

Birmingham University Field Archaeology Unit Project No. 502 October 1997

Brownhills Common, Walsall: Archaeology

Stage 1 Desk-based assessment

by Peter Ellis

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BROWNHILLS COMMON, WALSALL: ARCHAEOLOGY

Stage 1: Desk-based Assessment

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1. Introduction

The following report outlines the results of a desk-top study and field walkover undertaken by Birmingham University Field Archaeology Unit in September and October 1997. The work was commissioned by Aspinwall and Company on behalf of the Potters Clay and Coal Company Ltd, and was intended to provide an initial archaeological response to inform proposals to quarry specialist clays from part of Brownhills Common (Fig 1). The assessment was intended to determine the nature, extent, survival and significance of archaeological features and deposits within the study area. The work followed a brief provided by Hilary White of the West Midlands Sites and Monuments Record, JDT, Solihull. The study area, lying between Coppice Lane and the Chester Road and bounded to the east by the disused Midland Railway line, is the site of abandoned mineworkings and covered in trees and scrub.

The work comprised a collation of the SMR database for known sites at and near the study area, held by JDT, Solihull, followed by a study of primary and secondary sources at Lichfield Joint Record Office, Stafford Record Office, the William Salt Library, Stafford, and the Walsall Local History Centre. A field walkover was also undertaken. The sources of information used have been listed in Appendix 1. The historical background to the site is followed by sections detailing the results of documentary research and a field visit. This data is then discussed and evaluated. Recommendations for further work are in Appendix 2.

2. Historical and archaeological background

Brownhills is first mentioned in the 18th century, coming into existence as a result of the expansion of coal mining into the area (SMR 5820). Before the formation of Brownhills into a local government district in 1877 and an Urban District in 1894, the study area lay within Norton Canes parish. Geologically the area lies on Carboniferous coal measures, comprising sequences of clay and coal seams (info. James Associates). At the site itself a 3-7m covering of boulder clay seals fireclay, brickclay and coal resources, all of which can be won these days by opencast mining methods.

Mining in Staffordshire is recorded from the 13th century (VCH 1967). Tudor and Stuart records suggest that coalmining was commonplace with many landowners conducting small-scale operations on their estates. The methods used are thought to have involved bell pits, shafts opened from the surface vertically to the coal seam which was then opened up wider than the shaft until no longer workable, leaving an abandoned bell-shaped pit (Sherlock 1976, 86). Technological changes in the 18th century brought deeper mining, a depth of 170 feet being recorded in south Staffordshire in 1710 (Sherlock 1976, 97). The volume of coal production was sharply increased and major investment took place in mines and in transport, especially canals. Of the latter, the Wyrley and Essington Canal lies to the south of the study area. Rail transport and tram or rail links from the pithead to the mainline came with the 19th century. By then two shafts were usually run in tandem 6-8 yards apart. The coal seams were not completely mined; the 'pillar and stall' method left supporting pillars of coal around which areas were cleared. In 1853, Warrington Smyth described the resulting landscape as dotted with 'innumerable shafts, and deformed by the large waste heaps of slate and slack which so frequently surround them' (quoted in Sherlock 1976, 88). Increasingly powerful pumps were developed over the period to control flooding in the pits.

3. Results of the desk-based study

3.1 Romano-British

The proximity of Watling Street would suggest the possibility of Romano-British activity. The road (Margary 1h: Margary 1973, 291) changes its alignment slightly at a high point just to the north-west of the study area (Fig 1). This would represent the adoption of a new sight line by the engineers. To the east, Knaves castle (SMR 2664) might represent a Romano-British station. Although no evidence has been found to suggest a Roman presence on the site, the possibility exists of Romano-British features near to the major road, either roadside settlements or farmsteads set back from the road.

3.2 Coal mining

3.2.1 Before the 19th century

Coal shafts within the study area are shown on a map of c. 1800 (Fig 2; Reece 1996, 98), although Reece also gives a mid 18th-century date (1996, 99). The original of the map has not been found, Reece showing a tracing. An Engine House is marked at the south-west corner of the study area, with a line of equidistant pit shafts shown running in a line north-eastward and numbered 1-10. Of these the first 6 or 7 would lie within the study area. To the south-east, four further pits are shown, three of which are named the first and second 'watery pits' and 'late Rowley's pit'. Two of these appear to lie within the study area, with two others to the south beyond Coppice Lane. The plan caption states that these are Brownhills Collicry workings 'on the waste parts'. The linear layout suggests that they represent deeper workings than bell pits, with underground shafts running to the south-east.

There is circumstantial evidence of coal mining prior to this. A 1794 plan of the Wyrley and Essington canal (Reece 1996, 18) shows its route through mining areas presumably represented by circles denoting pit shafts, and a number of these are shown in the Brownhills area (Fig 3). The canal was opened in 1797 and was intended to serve the minefields, many of which were 'upon waste or unimproved lands of

small value' (Reece 1996, 18). A wharf lay 200m to the south west of the study area with a branch running toward its south-west corner.

A plan of Norton Canes of 1827 (SRO D351/M/B/200), reused with slight alterations by the Tithe Commissioners in 1838 (LJRO B/A/15), shows a number of fields, then in agricultural use, with names suggestive of former mining activity. These included 'Near Engines', 'Old Coalpit land', 'Engine meadow', and 'Far and Near Engine pieces', with others indicating the use of clays such as 'Brick kiln piece'. 'Old coalpit land', at the south-west corner of the site, and 'Engine piece' to its west are also shown on a map of 1812 (SRO D978/14).

Reece notes records of Newcomen engines in Great Wyrley in 1722, and field names associated with coal mining in Little Wyrley in 1742 (Reece 1996, 99). He also quotes a will of the 1770s by the landowner Phineas Hussey recording the existence of 'fire engines', or mine drainage engines, at his collieries at Brownhills (Reece 1996, 99).

3.2.2 Nineteenth and 20th centuries

The 1827 map leaves the study area blank. A 'New Engine', not shown on the 1812 map, is indicated 100m west of the north-west corner. To it runs a tram or railway track from the canal head to the south. Eleven pit heads, with others just outside the study area, are shown on a plan of areas mined by the Brownhills Colliery in 1841 (Rollins 1994, coloured plates; AMRO). Seven of these are concentrated in the southwest corner of the study area (Fig 5). The OS 1" map of the 1840s, predating the Staffordshire railway line of 1849, shows 'The Coal Works' in the study area and to its east (Reece 1996, 4). This map also shows lines connecting to the canal, and paths within the study area. A strike is documented in 1874 in the Brownhills Collieries (Rollins 1994, 25).

In 1882, the now disused railway defining the east side of the study area was opened (Reece 1996, 21; SMR 9343). The area is represented in detail on the 25" Ordnance Survey maps of 1883/4 (Fig 4: the 1883 6" map). These show Coppice Colliery No 5 (SMR 9143, 9145) on the west side of the study area as a number of buildings, marked as 'Brick Works', lying beside the present large pool, then apparently at the bottom of a large cutting. Five buildings are shown around the main shaft itself. To the north of the latter is a large spoil mound and tram or railway tracks run to the north. A small pool lies to the north west. A rectangular building is shown further north, in the northwest corner of the study area. Coppice Colliery No 1 (SMR 9144) is shown lying outside the study area to the north with a number of buildings and a network of rail or tramway tracks. To the north-west Coppice Colliery No 3 (SMR 9142) is shown south of the junction of the Chester Road and Watling Street. The rail tracks from all three collieries connect with the Norton branch of the Staffordshire line, opened in 1849 (Reece 1996, 15; SMR 9272).

The exact nature of the transport system within the study area in the 19th century is not clear. A lease of 1868 stipulates the maintenance of a tramway through Birch Coppice, to the south of the study area, and the manning of a gate at its north entrance (Reece 1996, 103). This is probably the line running north-south across the study area to Coppice Colliery No 1 (Fig 5). A tramway is noted north of Coppice colliery No 5 on the 1887 25" OS map (SMR 9143). A small gauge tram system would seem likely within the study area, connecting both with the canal and the railway.

White's and Kelly's Directories note extensive collieries in Brownhills in 1834 'opened many years ago' (White's), in 1851 (White's), and in the late 19th century (Kelly's). Kelly's Directory lists the Coppice Colliery Company as at Brownhills from the first Directory in 1880 (Kelly's Directory, 215) until 1896. By the turn of the century the company ceases to be mentioned in connection with Brownhills although it continued until at least 1905 (SRO D1117, COP 1). The major part of its mining operations took place north of Watling Street (SRO 566/13-15).

A mass of data regarding the Coppice Colliery is held at the Stafford Record Office comprising *inter alia* wages books for 1907/8 (D876/105), cash and costs sheets from 1878-1912 (D876/105A), estates correspondence 1894-1913 (D1117, COP 1), and estates leases c. 1870 (D1117, COP 2). It was not possible to find records specifically referring to Coppice Colliery No 5, the works within the study area. Sales at the turn of the century were divided between truck and cart sales and boat sales, suggesting the continued importance of the canal system. Pages in the wages book for 1907/8 are headed 'No 1' (perhaps referring to Colliery No 1). These show a deep and a shallow scam being worked with 75 and 76 men employed at each. A 'New Coppice Colliery' was opened in 1894 (Ashton 1976, Chapter 9). However 20th-century work at 'Old Coppice Colliery' was undertaken by the Cannock Chase company, which may thus have taken over the Coppice Colliery Company by then (Ashton 1976, Chapter 9). The Cannock Chase company functioned between 1849 and 1961 (Ashton 1976, Appendix 1). Coppice Collieries Nos 6 and 8 were sited to the north of Watling Street (Fig 4).

The scale of 19th-century workings is shown by an indenture of 1811 leasing Phineas Hussey's collieries at Brownhills (quoted in Reece 1996, 100). This specifically places the Brownhills collieries on the 'waste lands'. The lease was held for much of the 19th century first by William Hanbury and then by William Harrison (Reece 1996, 100-101).

Within the study area, Coppice Collieries 1 and 5 are no longer shown on the 2nd edition OS 25" map of 1902, although an 'Old Coal Shaft' is shown in the north part of the area. Reece (1996, 7) situates Coppice Colliery No 2 in this area. The building shown in 1883/4 in the north-west corner of the area is shown as an enclosure. An enclosure is also shown south of the present pond on the north boundary of the area. This is repeated on the 1919 25" map, which also shows two large spoil mounds on the west of the area, with the building shown in 1883/4 now perhaps an enclosure. The 1938 edition shows a railway track crossing the area from south to north leading to the area of the former Coppice Colliery No 1, which is cited as having been reopened. The old coal shaft, presumably Coppice Colliery No 2, shown on all maps from 1902 is also shown as having been reopened. The existing network of drainage channels is first shown on the OS 6" map for 1922 and is repeated on the 1938 25" map.

An aerial photograph taken in 1948 shows apparent open workings in the north and south of the study area (SRO CPE/UK/2555 4095). A second aerial photograph taken in 1977 (SMR 102 106) shows recent workings in the area of Coppice Colliery No 3. Borehole data supplied to Aspinwall records unworked coal seams at 20m, 22m, 53m and 56m below ground surface, and extensive workings at 33m, 43m and 70m. The latter workings were thought to represent pre 1840 activity.

<u>Table: Summary of data</u> (C= cartographic, D=documentary)

1797	Wyrley and Essington canal built to service coalmines probably in, and certainly near, the study area (C)
c. 1800	mineshafts shown on site (C)
1812, 1827, 1838	Maps show evidence of previous mining activity to east and south of site, and current activity to its north (C and D)
1841	Mine shafts mapped on site (C)
1849	Staffordshire rail line opened (D)
1882	Midland rail line opened (D)
1883-1938	Ordnance Survey maps show decline of coal working in the study area (C)
1870-1913	Documents available for Coppice Colliery Company (D)

4. Results of the field walkover

The study area is covered by dense scrub. The walkover exercise located the 20thcentury drainage system; the ponds shown on maps; a large open area excavation to the south of the site surrounded by sharply angled banks 2-3m high; a nearby concrete abutment; the raised lines of tram and rail routes; large raised areas up to 2m above the surrounding land and as much as 100m across; numbers of ditch and bank features; and numerous circular depressions, presumably small scale-workings. Figure 5 shows the main features.

None of the buildings shown on the maps discussed above were located as foundations or rubble remains, although at Coppice Colliery No 5 there were earthwork indications of the location of the largest building. The same was true for Collieries Nos 1 and 3 outside the study area. Nor were the mineshafts and other buildings discussed above apparent on the ground, although the smaller Coppice Colliery No 5 buildings, and the possible building to its north, could be indicated by sunken sub-rectangular areas. There were no indications of tramway or railway furniture. The only landscape relationship observed was that the drainage ditches shown on maps from 1922 were clearly the latest features, cutting the tram or rail lines.

Topographically, land in the vicinity is more or less level, and the widespread raised areas cannot be natural features but must all be seen as spoil mounds. These are extensive. Some of the circular or sub-rectangular depressions may be 18th-century bell pits. However, a number was found cut into the raised spoil mounds. It is possible that these represent subsidence rather than pitting.

5. Discussion

The research failed to locate records of mining within the study area earlier than the 19th century. It would seem likely, however, that unenclosed land was generally preferred for mining. Since fields with names in 1838 suggesting earlier industrial use are located in the immediate vicinity of the study area, it would seem reasonable to expect 18th-century activity in this unenclosed area. The canal branch laid out in 1797 across 'Old Coalpit land' directly toward the south-west corner of the study area, where in c. 1800 and again in 1841 there was a concentration of shafts, is further evidence, and seems likely to indicate a pre-existing mining focus.

However no archaeological features from an earlier period of mining than the 19thcentury can be certainly identified on the ground since possible bell pit features also occur on what must be 19th-century spoil mounds. It must be suspected that abandoned mine workings represent the latest activity on site, with earlier features often buried or destroyed by later features. The working of clay as well as coal is indicated by Coppice Colliery No 5. The association of mine shaft and brickworks there is not uncommon, and was paralleled at Cannock Chase mines 7, 9, 10 (Ashton 1976, plans 2 and 7). It is of interest to note the field name 'Brick kiln picce' to the west, an indication of probable pre-19th century brick making. The brick works at Coppice Colliery No. 5 may have replaced earlier works.

6. Assessment of significance

Because of tree cover, it is difficult to assess the importance of the study area as an industrial archaeological landscape. However, the spoil tips, tram or rail trackways, ponds and bell pit areas, would all have considerable visual impact if seen with the tree cover cleared.

The study area appears to have been devoted solely to industrial use, principally mining and perhaps secondarily brick making, over the last several hundred years. Inevitably the area is heavily disturbed and much of the earlier industrial archaeology may have been destroyed. However it has often proved the case on industrial archaeology sites that earlier activity was abandoned *in situ* and remained buried beneath later spoil heaps. This may well be the case here.

This single site use over the recent period makes it of enhanced archaeological potential. In addition to this, a considerable documentation for the 19th-century exists which can be tied to structures represented on maps, and which might be available for excavation.

In particular, the study area has considerable potential for locating material relating to transport systems and their associated technology. There are a number of raised tracks formerly used by trams or trains which are of great archaeological interest. Technological material and evidence associated with different mining strategies may also remain to be located.

Finally, it is possible that renewed quarrying itself may reveal evidence of previous mining activity, as has been the case with the borehole data where previously mined seams have been recognised.

Although it must be suspected that evidence of previous land use from the Roman period until the start of mining has been destroyed, it is nevertheless possible that field boundary remains of pre-mining date may be located.

In summary, the industrial archaeology potential of the area must be seen as of considerable importance. The site is one of numerous long-used coal mining sites, although not in its time in any way out of the ordinary. It has, however, become a rare surviving segment of a previously common industrial landscape, and as such worthy of record or preservation if possible.

The important archaeological areas to the west of the study area will be unaffected by quarrying, according to the current design plans, and will thus be preserved. The remainder of the study area the opportunity of recording the resource and undertaking further investigations should lead to an enhanced understanding of an important episode in the history of the area.

7. References

Ashton, G, 1976 A history of Brownhills, typescript (WLHC)

Margary, I, 1973 Roman roads in Britain, 3rd edn, London

Reece, G, 1996 Brownhills, a walk into history, Walsall

Rollins, B, 1994 Coal mining in Walsall Wood, Brownhills and Aldridge, Walsall

Sherlock, R, 1976 Industrial Archaeology of Staffordshire, Newton Abbot

VCH 1967 Victoria County History for Staffordshire, II, Oxford

8. Abbreviations

AMRO = Abandoned Mines Record Office - Burton on Trent LJRO = Lichfield Joint Record Office SMR = Sites and Monuments Record, JDT Solihull SRO = County Record Office, Stafford WLHC = Walsall Local History Centre WSL = William Salt Library, Stafford

Appendix 1: Sources consulted

Maps

SROD(W)1756/7Norton estate of Richard Gildard, 1763 (n/a)D978/14Hussey estates, 1812D351/M/B/200Plan of Norton Canes parish, 1827566/13-15Colliery plans, 1855-95 - all north of Watling StD570/15/35Colliery plans - north of Watling StD570/15/34Brownhills 1896

<u>LJRO</u> B/A/15

Tithe map and commutation

Plus OS maps 1883-1938

Note: It has not been possible to locate the original of Figure 2 (Reece 1996, 98). The coloured plans in Rollins 1994 were copied and coloured by Rollins from originals at AMRO, Burton on Trent (pers. comm. Brian Rollins).

Documents

<u>SRO</u>	
D593/K/5/1/38	Documents re Midlands rail line across Brownhill Commons
D77 6/1	Material relating to 1874 strike at Brownhills colliery
D876 105	Coppice Colliery Company: 1907/8 Wages book
D876 105A	Coppice Colliery Company: 1878-1912 Cash and costs sheets
D1117 COP 1	Coppice Colliery Company: 1894-1913 Estates correspondence
D1117 COP 2	Coppice Colliery Company: c. 1870 Estate leases
695 1/12/7-9	Coalmine deeds (not seen)

Texts

Morriss, R, 1997 Buildings of interest in Brownhills and Pelsall, Mercian Heritage Series no 32, SMR

Pearson, A, 1997 Brownhills and Pelsall archaeological survey, SMR

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Air photographs

27/3/48, CPE/UK/2555 4095, SRO 9.6.77, nos 102 and 106, SMR

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Appendix 2: Mitigation strategies and proposals for further work

Introduction

The proposed quarry area leaves peripheral areas of the study area untouched, particularly on its west side. Further archaeological investigations might indicate where minor readjustments of the design plan could enhance the preservation of the area formerly occupied by Coppice Colliery No. 5.

Proposed Stage 2 archaeological response

A survey of the present archaeological landscape within the study area is desirable before further, intrusive archaeological work, such as trial-trenching is considered. The existing remains are difficult to envisage under the present ground cover. A detailed EDM survey will provide a basis for the formulation of proposals for trialtrenching, if appropriate, as well as assist in an overall understanding of the site. In addition, some limited further research, outside the scope of the present preliminary assessment, may usefully be undertaken to detail further early mining activity in the study area.

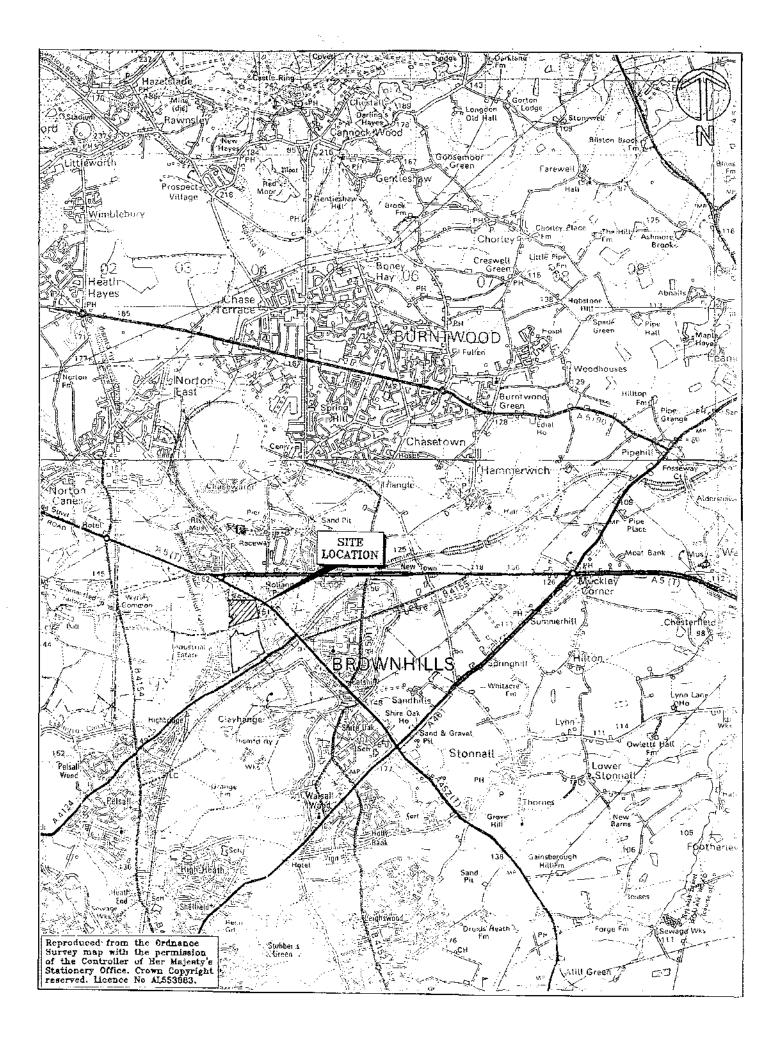
A <u>Specification</u> for this work would require agreement with the West Midlands SMR Officer before implementation.

If appropriate, trial-trenching should be undertaken to test the survival and significance of the following industrial features:

1) Parts of the tram or rail track ways, to establish their sequence and function, to add to data on mining transport.

2) Areas of later spoil heaps, to elucidate their date, and to assess the potential for the presence of carlier, underlying industrial features.

In addition, consideration should be given to testing a sample of areas for which no archaeological information is presently available.



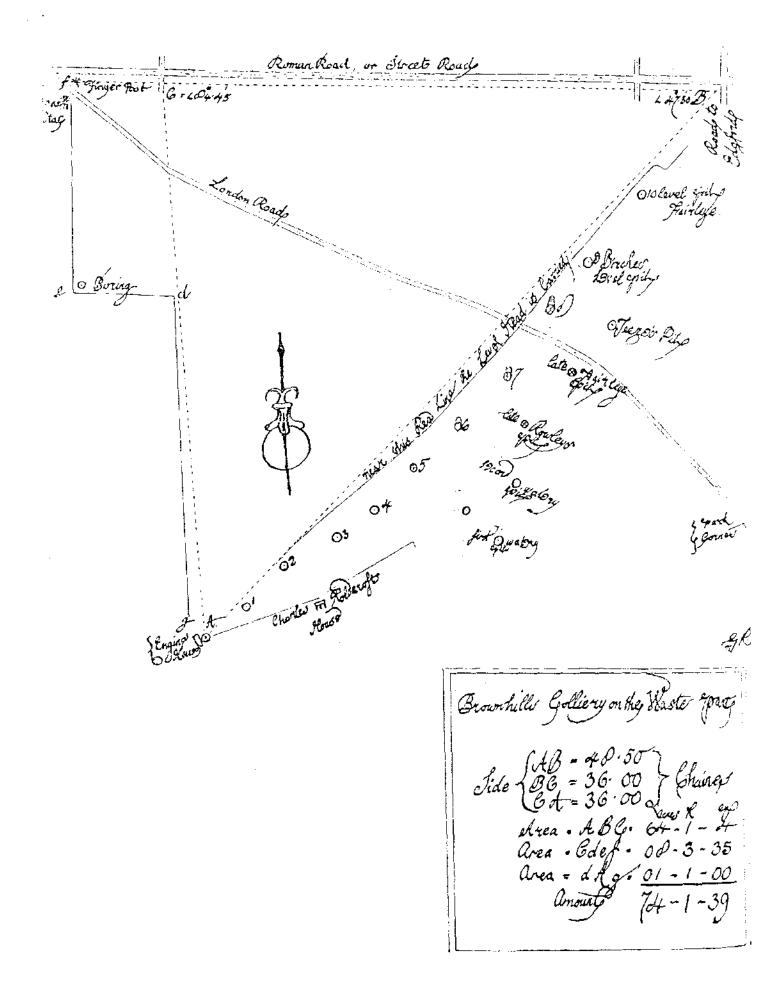


Fig.2 Brownhills Common c.1800

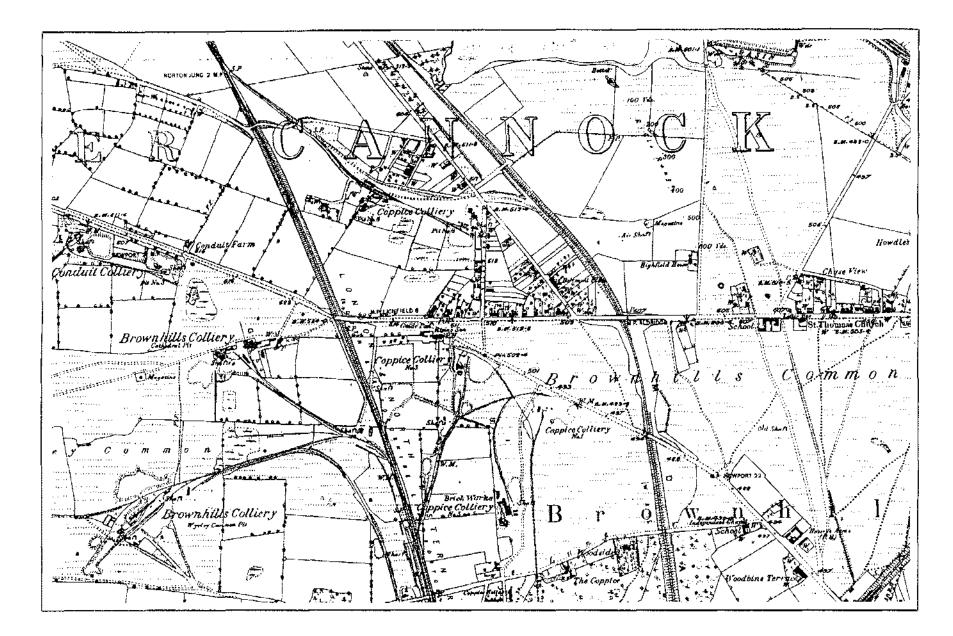
A Plan of the Wyrley & Efsington Canal, as non execu ting, with proposed Extensions t's smalon from Survey's taken in 1991,1 8- 17.03, 10" Will." Pitt. Willes Lichafield . Park Valsall Hay hend The Red Line is the Wyrley Canal non executing Barr Beacon Scale of Miles & Furlongs The Blue Line is the Proposed extension 8 a. Alles 6 26

The Wyrley and Effington Canal,

AS now executing, goes through very extensive Mines of Coul, the Property of the MARQUIS OF STAFFORD, Mr. PULTENE, Mr. ANSON, Mr. VERNON, and others; most of which Mines are upon waste or unimproved Lands of finall Value, and fearcely acceptible by Land Carriage; the Canal opens a Communication from fuch Mines to Wolverhampton, Walfall, the Birmingham Canal, the Stuffordfluire and Worcefterfluire Canal, the Severn, and all the Country adjacent to these feweral Navigations.

THE propoled Extension goes the opti-Golcotty: Revenhills, and ether confidenable Coal Mines, in a Country of bad Roads; and upwards of Three Miles over the extensive Waste of Cannock-Heath: A Collateral Cut upon the Wolverhampton Level may be continued from Catfhill into the immensfe Beds of Line Stone of Linley, Russian Park, and Hay-Head, without a Lock; forming a Level Summit Cunal, from Volverhampton, through Birchill and Catschill, to Hay-Head, upwards of Twenty Miles. The Extension would unite all these Coal and Line Works a with the City of Lichfield, the Coventry Cana Sould the adjacent Parts; and also effect a direct Communication (so much wanted) between the penaleur Parts of Staffordshire and the Metropolis, by Means of the Braunston Canal.

Fig. 3 Wyrlely and Essington Canal 1793



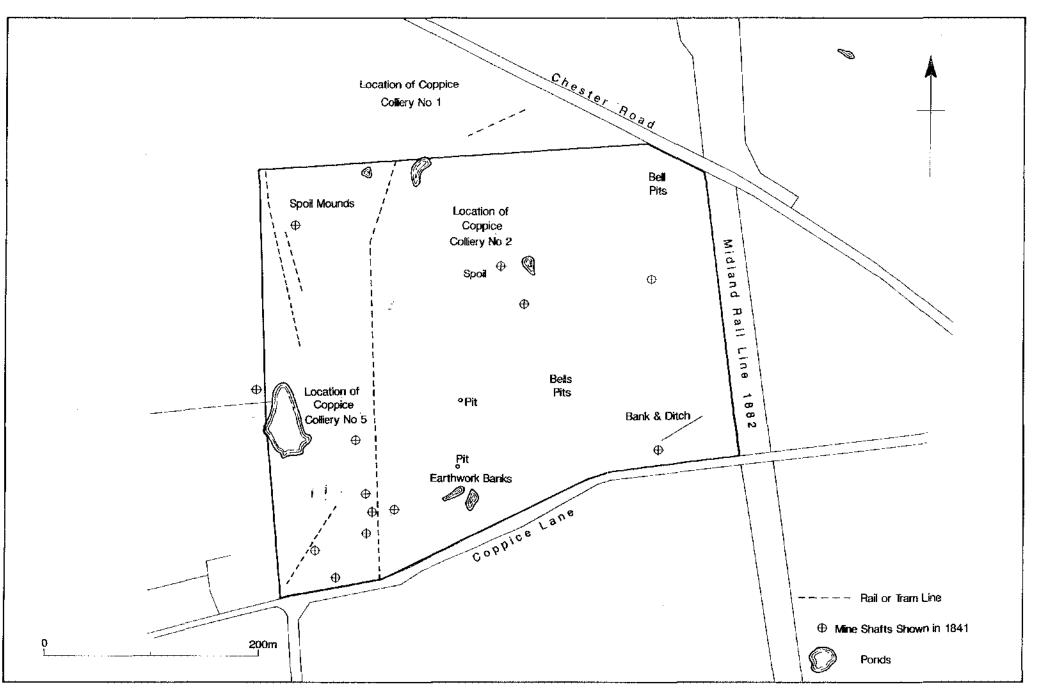


Fig.5 The Study Area: Archaeological Features