble, which was in turn overlain by the mixed loam.

- 4.7.3 **Brick surface:** the remainder of the trench was covered by a patchily preserved, unmortared brick surface, which appeared to butt and be contained by a pair of sandstone blocks, forming a corner, with northern and southern arms. The mixed loam lay to the west of these blocks. The brick surface was covered by a thin deposit (0.03m in places) of dark greyish brown sandy loam topsoil.
- 4.7.4 At the extreme east of the trench, the north/south aligned sandstone wall, which had been identified within the western limits of Trench 2, was revealed.

#### 4.8 **TRENCH 4**

- 4.8.1 Trench 4 was excavated to the immediate south of Trench 3 in order to establish the presence or absence of a kiln reputed to be in the vicinity (acting on the information of a local resident). The trench measured 4.3m and was aligned on an east/west axis. The trench was excavated to a maximum depth of 1.09m.
- 4.8.2 **Cobbled surface**: the earliest feature examined was a well-constructed cobbled surface (of which only a 0.40m wide strip was uncovered) identified in the extreme western end of the trench. It was constructed from sandstone cobbles which sloped down to the south.
- 4.8.3 Sandstone wall: the cobbles were cut by a linear trench which proved to be the construction trench for a north/south aligned wall. The trench was 0.30m wide, and was filled by dark brown gritty sandy loam. The wall which stood within it was well-constructed and survived to a height of 0.70m. It was built from large sandstone blocks, which, on average, measured 0.30m x 015m x 0.10m and there was a well-defined face on the eastern side. It was seen to be contemporary with an extensive brick and ceramic tile surface to the east. The floor, which sloped to the south at a similar angle to that of the adjacent cobbled surface (4.9.2), appeared to have a system of deliberately constructed channels or runnels 0.40m apart which ran north/south.
- 4.8.4 On the west side of the wall the foundation trench was overlain by a brown sandstone rubble deposit, which was probably contemporary with the brick surface to the east. This layer was overlain by a substantial deposit of mixed sandstone rubble, which appeared to have derived from the collapse of the western face of the wall.
- 4.8.5 The internal brick floor was overlain by approximately 0.45m of demolition rubble, mainly sandstone and brick, which in turn was overlain by a very dark grey, mixed ash and clinker deposit (0.26m deep). This presumably industrial deposit was directly below a thin (0.10m) layer of greenish-grey silty clay. All these deposits were confined within the surviving height of the wall. A thin layer (0.0.14m) of dark greyish-brown loam overlay both the silty clay to the east, and the wall rubble to the west of the wall. This was in turn overlain by a

relatively deep (0.30m) deposit of sandy loam topsoil, which contained much rubble.

#### 4.9 TRENCH 5

4.9.1 Trench 5 was excavated to the north of Trench 1, to test for the presence or absence of any internal or external yard surfaces associated with the large revetment wall (5.5). A sondage was excavated to a depth of 1.24m, in order to examine a deposit of pinkish compacted sandstone rubble identified at a depth of 1.04m. This deposit (sandstone blocks within a coarse sand matrix) was similar to that identified in Trench 1. The sandstone blocks were regular with occasional smoothly dressed faces. The deposit was overlain by layers of mainly compacted black clinker, ash and coal, which overall were 0.53m deep and also incorporated a large lens of shale, approximately 4.70m long. The closely stratified nature of the deposits suggested a sequence of dumps. The industrial material was directly overlain, at the western end of the trench, by a deposit of coarse pinkish clay sand, 0.15m thick and 3m long. Both this, and the mixed clinker deposit, were below a very dark brown loam topsoil containing abundant rubble.

#### 4.10 TRENCH 6

- 4.10.1 Trench 6 was excavated in an area identified during the topographic survey as containing no upstanding archaeological earthworks, although there was a wall to the east of the trench. It was situated to the rear of the terrace of houses and to the north of the main area of archaeological activity.
- 4.10.2 *Natural deposits*: a mottled yellow, naturally deposited, boulder clay was established at a depth of 1.40m in a sondage excavated at the southern end of the trench.
- 4.10.3 *Earliest features*: the natural clay was covered by a series of thin homogeneous clay layers. The first of these was a pale brown sandy clay, 0.17m thick, which was in turn covered by a thin layer (0.01m deep) of black sandy clay which contained coal fragments. Above this was a 0.09m deep deposit of pale brown clay with small grits and eroded sandstone and also a 0.04m deep deposit of yellowish brown coarse clay. This clay was sealed by a 0.05m thick layer of black clay containing coal fragments and a 0.03m thick deposit of yellowish brown sandy clay, with coal fragments. Above these was an olive brown sandy clay (0.07m thick) which also contained coal fragments. All of these deposits sloped down to the north at an angle of approximately 30°.
- 4.10.4 **Sandstone Wall**: the badly damaged remains of a sandstone wall (0.75m in width) were revealed 4.5m from the southern edge of the trench, cutting the olive brown sandy clay deposit. A substantial deposit of lime mortar (3.5m wide and c1m deep), also cut the olive brown layer in the extreme south of the trench. Further excavation of the trench was precluded by the discovery of a

- brick-built drain 5.5m from the southern edge of the trench which ran the rest of its length.
- 4.10.5 Topsoil was a dark brown clay loam, which was in places up to 0.55m deep, and contained much modern material including electrical fittings and aluminium cans.

#### 4.11 TRENCH 7

- 4.11.1 Trench 7 was excavated on an approximate north-west/south-east alignment and was sited to inspect the nature of structures adjacent to Parton Brow. It measured 9.2m in length.
- 4.11.2 *Cellars:* a series of walls defining two cellars (both 3.88m x 3.21m) was identified at a depth of 0.10m below the surface of the trench. The full depth of the cellars was never established as they were completely backfilled by a very loose brick rubble. The rubble comprised 80% hard orange "Lonsdale" bricks, within loose white lime mortar and clay. All the walls were brick-built, covered by lime plaster and apparently of a single build. The rubble was overlain by a thin deposit of blue grey clay containing clinker and ash and a shallow grey loam topsoil.

# 5. THE BREWERY (AREA D)

#### 5.1 **INTRODUCTION**

5.1.1 The Parton brewery is situated on the inside bend of a road, now called Brewery Brow, leading from Main Street up the steep hill to the Turnpike Road. The site is by a stream which runs down a valley in the hillside. The earliest documentary evidence for the brewery dates to 1815, when its buildings are depicted on a map of Parton (CRO D/Lons/W Plans 1815). The brewery is also shown on a plan of Parton dated 1835 (WRO DH 310/MS 276), and in 1852 a plan was made of the brewery itself (CRO D/Lons/W Plans 1852) (Fig 14). The evolution of the brewery buildings is apparent from these maps together with the early edition OS maps, and this sequence is discussed below (*Section 5.3*).

#### 5.2 HISTORY OF THE SITE

- 5.2.1 The Parton brewery appears to have been owned by the Lowther family, as the plan of the brewery is contained in the Lonsdale archives. The names of successive brewers are also documented in trade directories. The first dates to 1829 (Parson and White 1829, 230), when the brewery was operated by John Harrison & Co, who also ran a brewery in 10 Irish Street, Whitehaven. The same company ran the brewery in 1834 (Pigot and Co. 1834, 118), and John Harrison's name appears on the 1835 map. By 1847, however, it was in the hands of William Aldrich, brewer and maltster (Mannix and Whellan 1847, 354), who still held it a year later (Slater 1848, 160).
- 5.2.2 By 1879, the brewery was run by Joseph Dalzell (Slater 1879, 169), who continued to run it (Bulmer 1883, 176) well into the twentieth century. Towards the end of the nineteenth century, the business clearly expanded, as the directories describe it as a large brewery, wine and spirit merchants and mineral water manufacturers (Kelly 1894, 209; Kelly 1897, 210). The brewery continued in existence at least until the 1920s (Bulmer 1901, 604; WRO YDB 10/92-98). The OS 3rd edition map of 1925 continues to show the outline of the brewery buildings, but they are unshaded, implying dereliction.

#### 5.3 THE BREWERY BUILDINGS

- 5.3.1 The brewery survives as substantial foundations with some standing walls (up to several metres high in places) (Fig 15). These remains incorporate evidence for several phases of construction and alteration, in both stone and brick. They include long cellarage vaults and water management features.
- 5.3.2 Map evidence shows that the brewery was in existence by 1815 and that its basic plan was that of an 'L'-shaped building; however, the topographic accuracy of the 1815 map is, by comparison with the other maps, relatively

poor. The 1835 map reveals more detail of the site layout. A rectangular building is shown adjacent to 'Brewery Brow' and this is linked to a long, narrow building running along the north side of a stream. To the north of this building is a curved boundary wall, whilst to the south-west, on the south side of the stream, there is a further rectangular block of buildings (although it is not clear whether or not this is part of the brewery). The 1852 map shows the same basic layout, but with some additional shaded areas (Fig 14). In particular it suggests that the stream has been culverted, and a building erected over it which joins a long thin building to the rectangular southern block. In addition, a long cellar is shown to the north. The 1863 map, however, seems curiously out of step with this and the layout shown is much closer to that shown in 1835, with the stream still clearly open. The 1899 map appears to show a reversion to the 1852 layout, with the stream curlverted and built over; it also shows buildings over the cellar. The 1925 map shows the same layout, but with the buildings unshaded, implying dereliction.

- 5.3.3 The extant remains confirm the main documented building sequence, but at the same time demonstrate structural changes that are not recorded on the historical maps, as well as providing more detail on the form and hence function of buildings. The remains have been grouped as follows:
- 5.3.4 *Component D1*: this is the north building seen on the historical maps. Its remains indicate a rectangular stone building, with an elevated floor level, containing many wall features and internal divisions.
- 5.3.5 *Component D2*: cellarage with twin-arched openings, one blocked by brickwork, the other part-blocked by rubble.
- 5.3.6 **Component D3**: a stone staircase rising from the cobbled track (D8) to the floor level of the north building (D1).
- 5.3.7 Component D4: this is the long narrow building seen on the historical maps. Its remains clearly contain several phases of construction and alteration, mainly in stone, with some use of brick. There is evidence for several internal divisions and the wall layout seems to be broadly consistent with the map sequence, ie an initial narrow building north of the stream, later extended over the stream when it was culverted [Note: walls D5 and D8 are within this area.]
- 5.3.8 *Component D5*: a short run of walling of refractory brick.
- 5.3.9 **Component D6**: the north boundary wall of the brewery site: essentially a large stone revetment, extending east from the staircase (D3). At the east end of the wall are fragments of a rectangular building seen on the 1852 map.
- 5.3.10 *Component D7*: a run of stone walling with windows (later blocked in brick). This appears to be part of the original brewery building.
- 5.3.11 *Component D8*: remains of a cobbled trackway between the north building (D1) and the long narrow building (D4).

- 5.3.12 *Component D9*: culvert for the stream. The location of this feature appears consistent with the evidence of the 1852 map.
- 5.3.13 For the purposes of this report, an annotated survey drawing provides a basic record of the remains (Fig 15). There is clearly a high potential for further vegetation clearance and recording in order to allow detailed phasing and interpretation of the structure. Any attempt at detailed interpretation, at this stage, would be inappropriate without such clearance.

#### 5.4 EVALUATION TRENCHES

5.4.1 Three trenches were dug in order to evaluate specific features on the site, with the intention of sampling the range and quality of archaeological deposits. The trenches are shown on Fig 15 and their location, alignment and size is presented below in tabular form:

Trench	Alignment:	<b>Dimensions</b>	Maximum
			Depth
8	north-east/south-west	7m x 1.2m	1.68m
9	north-west/south-east	3m x 1.2m	1.1m
10	north-west/south-east	3.5m x 1.2m	1.01m

#### 5.5 **TRENCH 8**

- 5.5.1 Trench 8 was excavated on a north-east/south-west alignment; it was narrower than planned as a toothed bucket was used in order to ensure the effective excavation of building rubble. It was intended to investigate the extent of a cobble path visible on the surface, and to test for the presence of structures below the considerable mound of rubble in the south-western part of the site.
- 5.5.2 *Cobbled path:* this was seen to camber gently to the south-west for approximately 0.80m and was covered by a shallow overburden of modern debris and dark grey brown sandy loam topsoil. It was seen to butt a north-west/south-east aligned wall.
- 5.5.3 *Cellar:* the well-constructed sandstone wall, was 0.50m wide and served as the north-eastern wall of a cellar. It survived to a depth of 0.76m at the south-eastern end, and was covered by a cement render on its inner face. The cellar had a concrete floor, which had no evidence for machine bases or other features.
- 5.5.4 The south-western extent of the cellar was some 7m from the north-eastern edge of the trench. It comprised a wall of similar sandstone construction, which was incorporated into a culvert for the stream which issued from the spring head at the eastern end of the site. The cellar was completely filled with construction debris and modern rubbish to approximately 1.68m below the level of the ground surface, at the south-western end of the site. There was dark

grey loam topsoil present above the building debris but this was nowhere more than 0.10m thick.

#### 5.6 **TRENCH 9**

- 5.6.1 Trench 9 was excavated to the north-east of Trench 8 and was intended to investigate a terraced area which had been less affected by rubble dumping than elsewhere. It was also intended to test for the presence and nature of any features associated with the brick wall which divided the terraced area from that inspected in Trench 8. The trench was excavated on a north-west/south-east alignment.
- 5.6.2 **Stream culvert:** excavation was abandoned at a depth of 1.1m on discovery of a culverted stream, which was contained within a fragile dry-stone structure composed of rounded boulders. The alignment of the stream had changed dramatically between the spring head and the culvert identified in Trench 8. The excavation revealed no other features within the trench; the culvert was covered by a 1.1m thick deposit of mixed loam and rubble.

#### 5 7 TRENCH 10

- 5.7.1 Trench 10 was located on the northern side of the path and was intended to inspect the nature of the cobbled surface and to test for evidence of earlier occupation of the site preserved below the surface. The trench was excavated to a maximum depth of 1m.
- 5.7.2 **Natural deposits:** boulder clay was encountered at the eastern end of the trench at a depth of 0.65m. The deposits were excavated to a depth of 1m in order to establish their integrity, as the upper levels of the clay had been affected by leeching. In the western part of the trench, a greenish shale bedrock was identified at the same depth (0.65m) as the boulder clay; the two met in a vertical junction.
- 5.7.3 **Cobbled surface:** both natural deposits were directly overlain by a substantial deposit of ash and clinker, 0.28m deep, into the top 0.10m of which the cobbled surface was bedded. The cobbles were set compactly on their long axis, and were an average size of 0.20m x 0.10m. The surface was sealed by a 0.37m depth of mixed loam and rubble topsoil.

# 6. DISCUSSION

#### 6.1 DOMESTIC HOUSING (AREA B)

6.1.1 The remains of what appears to be industrial housing occupies the northern third of Area B. The historical map sequence suggests several phases of building in this area and the visible remains suggest that the earlier phase of construction was in stone (eighteenth or early nineteenth century) with later building in brick (late nineteenth century). There is extensive below-ground survival of building foundations, together with low walls (up to 3m above local ground level). A single trial trench in the area confirmed that the buildings were cellared. The combination of documentary evidence, survey and trial trenching are all consistent with a history of domestic use. However, a north/south wall, which stands in the centre of the area, contains a series of large beam sockets that suggest some non-domestic activity at this location. In themselves these remains are likely to be of local or regional importance; however, they do have an enhanced group value, both as part of an eighteenth/nineteenth-century industrial community and by virtue of their proximity to the coal mine and brickworks.

### 6.2 COAL MINE AND BRICKWORKS (AREA B)

- 621 The southern two-thirds of the plot is occupied by the remains of the coal mine and brickworks. The evidence uncovered to date is insufficient to give a clear picture of how these two industries operated on the site and it is notable that the existence of the brickworks has been largely identified from the oral testimony of local residents visiting the site during survey and evaluation work, no corroborative documentary information has so far been located. However, the coal mine is identified on historical maps as originating between 1815 and 1835 and it may confidently be identified with the 'Parton Drift', documented as being opened in 1827. On this basis, the mine itself may be identified as that known as 'Parton Pit' (Wood 1988, 118). It may therefore be presumed that the construction of the mining complex - the cutting back of the steep hill, the construction of the revetment with its arched openings, and the importing of quarry waste to form a platform (identified as the basal deposits within Trenches 1 and 5) - dates from 1827. As all the essential features of the mine the large building complex, pitshafts, engine house, the lower reservoir, the waggonway yard and associated lodge, and the road entrance from Parton Brow - all appear on the 1835 map and the 1840s paintings, it seems likely that they were built at the same time.
- 6.2.2 The central building complex (component 5.1), seen on both the sequence of historical maps and the early paintings and photographs, clearly took the form of large gabled structures. However, there was little surface survival of this structure, apart from wall stubs and scars in the eastern elevation of the main revetment wall. The plan form of the early structure is clearly demonstrated by the 1835 plan, which, when overlain with the present survey, demonstrates that it was a relatively accurate survey (Fig 5). The northern wall is located just to the south of Trench 1 and Trench 2 has just picked up the western end wall of

- an ancillary building shown on that early plan. It shows that the cobbled surface identified in Trench 1 was within a structure that was unshaded on the drawing and was by implication unroofed. It could potentially have been an enclosed yard or similar feature.
- 6.2.3 The trial trenching results have established that these buildings were, for the most part, constructed of sandstone with internal brick surfaces. The purpose of these buildings, however, remains obscure; were they used originally by the mine or the brickworks, or were they originally for the mine and later adapted for the brickworks? They could have housed workshops and/or coal-cleaning facilities, although they seem large for this purpose. An alternative use might be in relation to the brickworks; the presence of the large chimney on the c1900 photographs implies some form of adaptation in the late nineteenth century. The remains of a large flue of sandstone-construction, within Trench 1, running parallel to the north wall of the building complex, possibly relates to this chimney. These combined remains might be used to speculate on the presence of a kiln here.
- 6.2.4 The two later structures seen on the 1899 map (components 5.6 and 5.4) have been identified by oral testimony as being part of the brickworks. Component 5.6 (west of the reservoir) has brick walling and floor surfaces, and such features would not be inconsistent with a use as a brick kiln. The purpose of component 5.4 is unclear.
- 6.2.5 One other feature of interest was the presence, in a number of the trenches, of purpose-built runnels or channels indicating some form of drainage requirement.
- 6.2.6 Trial trenching also revealed features which were not reflected in the surface topography, suggesting a relatively complex stratigraphic sequence. In places there were three or four successive events demonstrated within a single trench. In several places, for example in Trench 2, the archaeological deposits could be linked directly with standing remains, thereby enhancing their interpretation. In others, they were unpredicted, as for example the sloping cobble, brick and tile floors within Trench 4.
- 6.2.7 Although the trial trenching yielded information about the form of structures on the site, evidence for the nature of any industrial processes was elusive. There was an abundance of coal and coal-associated debris (particularly north of the building complex), which is consistent with mining activity; however, material which would confirm the use of the site as a brickworks was not evident.
- 6.2.8 Several important features of the coal mine survive, which, whilst they are on the edge of the survey area, are crucial in understanding the site as a whole and in assessing the importance of the remains. The most important of these are the pit shafts and its associated engine house. The engine house is visible on the c1840s paintings, as a tall square building with a large chimney in its west (gable) wall and a series of windows on three levels. The ruined remains include a substantial part of the east wall, which incorporates a central iron axle

housing, and, directly beneath the building, a brick-vaulted chamber (perhaps a boiler room) which gives access to further chambers to the north. These features suggest the use of a steam engine, although the type is uncertain. There is no sign of a beam projecting from the building on the 1840s paintings, or indeed any clear picture of a winding or pumping mechanism. It may be that a beam engine was being operated inside the building, although the structure seems small for this, or alternatively a type of vertical engine may have been used. In either case, this would be a comparatively rare national survival and it may be unique in the North West. (English Heritage's Monument Protection Programme (MPP) review of coal mining identified only four examples of 'engine house indoor' and two of 'engine house vertical winder' (Gould and Cranstone 1992)).

6.2.9 The two reservoirs to the south of the pit complex presumably relate to the use of steam, although it is curious that only the lower reservoir, which seems low in relation to the engine house, is shown on early maps. The two shafts are in line with the 'drift entrance' marked on the early maps, which is identifiable on site from an arched aperture (now blocked) in the large retaining wall. The arch in the walling immediately below the shaft tops is presumably unconnected to the drift, as it is much too high. Two large chambers to the west of the pit shafts may have been bunkers for the coal.

#### 6.3 OTHER OBSERVATIONS

- 6.3.1 There are some further historically important features immediately outside the study area and therefore beyond the remit of the survey, which are listed below. These features are an integral part of the historical site, and play a key role in its interpretation. Indeed, some features are on the edge of the survey area and could be directly affected by the proposed reclamation scheme.
  - Parton Brow perimeter wall, gateway (including stone gate piers) and mine approach road all survive.
  - Pit shafts a pair are shown on 1835 and later maps. They are now concrete-capped.
  - Engine house square buildings oriented towards the pit shafts, they area shown on the 1835 and later maps. The 1840s paintings show a three-storey building with a large chimney in the west gable wall. The east wall survives on site and includes an iron bearing. Beneath the southern half of the building is a brick-arched chamber with a doorway to a passageway perhaps a boiler room.
  - Upper reservoir shown only on the 1863 map; however, the breached dam survives.
  - Drift entrance marked on the 1835 map. The 1863 map suggested that material was being dumped on the beach from it. An arch in the mainline railway is now blocked.

- Railway sidings an earlier waggonway is depicted on the 1835 map and 1840s paintings. This now forms the garden area to the Lodge building.
- Railway entrance lodge and gate these are shown on the 1835 map and are still substantially intact and occupied.
- 6.2.10 These industrial remains are certainly of great importance within the context of the history of the West Cumberland coal field, the Lowther estate and the community of Parton, and could potentially be of national importance. These ratings are enhanced further by group value with the wealth of other remains in the area, particularly along the coastal railway.

#### 6.4 THE BREWERY (AREA D)

- 6.4.1 The remains of the brewery take the form of substantial foundations and partstanding walls, which include a series of long cellars and water management features. Three trenches were excavated in this area, which confirmed the survival of substantial deposits relating to the brewery. No evidence was found for human activity on the site prior to the construction of the brewery, but it is likely that in the cellared area any such evidence would have been removed by its construction.
- 6.4.2 The cellar was well-constructed and filled with very modern waste suggesting that the feature had been used until relatively recently. The presence of a running culverted stream through the centre of the site precluded detailed inspection of the trenches in this area, but it was noted that the stream course was incorporated into the design of the brewery and that the culvert formed the basal courses of the main rear cellar wall.
- 6.4.3 It is clear from inspection of these remains and the sequence of historical maps that the surviving fabric contains evidence for several phases of construction within the life of the building, in addition to the information gained from the documentary evidence. Hence, there is a strong possibility that further clearance and recording will allow detailed phasing and interpretation of the structural remains.
- 6.4.4 On a national level, the brewery site is probably of relatively low value, but, at a local and regional level its value is very high, being the substantial remains of a significant component of Parton's under-studied industrial heritage.

# 7. IMPACT AND RECOMMENDATIONS

#### 7.1 ARCHAEOLOGICAL IMPACT

- 7.1.1 **Domestic housing, coal mine and brickworks** (Area B): The development proposals for the reduction of the ground surface to the rear of the main revetment wall (Structure 5.5) by as much as 1m below the present surface for a total of 20m will have a significant impact upon the integrity of both the above and below ground remains within the proposed area. The flue structure and associated cobbled surface would be drastically affected by any proposed groundworks within the area.
- 7.1.2 The vaulted chamber beneath the engine house appeared from cursory inspection to open on to further chambers. Both this and the reservoirs may require consideration of safety issues with regard to the proposed development. Such considerations should take account of the archaeological value of these features.
- 7.1.3 **Brewery** (**Area D**): The development proposals will have relatively little impact upon the extant fabric of the structure. Only one small section of brick wall will be demolished and this has already been recorded by the present programme.

#### 7.2 **RECOMMENDATIONS**

- 7.2.1 Current policy dictates that wherever possible identified sites of archaeological importance are preserved *in-situ* as embodied in the Institute of Field Archaeologists' *Code of Conduct* and the Department of Environment *Planning Policy Guidance Note 16*. Our concern must be to protect and preserve archaeological sites wherever possible, and only where this is not feasible are destructive techniques of record advocated. Our aim is to recommend the appropriate action which will achieve recording objectively, without the waste of resources.
- 7.2.2 The Level 2 survey (LUAU 1993) provides for a basic record of surface features, and is a type typically undertaken as part of an evaluation (ACAO 1993). It can serve as a mitigation measure for sites which are of limited archaeological significance with poor surface survival. The earthworks that will be affected by the present landscaping are late spoil mounds and therefore fall within this category; it can therefore be considered that an adequate mitigative record of the affected earthworks has now been undertaken.
- 7.2.3 Relatively little landscaping work will be undertaken at Area D which will consequently have only a very limited impact upon the archaeological structures. A detailed survey has been undertaken of the general site and a fabric survey has been undertaken of a small wall that will be demolished. It is considered that, in the context of the present development, this survey work is

- adequate mitigation and therefore it is recommended that no further archaeological recording be undertaken in this area.
- 7.2.4 The fabric survey has generated a photographic and outline graphic record of most of the elevations that will be affected by the proposed landscaping. The impact of the proposed development has therefore, in these instances been mitigated. There is, however, one wall (CCC ref. W14) that will be truncated by the landscaping, which is of potential archaeological importance, but has not been surveyed. This is a revetment wall supporting the terrace on which domestic structures 3.4 are built. It displays evidence of a now demolished, potentially significant, non-domestic building to the west of it. It is therefore recommended that this wall be subject to a fabric survey in advance of its truncation.
- 7.2.5 Given that part of the main works building (5.1) will be destroyed by the proposed landscaping adjacent to the revetment wall, it is of great importance that mitigation measures are employed to record fully these features before they are destroyed. Full archaeological recording of the affected features is of great importance to the understanding of the industrial processes.
- 7.2.6 It is therefore recommended that an archaeological excavation be undertaken along the full length of the main revetment wall (Structure 5.5) that will be truncated by the proposed landscaping. The landscaping will affect a broad width of up to 14m out from the wall and it is therefore recommended that the excavation examine this maximum width. The excavation would provide a mitigative record of the archaeological structures and deposits within this area.

# 8. GAZETTEER OF DOCUMENTARY SITES

Site number 01
Site name Moresby
NGR NX 9900 2100
Site type Bead, find
Period Prehistoric
Source SMR 01024

**Description** 

Glass bead in the shape of a spindle whorl, with blackish, yellow and red lines.

Assessment

The site lies outside the study area.

Site number

Site name

NGR

NX 9900 2100

Site type

Period

Prehistoric

Source

SMR 04471

**Description**Bronze pin. **Assessment** 

The site lies outside the study area.

Site number 03

Site name Moresby Hall NGR NX 9830 2090 Site type Tumulus, urn Period Prehistoric Source SMR 06239

Description

Cremation urn with cairn.

Assessment

The site lies outside the study area.

Site number 04
Site name Moresby
NGR NX 9800 2100

**Site type** Sculptured stone, query temple

Period Prehistoric/Roman Source SMR 03607

Description

A horned beast, possible Celtic deity.

Assessment

The site lies outside the study area.

Site number
Site name
Moresby
NGR
NX 9800 2000
Site type
Burial mound, urn
Period
Query prehistoric/Roman

Source SMR 06238

**Description** 

Cremation urn found with mound.

#### Assessment

The site lies outside the study area.

Site number 06 Site name Parton

NGR NX 9830 2090 - NX 9830 2180

Site type Road
Period Roman
Source SMR 01008

**Description** 

Possible route of a Roman road.

Assessment

The site lies outside the study area.

Site number 07

Site name Parton Roman Fort
NGR NX 98180 21000
Site type Roman Fort
Period Roman
Source SMR 01009

**Description** 

Grass-covered ramparts of a Roman fort covering an area of around 3.5 acres. It is possibly of Hadrianic foundation, but little modern work has been undertaken here.

#### Assessment

The site lies outside the study area.

Site Number 08
Site name Moresby
NGR NX 9800 2000
Site type Coins
Period Roman
Source SMR 01021

Description

Findspot of Roman coins.

Assessment

The site lies outside the study area.

Site Number 09
Site name Moresby

NGR NX 9820 2060 - NX 9800 2055 Site type Possible fortlet, mound

Period Roman?
Source SMR 05630

Description

A square cropmark which may be a Roman fortlet.

Assessment

The site lies outside the study area.

Site Number 10 Site name Parton

NGR NX 98000 20000

Site type Cist, urn
Period Roman
Source SMR 06389

Description

A Roman stone cist with an associated cremation vessel.

#### Assessment

The site lies outside the study area.

Site number 11 Site name Moresby NX 9800 2100 NGR Site type Pottery vessels Period Roman SMR 06390 Source

Description

Three Roman vessels dug from a railway cutting.

Assessment

The site lies outside the study area.

Site number 12

Site name Church Field, Moresby

NGR NX 9900 2100 Site type Figurine Roman Period Source SMR 06585

Description

A bronze figurine found in a railway cutting.

Assessment

The site lies outside the study area.

Site number 13 Moresby Site name NGR NX 9830 2080 Site type Vicus Period Roman Source SMR 13673

Description

Ditches and gullies associated with Roman pottery. It is interpreted as the vicus of the adjacent Roman fort (Site 07).

# Assessment

The site lies outside the study area

Site number 14 Site name Moresby NGR NX 9826 2099 Site type Church Period Medieval Source SMR 04472

Description

A chancel arch from the former church, the remainder of the church was demolished before construction of the present church.

# Assessment

The site lies outside the study area.

Site number 15 Site name Moresby NGR NX 9807 2089 Holy well Site type Period Medieval

SMR 04474 Source

Description

Holy well within the area of the Roman fort.

Assessment

The site lies outside the study area.

Site number 16

Workington Site name NX 9800 2000 NGR

Site type Coin Period Medieval SMR 04920 Source

Description Coin of Edward IV. Assessment

The site lies outside the study area.

Site number 17

Site name Moresby Hall Farm NX 9834 2098 NGR Site type Hall, tower house Period Medieval/post-medieval

Source SMR 04473

Description

A large house incorporating a tower house.

Assessment

The site lies outside the study area.

Site Number 18 Parton Site name

NX 9780 2100 NGR Harbour, pier Site type Period Post-medieval SMR 01010 Source

Description

A harbour which was constructed by 1600, rebuilt in the seventeenth century and the pier was destroyed in 1795.

Assessment

The site lies outside the study area.

Site Number 19 Site name Parton

NX 98030 20540 **NGR** Site type Brewery Period Post-medieval

Source Map of 1815, nineteenth and twentieth century trade directories

Description

The ruins of structures which were part of a brewery from the early nineteenth century at least. It continued in business into the twentieth century.

Assessment

The site forms part of the study area.

Site Number 20 Site name Parton

NX 9780 2020 **NGR** 

Site type Brickworks
Period Post-medieval

**Source** SMR 04690, buildings shown on maps from 1835

Description

The ruins of brickworks although there is no documentary evidence for this, but it is remembered by local inhabitants. It is associated with a nineteenth century drift mine. The SMR notes that the brickworks were recorded by Dennis Perriam in the 1980s, but he states that he has never visited the site and is not familiar with it.

# Assessment

The site forms part of the study area.

Site number 21

Site name Moresby Hall
NGR NX 98330 20980
Site type Cist, burials
Period Unknown
Source SMR 01019

Description

Skeletons found within cists, which were possibly associated with the Roman fort

### Assessment

The site lies outside the study area.

Site number 22
Site name Moresby
NGR NX 9900 2100
Site type Ornament
Period Unknown
Source SMR 01022

**Description**Bronze ornament. **Assessment** 

The site lies outside the study area.

Site number 23

Site nameHunting HowsNGRNX 9880 2000Site typeThe site of a tumulus

Period Unknown Source SMR 04908

Description

Site of a burial mound.

Assessment

The site lies outside the study area.

Site number
Site name
Moresby
NGR
NX 9860 2030
Site type
Settlement?
Period
Unknown
Source
SMR 05121

Description

Faint cropmarks of a sub-rectangular feature.

Assessment

The site lies outside the study area.

Site Number 25 Site name Moresby

NGR NX 98800 20560 Site type Earthwork platform

Period Unknown Source SMR 05863

**Description**A possible platform. **Assessment** 

The site lies outside the study area.

Site Number 26
Site name Moresby
NGR NX 9860 2060
Site type Hollow way
Period Unknown
Source SMR 05864

**Description** 

A possible hollow way.

Assessment

The site lies outside the study area.

Site Number 27

Site name Moresby

NGR NX 98730 20050

Site typeQuarryPeriodUnknownSourceSMR 11514

**Description** 

A quarry, which is no longer marked on OS mapping.

Assessment

The site lies outside the study area.

# 9. CATALOGUE OF SITE COMPONENTS (AREA B)

Number1.1Site typeTerracePeriodpre-1815FormFoundations

# **Description**

The OS 1863 map shows a group of buildings in the northern third of plot 46, in the angle between Bank Yard Road and Parton Brow. The 1835, 1863 and 1899 maps show a terrace of buildings subdivided into three. A single large rectangle on the 1815 map probably represents the same buildings. The 1835 map labels the subplot 'Harrison' (a 'Mr Harrison' is marked elsewhere on the map).

The area is one of uneven ground with a cover of grass and briar. There is some exposed building rubble in the centre of the area, and this material includes stone and brick, the latter is frogged and stamped 'Micklam'. It is very likely that building foundations survive intact albeit beneath the surface rubble.

# Interpretation

This was probably a short terrace of three houses of late eighteenth or early nineteenth century date.

# Archaeological Importance

As a survival of industrial housing, these remains are of low archaeological importance, but they do have group value in relation to the mining remains.

Number1.2Site typeGardensPeriodpre-1815FormEarthworks

# Description

This area is immediately south of 1.1. The 1835 and 1863 maps show what are presumably pathways within the area. The 1835 map labels the subplot 'Harrison' (a 'Mr Harrison' is marked elsewhere on the map).

The area is one of uneven ground with a cover of grass and briar. It is possible that buried evidence for the layout of the gardens survives.

# Interpretation

This area was probably occupied by gardens belonging to terrace 1.1.

# Archaeological Importance

In itself this area is of low archaeological importance, although it has group value in relation to the mining remains.

Number2.1Site typeHouses?Periodpre-1815FormFoundations

# Description

The OS 1863 map shows a north/south run of buildings on the east side of the central third of plot 46. The 1835 map labels the subplot 'Mr Thompson'. The run of historical maps suggest additions and alterations between 1815 and 1899 (particularly additions to the west).

The area consists of a platform behind the Parton Brow boundary wall (2.6). Surviving walling (of stone) is visible up to 3m high on the north and west sides. Evidence for the layout and phasing of the buildings almost certainly survives.

# Interpretation

This was presumably a line of industrial housing facing onto Parton Brow.

# Archaeological Importance

As a survival of industrial housing, these remains are of low archaeological importance, but they do have group value in relation to the mining remains.

Number 2.2 Site type Houses?

**Period** pre-1815 **Form** Foundations

# Description

The OS 1863 map shows an east/west run of buildings at the south-east corner of the central third of plot 46. The 1835 map labels this subplot 'Mr Thompson'. The run of historical maps suggest additions and alterations between 1815 and 1899 (particularly additions to the west).

The area consists of a platform behind the Parton Brow boundary wall (2.6). Evidence for the layout and phasing of the buildings almost certainly survives.

# Interpretation

This was presumably a line of industrial housing side-on to Parton Brow.

# **Archaeological Importance**

As a survival of industrial housing, these remains are of low archaeological importance, but they do have group value in relation to the mining remains.

Number2.3Site typeGardensPeriodpre-1815FormEarthworks

# Description

The 1815-1899 maps show an open area behind buildings 2.1 and 2.2. The 1835 map labels the subplot 'Mr Thompson'. The 1835 and 1863 maps show what are presumably pathways within the area. The 1899 map shows a division between land containing original buildings 2.1 and added buildings 2.5. The area is one of uneven sloping ground, which may retain evidence of the evolving garden layout.

# Interpretation

This area was probably occupied by gardens to the buildings 2.1, 2.2 and 2.5.

# **Archaeological Importance**

In itself this area is of low archaeological importance, although it has group value in relation to the mining remains.

Number 2.4 Site type Building

Period pre-1863 (post-1835)

**Form** Foundations

# Description

The OS 1863 map shows a square building occupying the north-west corner of the central third of plot 46. The building plan had become slightly rectangular by 1899, although this may represent an addition rather than a rebuild. Stone foundations appear to survive at this location, within uneven ground which rises approximately in line with the rear wall of the buildings shown on maps.

# Interpretation

This was probably a house, which may have been slightly enlarged or replaced by 1899.

# Archaeological Importance

As a survival of industrial housing, these remains are of low archaeological importance, but they do have group value in relation to the mining remains.

Number 2.5 Site type Terrace

Period pre-1899 (post-1863)

**Form** Foundations

#### Description

The OS 1899 map shows a square building, divided into two, occupying the south-west corner of the central third of plot 46. Stone foundations appear to survive at this location within uneven ground which rises approximately in line with the rear wall of the buildings shown on maps.

# Interpretation

This was probably a pair of houses.

# **Archaeological Importance**

As a survival of industrial housing, these remains are of low archaeological importance, but they do have group value in relation to the mining remains.

Number 2.6

Site typeBoundary wallPeriodpre-1835?FormStructure

Description

A boundary wall fronts Parton Brow east of 2.1. The wall is of stone and brick rubble construction. No wall is shown on the 1815 map, but a line is shown on maps from 1835 onwards.

# Interpretation

Property wall.

# **Archaeological Importance**

In itself this feature is of low archaeological importance, but it has group value in relation to the mining remains.

Number3.1Site typeBuildingPeriodpre-1815FormFoundations

# Description

The OS 1863 map shows a building in the north-west corner of the southern third of plot 46. This may date from before 1815 and in 1899 was depicted as divided into two. The 1835 map labels the sub-plot 'J B Steward'. Foundations are present, adjacent to Bank Yard Road.

# Interpretation

A house or houses.

# **Archaeological Importance**

As a survival of industrial housing, these remains are of low archaeological importance, but they do have group value in relation to the mining remains.

Number3.2Site typeGardenPeriodpre-1815?FormEarthworks

# Description

This area relates to building 3.1 on the historical maps. The area is shown open, with pathways and divisions marked on the 1835 and 1863 maps. Substantial stone walling (that forms the foundations of later buildings, 3.4) stands to c3m high in the approximate location of the divisions marked on the historical maps. There is a series of large west-facing beam sockets in this walling (note the 1863 map shows trees around this point).

# Interpretation

This was probably a domestic garden. The substantial stone walling may represent terracing or some other function.

# **Archaeological Importance**

In itself this feature is probably of low archaeological importance, but it has group value in relation to the mining remains.

Number 3.3

Site type Meeting hall

**Period** pre-1899 (post-1863) **Form** Ruined structure

#### Description

Walls of the brick-built meeting hall are marked 'Hall' on OS 1899 map and are built on part of 3.2. It is significant to note its location adjacent to Methodist church.

# Interpretation

A meeting hall.

# **Archaeological Importance**

In itself of this is of low archaeological importance, but has group value with mining remains as part of industrial community.

Number 3.4 Site type Terrace

**Period** pre-1899 (post-1863)

**Form** Foundations

# **Description**

A line of four buildings on the OS 1899 map, which is built on part of 3.2. Some brickwork survives over substantial stone foundations (see 3.2). The bricks are frogged and stamped 'Lonsdale'.

#### Interpretation

Terraced housing (four dwellings).

# Archaeological Importance

As remains of industrial housing, in itself of low archaeological importance, but has group value with mining remains.

Number 3.5

Site type Boundary wall

**Period** pre-1899 (probably post-1863)

Form Structure

# **Description**

A boundary wall stands along Parton Brow. It is built of yellow brick with stone capping. There are steps at the south-east corner which lead to the front of buildings 3.4.

# Interpretation

Property boundary of terrace 3.4.

# Archaeological Importance

In itself of low archaeological importance, but has group value with mining remains.

Number 4.1

Site type Colliery; Revetment

PeriodunknownFormStructure

# **Description**

This feature is not marked on the historical maps, although it is situated in what was the north end of plot 53 on the OS 1863 map. It consists of a curved stone revetment with what appears to be coal waste to the rear.

# Interpretation

Revetment for retaining coal waste.

# Archaeological Importance

It has group value as part of colliery.

Number 4.2

Site type Colliery; Spoil heaps

Period pre-1863
Form Structure

# **Description**

A feature within plot 54 of the OS 1863 map. It is shown as a hachured feature on the OS 1863 and 1899 maps. It consists of a curved stone revetment behind the northern end of large revetment 5.5. There are large quantities of coal waste within this area.

# Interpretation

Coal spoil heap with revetments for retaining it.

# **Archaeological Importance**

It has group value as part of colliery.

Number 5.1

Site typeColliery; Industrial buildingPeriodpre-1835 (post-1815)FormFoundations/Earthworks

#### Description

A long gabled building with a shorter building on the south side (5.7), it is shown on the 1840s paintings and c1900 photos and its plan is on the 1835, 1863 and 1899 maps. The 1835 map shows the line of the waggonway running through the western end of main building. At the eastern end there are several subdivisions adjacent to the pit shafts and the remains of this part of the building are still standing. Stone walling is identifiable at the west (where if now forms part of the revetment) and east ends. A pair of stone chambers at the east end have angled corners and sloped bases, and perhaps relate to the 1835 map divisions. If these were associated with brick-making, they could have served for the storage and preparation of clay. A wooden-lintelled opening in this vicinity has been suggested as an entrance to clay workings (Mr Jennings pers comm).

# Interpretation

The interpretation is uncertain. The structure may originally have housed colliery workshops and stores, and then subsequently turned to use as a brickworks. Alternatively the brickworks may have been contemporary with the original colliery.

# Archaeological Importance

The site has group value as part of the colliery.

Number 5.2

Site typeColliery; Enclosed areaPeriodpre-1835, post-1815FormEarthworks

# Description

An enclosed area first shown on the 1835 map, although no features were depicted within it. It is part of plot 54 on the OS 1863 map. At that date it was shown with small square structures lining the north side, a long rectangular structure on the south side, and a railway track running through the area. By 1899 the track is no longer shown and there are additional square structures at the west side. Photographs taken c1900 appear to show a large chimney in this area (not present on the 1840s paintings). The north side is marked by a bank of demolition rubble, the flue encountered here in excavations perhaps led to the chimney. Otherwise the area is open uneven ground.

### Interpretation

The interpretation is uncertain. Perhaps the chimney relates to brick kilns on the site.

# Archaeological Importance

It has group value as part of colliery.

Number 5.3

Site type Colliery; Dam
Period pre-1835 (post-1815)

Form Structure

# Description

A stone wall has a sunken area behind. Immediately to the rear of the wall is a culvert, with water running into it. A blocked arched opening at the base of revetment 5.7 may be the original outlet for the culvert.

# Interpretation

Dam for reservoir.

# Archaeological Importance

It has group value as part of colliery.

Number 5.4

Site type Brick works; Industrial building

Period pre-1899 (post-1863)
Form Ruined structure

# **Description**

A rectilinear, stone-walled structure first depicted on the 1899 map. The east gable, with splayed doorway, survives to full height - stone walling abuts it to the east. The south side includes a stone circular feature, with flues to the west. The western part of the structure (shaded area on 1899 map) has three arched recesses - brick arches over stone walling. Immediately to the south of the building, within

the railway sidings, is a brick-vaulted chamber. This first appears on the 1899 map, and was clearly inserted through the siding's revetment.

# Interpretation

Uncertain.

# **Archaeological Importance**

It has group value as part of a brickworks complex.

Number 5.5

**Site type** Colliery; Revetment **Period** pre-1835 (post-1815)

Form Structure

#### Description

A massive stone revetment now forms the western edge of the site, with some brickwork along the top. At the base of the revetment are two arched openings (now blocked), that to the north aligns with the 'Drift Entrance' shown on the 1835 map. That to the south lies west of pond 5.3 and has two *in situ* iron hinges. There are various other small openings and fixtures (probably for drainage and rainwater).

# Interpretation

A large revetment. The northern opening was an entrance for the Parton Drift mine, the southern opening may have related to the reservoir in some fashion.

# Archaeological Importance

It has group value as part of colliery.

Number 5.6

Site typeColliery; Brick kiln?Periodpre-1899 (post-1863)

**Form** Foundations

#### Description

A square structure is shown on the 1899 map. It now survives as an area of brick flooring and brick wall bases

# Interpretation

It was possibly the base of a kiln?

# Archaeological Importance

It has group value as part of colliery.

Number 5.7

Site typeColliery; Industrial buildingPeriodpre-1835 (post-1815)

**Form** Foundations

# Description

The southern element of the long gabled building is shown on the 1840s paintings and c1900 photos and its plan is on the 1835, 1863 and 1899 maps. Stone walling is identifiable at the east end, otherwise there is no surface survival of the building. The southern wall of the structure was revealed as a brick wall within Trench 2.

# Interpretation

The interpretation is uncertain, although it undoubtedly had a similar development to the main part of the building (5.1). The structure may originally have housed colliery workshops and stores, and then subsequently turned to use as a brickworks. Alternatively the brickworks may have been contemporary with the original colliery.

# Archaeological Importance

The site has group value as part of the colliery.

# 10. BIBLIOGRAPHY

# 10.1 **PRIMARY SOURCES**

# Carlisle (CRO)

D/Lons/W1/66 1718 'My advice to those that come to my estate at Whitehaven' notebook of Sir James Lowther

D/Lons/W8/101 18th c Rough sketch and explanation of a design of Parton harbour

D/Lons/W7/1/132 1836-1840 Day book of coal shipments from Howgill, Whingill and Parton collieries: account of tradesmen's bills

D/Lons/W7/1/143 1838-1841 Cash account for Howgill, Whingill and Parton collieries

D/Lons/W7/1/149 1849-1859Fortnightly analysis of coal produced, used and sold from William, Wi

D/Lons/W Plans, 1 1815 A sketch plan of Parton with boreholes, 18th December 1815, 1 inch: 4 chains

D/Lons/W Plans, 2 1852 Plan of Parton brewery property

# Whitehaven (WRO)

DH 310/MS 276 1835 Plan of Parton, William Gawthorp, 1 inch: 25 yards

YPR 15/104 1838 Plan of the parish or Moresby in the County of Cumberland, tithe map, 6 inches: 25 chains

# Beacon Centre, Whitehaven (BC)

Neg. 85 1820 Advert for workers for Parton drift, *Cumberland Pacquet*, 18th January 1820

Neg. 964 1900 View of sea wall and railway line with village beyond

Neg. 973 1905 Distant view of Parton village taken from cliff

# 10.2 PUBLISHED CARTOGRAPHIC SOURCES

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Wood, O 1988 West Cumberland Coal, Cumberland Westmorland Antiq Archaeol Soc, extra ser, 24, Kendal.

# APPENDIX 1 PROJECT BRIEF

Parton Environmental Improvements, Cumbria: Archaeological Evaluation	Parton Environi	nental Improvem	ients, Cumbria	: Archaeologica	ıl Evaluatioi
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# APPENDIX 2 PROJECT DESIGN

Lancaster University Archaeological Unit

**March 1997** 

# PARTON BANK YARD ROAD AND FOUNDRY ROAD ENVIRONMENTAL RECLAMATION

# **CUMBRIA**

# ARCHAEOLOGICAL EVALUATION PROJECT DESIGN

# **Proposals**

The following project design is offered in response to a brief provided by the Cumbria County Council, for an archaeological evaluation of two areas of proposed environmental reclamation at Parton, Copeland, Cumbria.

#### 1. INTRODUCTION

- This project design is offered in response to a request by Environment and Design, Cumbria County Council for an archaeological evaluation of an area of a former coal depot, brickworks and a Brewery at Parton, nr Whitehaven in West Cumbria. The evaluation is in advance of environmental reclamation to make four areas of waste ground available for public access; however, only two of the Areas (B and D) will require an archaeological evaluation prior to the development. Area B (off Bank Yard Road) is on the site of former coal workings and brickworks and Area D (off Foundry Road) is on the site of a former Brewery. The reclamation will involve the reduction of an earth retaining wall facing Bank Yard Road (Area B) and the site clearance of both areas. The archaeological evaluation is a planning condition attached to the planning consent granted by Copeland Borough Council.
- The southern part of Area B was the site of a Coal Depot which is shown as in use on the 1st edition (1863) and 2nd edition (1899) OS maps. Adjacent to this was a coal shaft which was disused by the time of the 2nd edition OS map (1899). The northern part of Area B was shown as being occupied by domestic housing and a village hall on the 1st, 2nd and 3rd (1925) edition OS maps. There was also a brickworks at this northern part of the site but this is not highlighted within the cartographic sources. Area D was the site of a Brewery shown on the 1st edition (1863) and 2nd edition (1899) OS maps, but had gone out of use by the time of the 3rd edition map (1925). The two sites reflect an important element of Parton's industrial heritage and as such warrant further investigation, prior to the reclamation development; this would establish the significance, survival and quality of the archaeological remains.
- 1.3 Lancaster University Archaeological Unit (LUAU) has considerable experience of the archaeological survey of sites and monuments of all periods, having undertaken a great number of small and large projects during the past 15 years. LUAU has particular experience in the archaeological recording and analysis of standing ancient monuments, historical buildings and industrial landscapes. Projects have been undertaken to fulfil the different requirements of various clients and planning authorities, and to very rigorous timetables.
- 1.4 LUAU has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. LUAU and all its members of staff operate subject to the Institute of Field Archaeologists' (IFA) Code of Conduct.

# 2. OBJECTIVES

- The following programme has been designed in accordance with a written and verbal brief by the Cumbria County Archaeologist to enable an evaluation of Areas B (Bank Yard Road) and D (Foundry Road) Parton. This is required to collate existing documentation of the history and archaeology of the site, to evaluate the survival, condition and significance of the archaeological remains and to provide recommendations for the mitigation of the archaeological resource.
- 2.2 The required stages to achieve the project objectives are as follows:

# 2.3 **DOCUMENTARY SURVEY**

A desk-top study will be undertaken of available archaeological records, primary sources, secondary sources and cartographic sources.

# 2.4 TOPOGRAPHIC SURVEY

A measured topographic survey is required of the extent of Areas B and D, to be undertaken by instrument survey. The defined study Area B is c 0.22 hectares in extent and study Area D is 0.05 hectares in extent.

#### 2.5 FABRIC SURVEY

Execute a fabric survey to provide a ground plan and elevation drawings for selected walls which will be affected by proposed reclamation works.

#### 2.6 TRIAL TRENCHING

A limited programme of trial excavations, as recommended by the County Archaeologist, will be undertaken to establish the nature, extent, chronology, and preservation of any archaeological deposits encountered. Suitable samples recovered will be assessed for their palaeoenvironmental potential.

#### 2.7 EVALUATION REPORT

A written evaluation report will assess the significance of the data generated by this programme within a local and regional context and make recommendations for mitigative recording.

# 3. METHOD STATEMENT

In line with the objectives and stages of the archaeological work stated above the following work programme is submitted.

#### 3.2 DOCUMENTARY SURVEY

- 3.2.1 The following 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.
- 3.2.2 Documentary and Cartographic Material: This work will rapidly address the full range of potential sources of information. It will include an appraisal of County histories, early maps, secondary sources and such primary documentation as may be reasonably available. Published documentary sources will also be examined and assessed. This work will involve visits to the County Record Office and the Cumbria Sites and Monuments Record.
- 3.2.3 Aerial Photography: A survey of the extant air photographic cover will be undertaken. This may indicate the range and survival of archaeological and structural features in the designated area, and if appropriate coverage is available, allow an assessment of the rate and progress of erosion of archaeological features. Aerial photographic work may entail liaison with the Royal Commission on the Historical Monuments (England), although, within the timescale available, it is unlikely that prints will be forthcoming from this body for inclusion in this report.
- 3.2.4 Physical Environment: A rapid desk-based compilation of geological (both solid and drift), pedological and topographical information will be undertaken. This will not only set the archaeological features in context but provides an indication of the extractive potential of the locality.

# 3.3 TOPOGRAPHIC SURVEY

- 3.3.1 It is proposed to undertake a level 2a survey (see LUAU survey levels, *Appendix 1*) of the Areas B and D; however, elements immediately to the east of Area B will also need to be examined to provide a contextual understanding of the rest of the complex. Area D, in particular, is heavily obscured by vegetation and should be cleared by Cumbria County Council contractors prior to the initiation of the field survey.
- 3.3.2 The survey will involve the outline mapping of the archaeological surface features within the survey Area. Some topographic detail will also be surveyed if it is archaeologically significant or is in the vicinity of archaeological features. Although the survey data will include altitude information this will not be used for the production of the level 2a survey. The survey will be superimposed onto a digital base survey that will be provided by Cumbria County Council. The survey would be accompanied by a detailed gazetteer description of individual archaeological features, which will relate directly to the survey mapping.

- 3.3.3 Survey control will be established over the site by closed traverse and internally will be accurate to +- 15mm; the control network will be located with respect to the digital base drawing provided by Cumbria County Council or the extant survey control.
- 3.3.4 The surface features will be surveyed by EDM tacheometry using a total station linked to a data logger, the accuracy of detail generation will be appropriate for a 1:250 output. The digital data is transferred onto a portable computer for manipulation and transfer to other digital or hard mediums. The archaeological detail is drawn up in the field as a dimensioned drawing on the plots with respect to survey markers. The survey drawings will be generated within a CAD system and can be output at any scale. The survey would be plotted as wet ink drawings on stable polyester film sheets, using RCHM(E) draughting conventions and line thicknesses appropriate for reproduction and reduction.
- 3.3.5 In conjunction with the archaeological survey a photographic archive will be generated, which will record significant features and general landscapes. This will provide an oblique photographic record of all wall elevations on both sites and will also provide a general perspective of the extant industrial landscape.

#### 3.4 FABRIC SURVEY

3.4.1 The brief requires the recording of upstanding elements of Areas B and D which will be affected by the proposed reclamation development. This will involve the recording of walls Ref. W3, W6, W7, W11 and W12 in Area B. Selective walls in the northern part of the survey area, which will also be demolished, will be recorded by the detail fabric survey. Within Area D the brick wall (Ref W) will be subject to a fabric survey. There are very significant differences of detail on either side of the large wall (Ref W3) and therefore both elevations will need to be recorded; the other walls will only need to be recorded from one side. The two arches (A and B) will not be destroyed by the development, but are of sufficient archaeological significance to warrant fabric recording and it is proposed that they be subject to detailed photographic recording but not the production of a drawn record.

In accordance with the verbal requirements of the County Archaeologist only outline recording of the elevations will be necessary, as long as the drawings are presented in conjunction with oblique photography. As well as the elevations it is also proposed to generate detail plans of the affected walls, and directly associated features. To satisfy these requirements it is proposed to undertake the following:

- 3.4.2 **Photographic Survey:** A general oblique and semi-oblique photographic record will be produced of all the affected external elevations and will include detail shots of relevant and significant features. This will provide a general perspective record of the elevations, but will not be used to generate the drawings.
- 3.4.3 **Drawn Survey:** The survey will record the outlines of all significant stones; quoins, ashlars, the outlines of the walls and all masonry breaks, but will not record all individual stones. The detail elevation survey will be undertaken by use of a Leica reflectorless total station, which generates a laser beam and is able to extract a distance measurement by its reflection from wall surfaces. The distance measurement is accurate to +-6mm and the recording involves tracing the laser beam around architectural features. The method is both economic in that it requires only one member of staff, but also enables the recording of detail that is inaccessible because of the high elevations. The digital information is transferred from a data logger into a CAD system and paper plots are output to enable the enhancement of the digital record by hand survey techniques. The hand survey amendments are then transferred back into the CAD system which offers the flexibility to enhance, manipulate, and model the graphical data output to generate the final drawings.
- 3.4.4 The plan drawings will be output at 1:50, and the elevations also at 1:50, although the plans can be output at higher scales if required.

#### 3.5 TRIAL TRENCHING

- 3.5.1 This programme of trenching will establish the presence or absence of any archaeological deposits and, if established, will then briefly test their date, nature, and quality of preservation. Excavation will normally be limited to the upper surface of significant archaeological deposits, unless further work is regarded by ourselves and the County Archaeologist or his representative as essential in order to complete the full evaluation. This element of the trial trenching is invaluable in order to assess those parts within the proposed study area where there is a potential for archaeological deposits to survive which are not visible on the surface.
- 3.5.2 Trial trenching will be required to target features of suspected archaeological significance which are visible as earthworks or linear features identified from the surface survey. It is required that the trenching examine 5% of the study area, and will involve the excavation of six 15m x 2m trenches in Area B and three 7.5m x 2m trenches in Area D. The precise locations of the trenches would be determined in discussions with the client and County Archaeologist at the outset of the project.
- 3.5.3 **Methodology:** To maximise the speed and efficiency of the operation the removal of overburden will be undertaken by machine (with a standard five or six foot toothless ditching bucket), although in areas where ephemeral remains are encountered elements may be hand dug. The trenches will not be excavated below a depth of 1.25m from the surface, to satisfy health and safety requirements for unshored excavations. If it is required to excavate below this depth, then there will be additional costs to enable the shoring of the trench.
- 3.5.4 All trenches will be excavated in a stratigraphical manner, whether by machine or by hand. Trenches will be accurately located with regard to surrounding features, by use of a total station survey instrument.
- 3.5.5 **Recording:** All information identified in the course of the site works will be recorded stratigraphically, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.5.6 Results of the field investigation will be recorded using a system, adapted from that used by Central Archaeology Service of English Heritage. The 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) in order to minimise deterioration. Samples will be collected for technological, pedological, palaeoenvironmental and chronological analysis as appropriate, but it is only intended to process such material for assessment at this stage.

# 3.6 EVALUATION REPORT

- 3.6.1 Archive: The results of Stages 3.1-3.5 above will form the basis of 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. The deposition of a properly quantified, ordered, and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the Institute of Field Archaeologists in that organisation's Code of Conduct. This archive will be provided in the English Heritage Central Archaeology Service format, as a printed document, and a synthesis (the evaluation report and index of the archive) will be submitted to the relevant Sites and Monuments Record.
- 3.6.2 All drawings will be produced on dimensionally stable drafting film on standard 'A' size sheets and in metric format. Each sheet will be fully titled. Line thicknesses will be chosen to allow for ease of duplication and/or reduction. Particular attention will be paid to achieving drawings of the highest quality and accuracy.

- 3.6.3 The archive will include the following:
  - Copies of relevant documentary material
  - Survey Control Information
  - Field / Inked Drawings and digital copies of CAD data
  - Photographic negatives, prints and colour transparencies
  - Written report
  - Administrative records
- 3.6.4 **Report:** One bound and one unbound copies of a written synthetic report will be submitted to the client which will be delivered within one month of completion of the site survey. The report will present, summarise, and interpret the results of the programme detailed in Stages 3.1-3.5 above, and will include an index of archaeological features identified in the course of the project, with an assessment of the sites development. It will incorporate appropriate illustrations, including copies of the site plans and elevation drawings, and the topographic survey mapping all reduced to an appropriate scale. The report will consist of an acknowledgements statement, lists of contents, executive summary, introduction summarising the brief and project design and any agreed departures from them, methodology, interpretative account of the site and associated structures, gazetteer of sites, list of archive contents, a complete bibliography of sources from which data has been derived, and a list of further sources identified during the programme of work. The report will make recommendations for further mitigative recording if required. The report will be in the same basic format as this project design. A copy of the report can be provided on 3.5" IBM compatible disk in either ASCii or Word for Windows format and the drawings can be provided as DXF files if required.

# 3.7 GENERAL CONDITIONS

- 3.7.1 *Access:* It is understood that Cumbria County Council owns both sites and therefore they will enable access for LUAU.
- 3.7.2 **Health and Safety:** Full regard will, of course, be given to all constraints (services) during the survey, as well as to all Health and Safety considerations. The LUAU Health and Safety Statement conforms to all the provisions of the SCAUM (Standing Conference of Unit Managers) Health and Safety manual. Risk assessments are undertaken as a matter of course for all projects. The Unit Safety Policy Statement will be provided to the client, if required. LUAU reserves the right to omit the recording of architectural detail, if safe access can not be provided for the survey of that detail.
- 3.7.3 **Confidentiality:** The report is designed as a document for the specific use of Cumbria County Council, for the particular purpose as defined in this project design, and should be treated as such. Any requirement to revise or reorder the material for submission or presentation to third parties or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.
- 3.7.4 **Project Monitoring:** Any proposed changes to this project design will be agreed with Environment and Design of Cumbria County Council and the County Archaeologist or his representative. If required a preliminary meeting will be established with a representative of Environment and Design, Cumbria County Council at the outset of the project. Further meetings to review the progress of the work may also be required.
- 3.7.5 **Insurance:** The insurance in respect of claims for personal injury to or the death of any person under a contract of service with the unit and arising out of an in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of LUAU, in respect of personal injury or damage to property by negligence of LUAU or any of

its employees, there applies the insurance cover of £ 1m for any one occurrence or series of occurrences arising out of one event.

#### 4. WORK TIMETABLE AND RESOURCES

#### 4.1 PHASING

4.1.1 It is envisaged that the various stages of the project outlined above will fall into three distinct phases, which would follow on consecutively, where appropriate. The phases of work would comprise:

i	Project Preparation		
	1 day (desk-based)		
ii	Documentary Survey		
	3 days (desk-based)		
iii	Topographic Survey		
	2.5 days (on site)		
iv	Fabric Survey		
	3.5 days (on site)		
v	Trial Trenching		
	5 days (on site)		
vi	Interim Summary		
	0.5 days		
vi	Evaluation Report		
	11 days (desk-based).		

- 4.1.2 LUAU can execute projects at very short notice once an agreement has been signed with the client. The project (field work, report and archive) is scheduled for completion two months from the completion of the field work. Subject to the receipt of an order by 28th March, it is proposed to start the evaluation programme (desk-top-study) on 7th April. The surveys and trial trenching will run concurrently and will start the week of the 14th April. The fieldwork is expected to finish by 25th April and an executive summary outlining the results and the recommendations will be produced shortly afterwards. The final report and drawings will take at least three weeks to complete.
- 4.1.3 The project will be under the project management of **Jamie Quartermaine**, **BA Surv Dip MIFA** (LUAU Project Manager) to whom all correspondence should be addressed. All Unit staff are experienced, qualified archaeologists, each with several years professional expertise. The analytical recording and reporting will be undertaken by **Mike Trueman BA**, who has extensive experience preparing reports on industrial landscapes for the English Heritage Monument Protection Programme.

# **ILLUSTRATIONS**

- Fig 1 Parton Location Plan
- Fig 2 Parton Desk-Top study site map
- Fig 3 1835 map of Parton (DH 310/MS 276 1835) by William Gawthorp
- Fig 4 OS 1899, 25": 1 mile map, 2nd edn, Southampton
- Fig 5 Survey plan of Brickworks Site (Area B) superimposed with 1835 map
- Fig 6 Area B Trench location map
- Fig 7 Trench 1 plan
- Fig 8 Trench 2 plan
- Fig 9 West elevation of the main terrace wall (Structure 5.5)
- Fig 10 East elevation of the main terrace wall (Structure 5.5)
- Fig 11 East gable wall and north elevation of Structure 5.4
- Fig 12 West elevation of Structure 5.4 and west elevation of pond wall
- Fig 13 South elevation of Structure 5.4
- Fig 14 1852 Plan of brewery (D/Lons/W Plans, 2 1852)
- Fig 15 Survey plan of Brewery site (Area D)
- Fig 16 1840's watercolour of Parton mine complex

Mig 1 Parton Location Plan

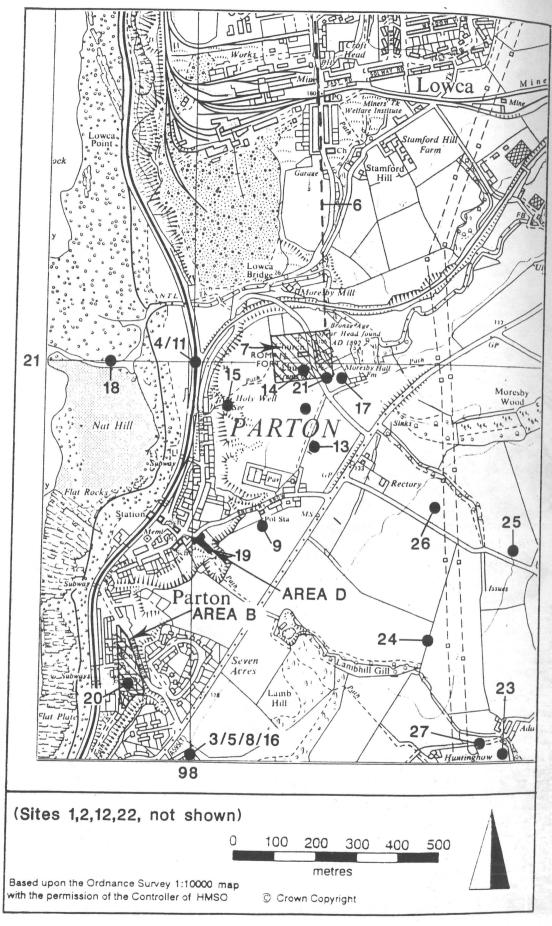


Fig 2 Parton Desk-Top Survey Site Map

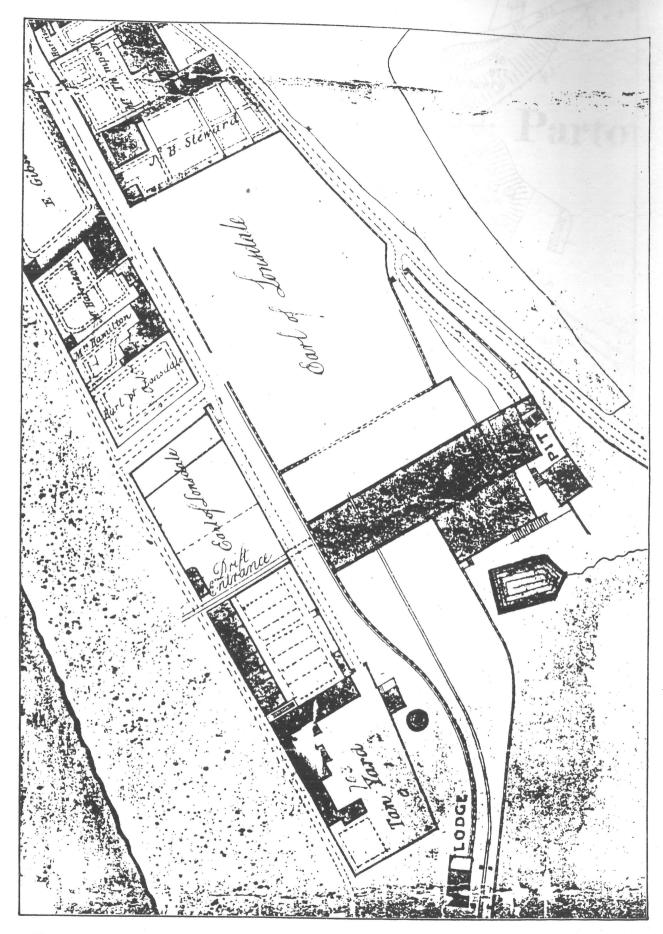


Fig 3 1835 map of Parton (DH 310/MS 276 1835) by William Gawthorp

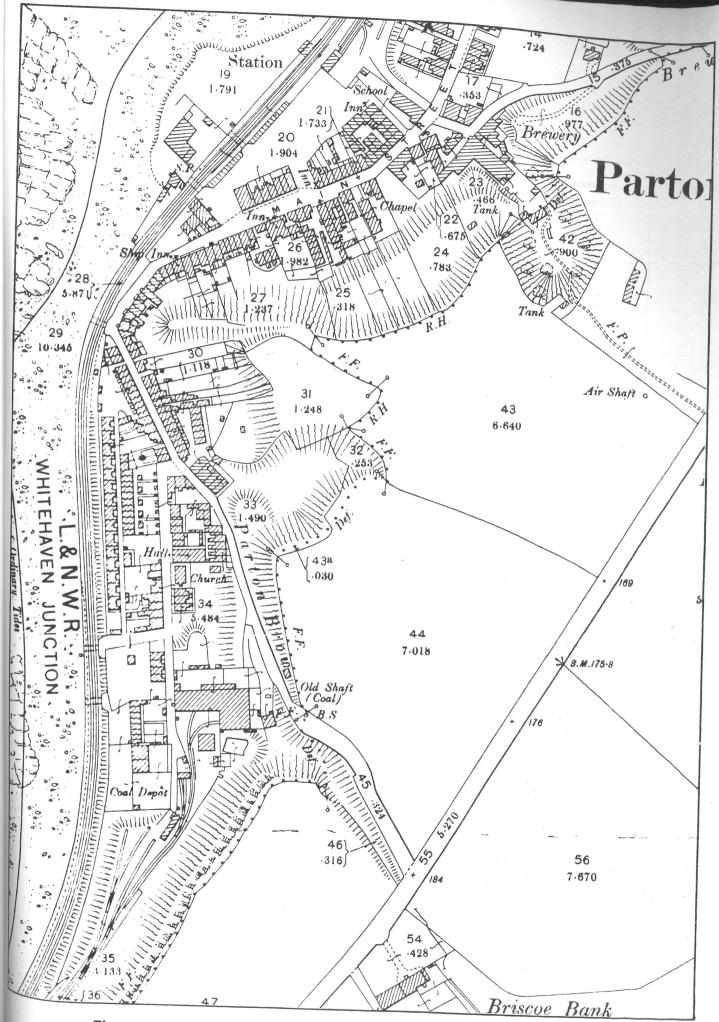


Fig 4 OS 1899, 25":1 mile map, 2nd edn, Southampton

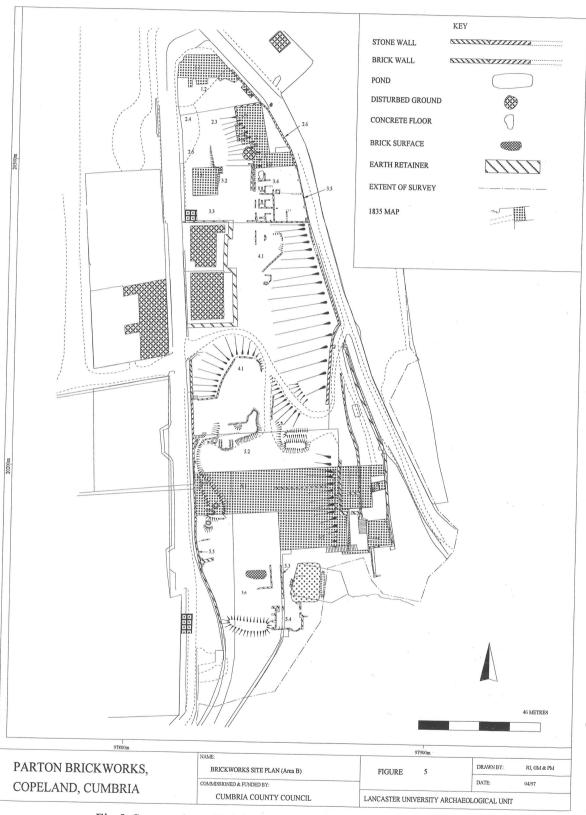


Fig 5 Survey plan of Brickworks site (Area B) superimposed with 1835 map

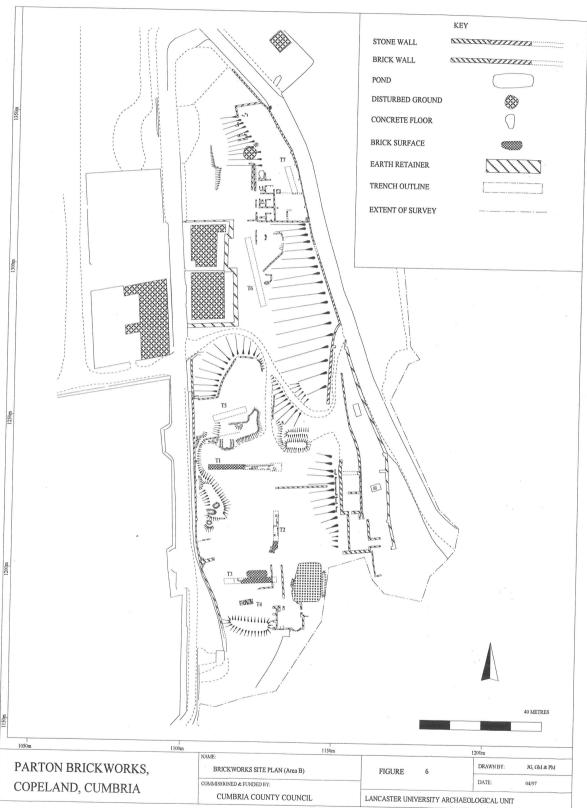


Fig 6 Area B Trench Location Plan

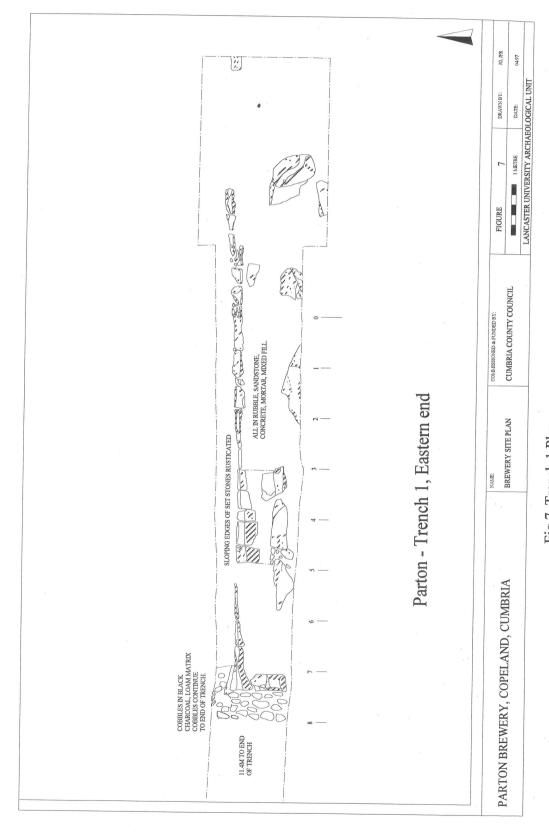


Fig 7 Trench 1 Plan

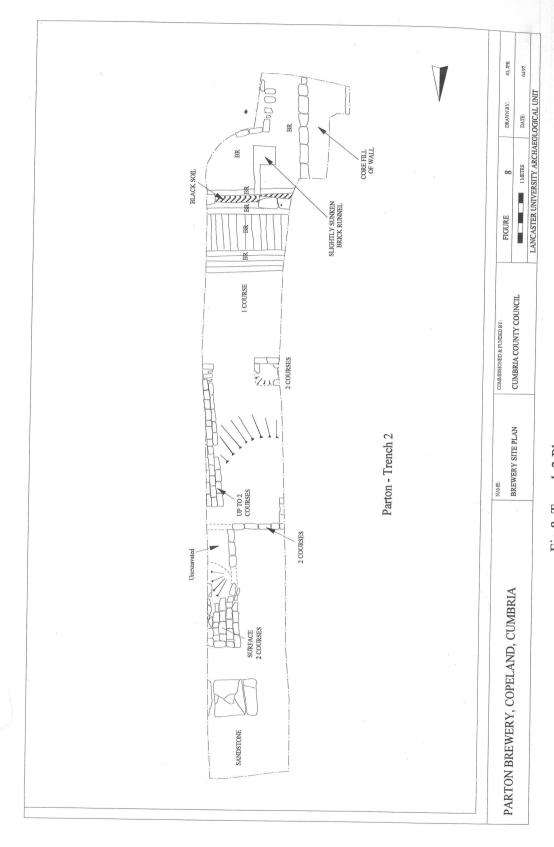


Fig 8 Trench 2 Plan

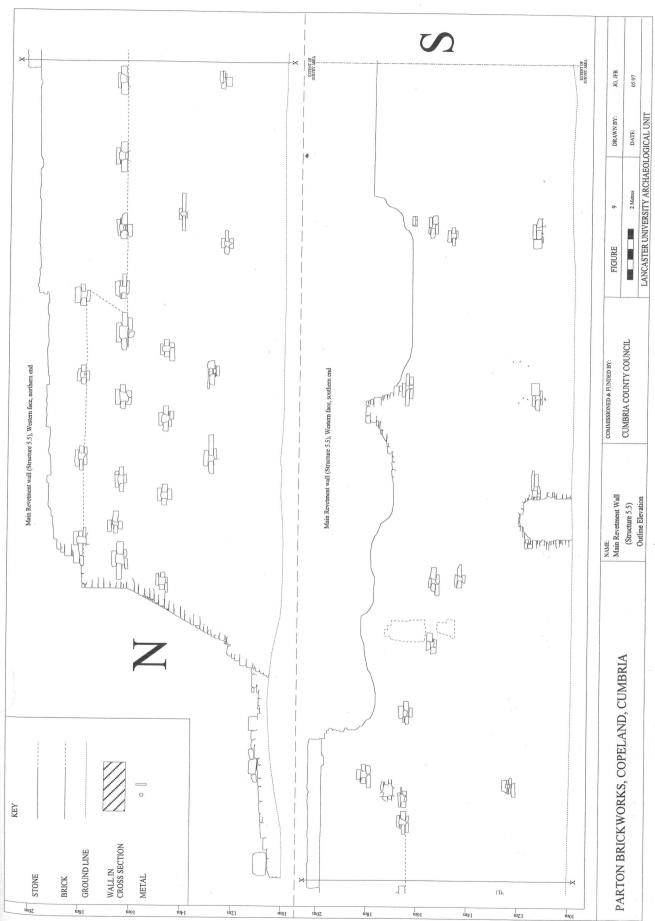


Fig 9 West elevation of the main terrace wall (Structure 5.5)

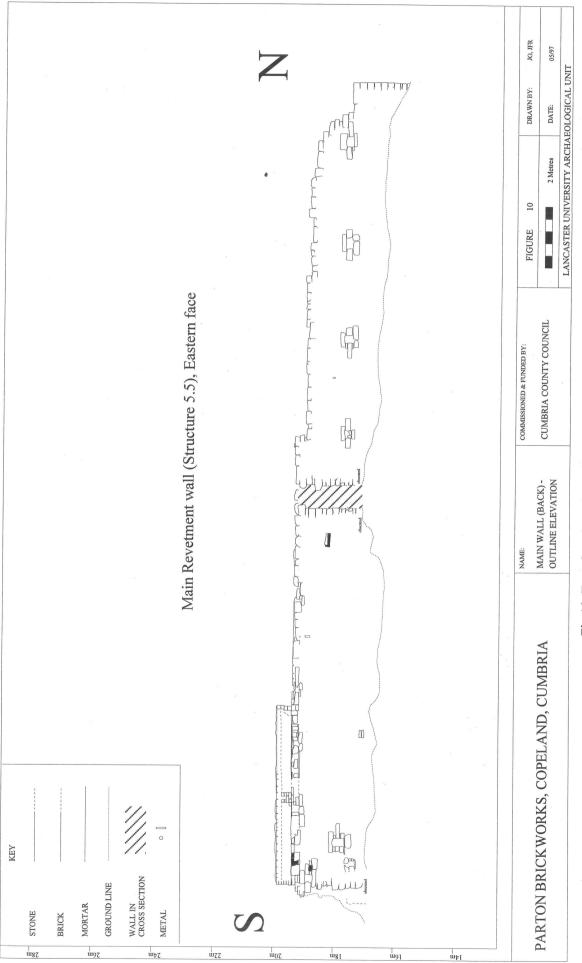


Fig 10 East elevation of the main terrace wall (Structure 5.5)

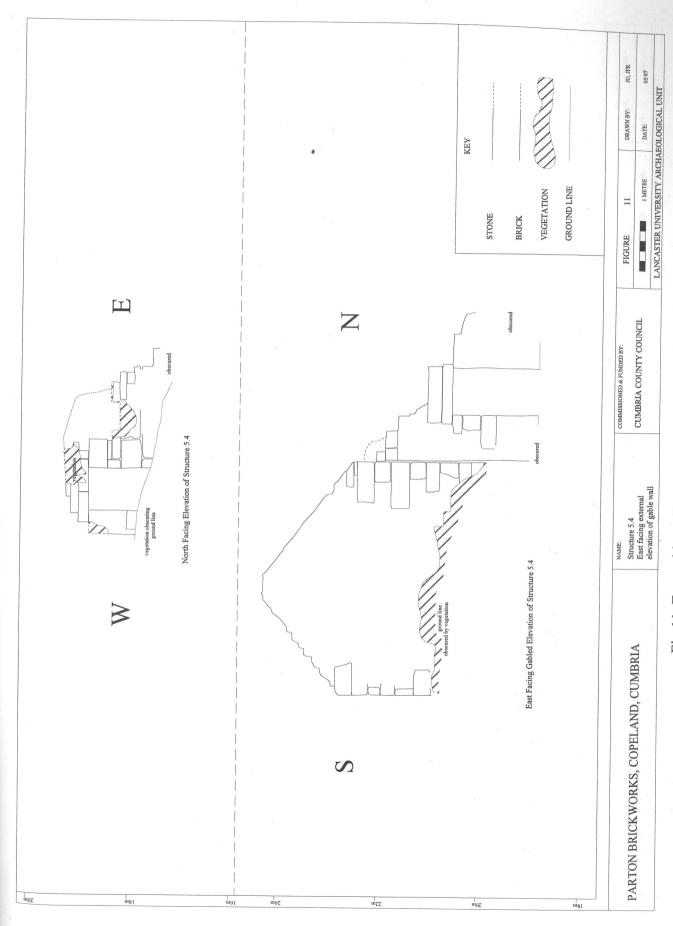


Fig 11 East gable wall and north elevation of Structure 5.4

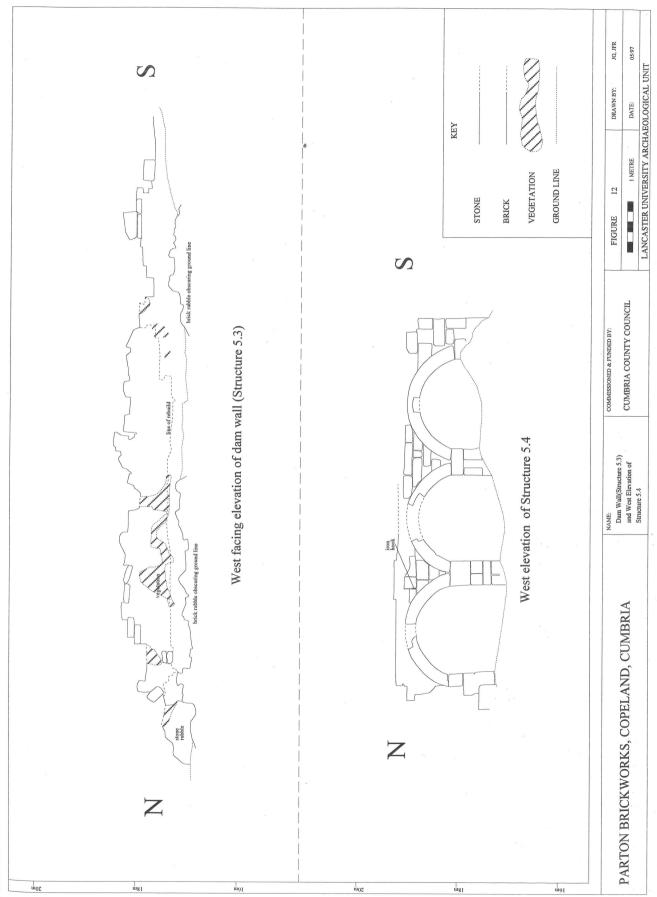


Fig 12 West elevation of Structure 5.4 and west elevation of dam wal (Structure 5.3)

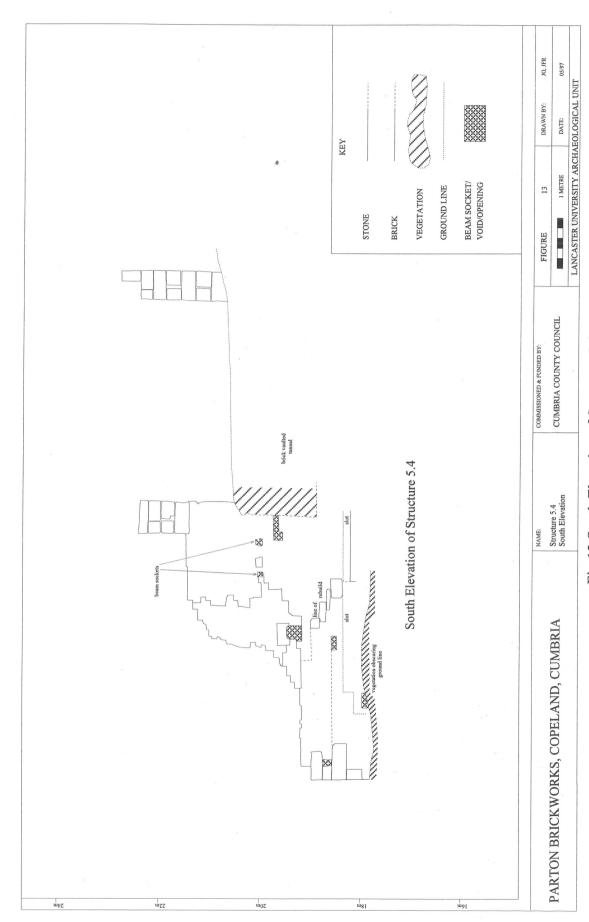


Fig 13 South Elevation of Structure 5.4

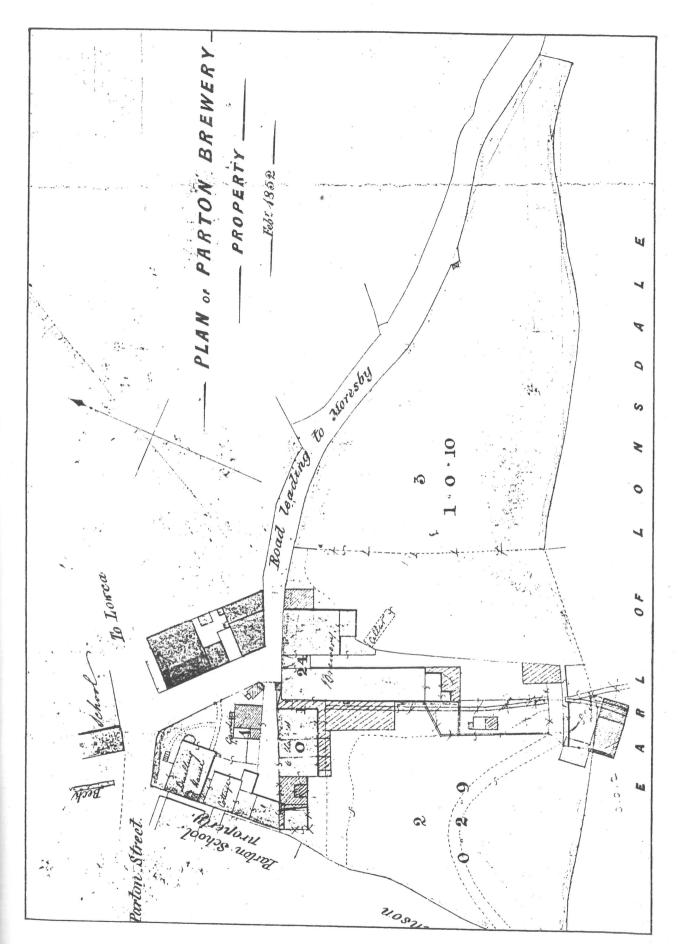


Fig 14 1852 Plan of Brewery (D/Lons/W Plans,2 1852)

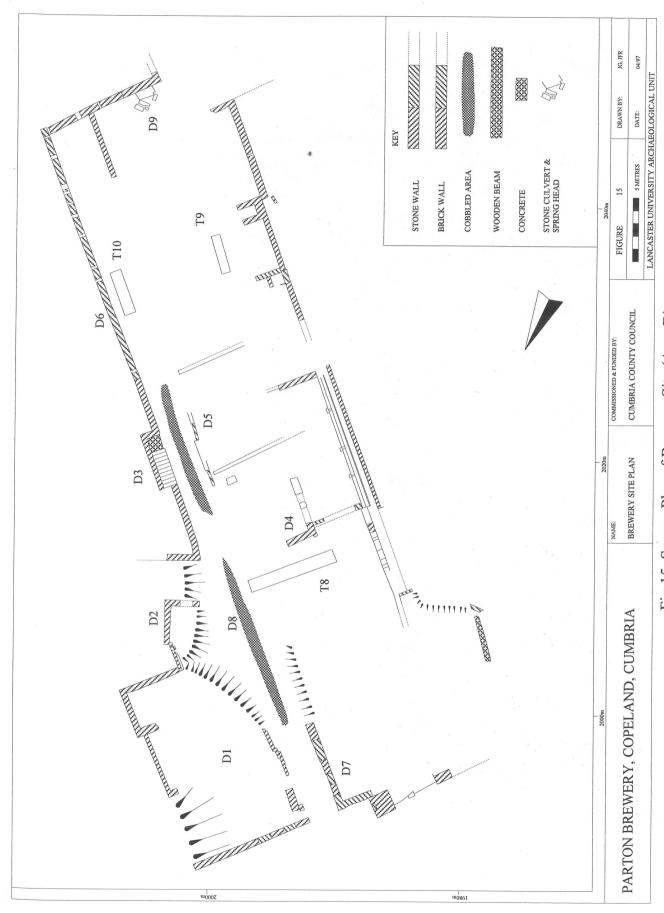


Fig 15 Survey Plan of Brewery Site (Area D)

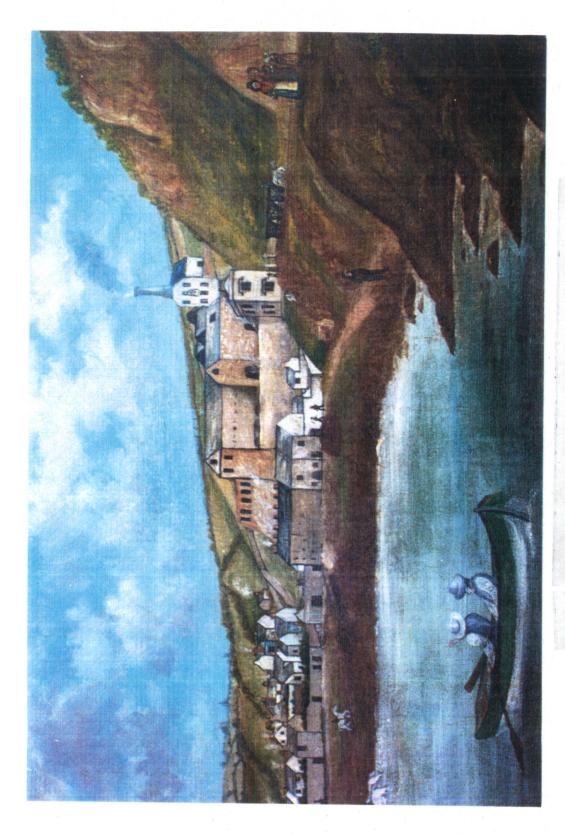


Fig 16 1840's watercolour of the Parton Mine Complex