Bilston Urban Village: Archaeological Desk-Based Assessment Supplement

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Appendix 1

Written Scheme of Investigation

Appendix 2

Table 1: BCSMR Entries from Hilary Whites previous desk-based assessment and new entries not covered in the previous desk-based assessment.

BCSMR Listing

Bilston Urban Village, The Black Country: Archaeological Desk-Based Assessment Supplement

Summary

An archaeological desk-based assessment and walkover survey of 40 acres of land to the south of Bilston and the Black Country Route was commissioned by Wolverhampton City Council in advance of the proposed development of 'Bilston Urban Village'. The desk-based assessment was designed to update a previous report (White BCSMR 10950), and to propose specific mitigation strategies in advance of the development. The assessment highlighted the importance both historically and archaeologically of the area surrounding the historic core of Bilston, from the early industrial sites of the medieval period through to the massive expansion and development of the iron and coal industries during the post-medieval period. It suggested that while the area as a whole had been subjected to a lot of modern development and landscaping, there was still the potential for earlier archaeological deposits to survive in discrete areas across the site. The significance of any surviving industrial archaeology is not only important in relation to Bilston itself, but, as Bilston is a typical example of a Black Country town, the industry based here had an effect at a national level.

1.0 Introduction

The following report details the results of a desk-based assessment and walkover survey of around 40ha of land proposed for development as the new 'Bilston Urban Village'. The work was commissioned by Wolverhampton City Council and was carried out as part of ongoing archaeological mitigation as part of planning permission for the project. It was undertaken by Birmingham Archaeology in October 2003. The area was the subject of a desk-based archaeological assessment in 1998 (Bilston Urban Village: Archaeological Assessment, Hilary White BCSMR 10950). The aim of this phase of work was to update the original report and to suggest mitigation strategies where the preservation of archaeological remains was possible. The work adhered to guidelines set down in the Standard and Guidance for Archaeological Desk-Based Assessments (Institute of Field Archaeologists 1999), a Written Scheme of Investigation prepared by Birmingham Archaeology (2003 Appendix 1) and a brief prepared by Mike Shaw, Black Country Archaeologist.

2.0 Site Location (Fig. 1)

The town of Bilston forms part of the City of Wolverhampton. It lies on a knoll of boulder clay that overlies the Staffordshire middle coal measure. The study area covers an area of around 40ha of largely former industrial land to the south of the historic core of Bilston and the Black Country Route. The area is irregular, but its broad limits can be defined as the Black Country Route on the north, Coseley Road on the west, the canal on the south and the disused railway line (which lies west of Railway Drive and Station Road) on the east.

In the historic period most of this area would have lain within the township of Bilston, but some portions on the southern edge were outliers of Sedgley Parish. In addition, the Bilston Brook formed the southern bounds of the manor of Bilston (or Stow Heath), with the area south of the Brook not in Sedgley part of the separate manor of Bradley.

3.0 Objectives

The objectives of this report were to:

- Consult the Black Country Sites and Monuments Record to check for new sites or amendments to existing descriptions since 1998.
- Locate the sites on modern Ordnance Survey maps and older maps not included in the original desk-based assessment.
- Report on a visual inspection of the sites assessing the likely survival of the remains and the impact of subsequent activity upon them.
- Assess the original, existing and proposed ground levels in order to assess which of the sites are likely to be affected by the proposed works.
- Assess the value of the archaeological sites within the area and propose mitigation works for the most significant sites, if necessary.
- Production of a report on the above.

4.0 Method (Figs. 2 and 3)

Documentary research of primary and secondary sources, including maps, was undertaken at Wolverhampton Archives and Local Studies and Lichfield Record Office. The Black Country Sites and Monuments Record (BCSMR), the primary source of archaeological information for the country, was also consulted (Appendix 2).

An inspection of the study area was carried out to assess the current conditions and to evaluate the area on the ground. A record was made of the survey by means of written notes and photographs.

As maps of the study area itself had few, if any, bench mark levels on them, it was not possible to compare ground levels from cartographic sources.

The projected line of Bilston Brook and the outlines of previous buildings were superimposed as accurately as possible onto modern maps (Figs. 2, 3, 13-18) using the 1832 Cholera map (Fig. 7) and the 1887 Ordnance Survey First Edition (Fig. 9) as templates.

5.0 Results (Figs. 4 to 12)

5.1 Desk-Based Assessment

The historic core of Bilston, located to the north of the study area, has been designated an Area of Archaeological Importance, particularly with reference to its

place in the Domesday Book. As with all urban areas, the land surrounding the historic core would have provided vital agricultural and industrial resources, and, although the occupation and activity in these areas would perhaps not be quite as intense as within the core of the town itself, the importance of understanding these resources from a historic and archaeological viewpoint should not be underestimated. The coal, iron and sand resources that typify the area surrounding Bilston, as indeed, the Black Country as a whole, not only shaped the history and development of Bilston from the medieval period onwards, they provided the resources that fuelled the industrial revolution that shaped the history and development of the whole of Britain.

5.2 General Historic Context

5.2.1 Prehistoric to Roman

No sites of this date were recorded on the Sites and Monuments Record for the Study Area. However, there is an account of the discovery of a hoard of Roman Coins from the reigns of Commodus and Antonius, described as having been found in a beautiful state of preservation in Bilston (Lawley 1893).

5.2.2 Saxon

Little is known of the Saxon period in Bilston although the place name is first recorded in 985 in a grant of land by Aethelred to Lady Wulfruna. A second charter of 994 recording lands granted by Wulfruna to the church at Wolverhampton describes the boundaries of Bilston in more detail. These boundaries broadly correlate with those of Bilston shown on the Timmis Map of 1839 (Brereton 1996, BCSMR 5810 - BL711). There is a reference to a Saxon temple at Bilston (BCSMR 2520, Lawley 1893), which was believed to be founded by Oswy, King of Mercia, to celebrate his victory over Penda of Northumberland. However, Lawley is not the most reliable historic source, and as yet, there has not been any corroborative evidence to substantiate this theory.

The Domesday Book of 1086 records that Bilston was owned by the King and was made up of eleven households. These households are recorded as eight villeins and three bordars with three ploughs, though there is no knowledge of where these people may have settled within Bilston, or of whether they lived together in a nucleated settlement or separately in clearings from woodland.

5.2.3 Medieval and Early Post-Medieval

In the medieval period Bilston was part of the ecclesiastical parish of Wolverhampton and lay within the royal manor of Stowheath, which comprised most of the east side of Wolverhampton. A deed of 1378 gives land for the support of a priest of Bilston, suggesting there was a chapel here by that date (Cope 1976). A chapel, dedicated to St Leonard, was certainly in existance by 1458 when a chantry was founded there by Sir Thomas de Erdington (Brereton 1996).

There is some cartographic evidence to indicate that medieval settlement in Bilston (BCSMR 5810) may have been planned around the High Street/Church Street axis, north of the study area. The medieval settlement presumably lay around the chapel, principally along Church Street and, to its west, High Street, and perhaps south down towards a crossing of the Bilston Brook at the bottom of Bridge Street. Both Church

Street and High Street show evidence of planning with burgage-style porperties. The character of Bilston during this period is nicely summed up by Price (1835) when he wrote "Writers on Staffordshire, have said little upon Bilston, which appears to have been occupied for centuries by Gentlemen living upon their own Estates..... until the introduction of trade about the time of Elizabeth".

Lawley refers to a 17th century record of John Foxall receiving 7/- for a new bridge over the Brook on the causeway leading to Bradley, which would place it in the area of the junction of Bankfield Road and Brook Terrace (Lawley 1920, 63 BCSMR 10909). Although the date of the bridge is unclear, this path linking Bilston to Bradley on the line of the later Bankfield is probably medieval in date (White 1998). It has also been suggested that a mill on Bilston Brook was located in the vicinity of this road.

By The Tudor period Bilston was a pleasant village with a number of good houses of timber, plaster, thatch, and leaded windows (Cope 1976). As Cope has described them, the inhabitants were engaged in agricultural pursuits, but more men were using coal and iron to manufacture small items to meet local needs and learning the skills of working and fashioning metals for which Bilston was to become increasingly famous (*ibid.*).

It is likely that small-scale mining for ironstone and coal could have taken place in either the medieval or earlier post-medieval periods in the study area. Lawley states in his History of Bilston (1893) that According to Rev Richard Ames, curate of Bilston in the 17th century, coal was got in Bilston as far back as 1380. He further adds that in a deed of 1401, two coal pits called ye holloways and ye Delves are said to be situated near Windmille Field in Bilston (BCSMR 2551).

There are also suggestions of medieval ironworking in the vicinity of Bilston, with references for medieval iron mines at Sedgley found in the Victoria Country History of Staffordshire (VCH ii, 108). Although the specific locations of these industries are not known, the industrial potential of the study area is without doubt, and is attested to by the rapid expansion of coal and ironworking industries in the post-medieval period. With the construction of the canal, it was possible for the industrial potential of the area to be fully realised, but even before this, the Bilston Brook provided a suitable source of water for these industries (Plate 1).

There are references for a mill located on Bilston Brook (BCSMR 8719), however, its precise position is, as yet, unclear. A document of 1378 refers to Thomas Robbins giving Sir William Poort, ye priest of Bilston, & John Robbins one messuage, one water mill etc. Another document of c.1383 states that Robert Rowley, late of Bilston (miller) did in his lifetime surrender to James Perry & Thomas Smith those 2 dwellings etc. A deed of 1553 stated that Roger de Boverucks sold half of a mill in Bilston to Adam Bate, and parish registers provide names of early 18th-century millers but make no distinction as to which mill they refer to (Dilworth 1976). A documentary reference of 1746 states that Benjamin Bickley had lease for moated property at Homers Fold (BCSMR 8732) and also a close called Millcroft containing about 7 acres. It goes on to say that where the mill lately stood, was now made and converted into a dwelling house, and all that parcel of land lately covered with water and used as a pool for aforesaid late mill, was now converted into a meadow. This

land was bounded by brook south and east and has Dr Hope's land west and the millcroft north (Cope 1976). There is a watermill shown on Yates map of 1775 marked as Bickleys Mill on a 1781 sketch, by which name it had probably been known for at least 14 years (BCSMR 8719). This suggests that Bickley owned both the converted mill, and the working mill.

These two clues, Yates map and the documentary references, suggest a few possible locations for the mill on Bilston Brook. The reference to the converted dwelling has lead to suggestions that either of the two buildings adjacent to Bilston Brook at the end of Brook Terrace and adjacent to the footpath to Bradley (BCSMR 10916, Plate 2 and BCSMR 10917, Plate 3) may be the location of the mill. If this footpath were indeed medieval in origin, then the position of a mill here would be possible.

Yates map (Fig. 4) depicts the mill further to the west, in the vicinity of what was later Woolley's factory (BCSMR 10642, Plate 4). A reference to a functioning mill in 1748 with two overshot wheels, two years after the mill was supposed to have been converted into a dwelling, has lead to the suggestion that the mill on Yates map was a second mill, used for joint corn milling and other industrial useage (White 1998). On Yates map, however, the mill is situated on a mill race to the north of Bilston Brook. This race is not visible on the maps of 1799 (Fig. 5) and 1832 (Fig. 7), although a mill pool is still visible on the map of 1832 to the north of Bilston Brook. There is also a house in this area, identified on the 1839 and 1845 Tithe Maps as being located to the north of Bilston Brook and to the north and east of Woolleys factory complex, near to where the race would have flowed (Woolleys House BCSMR 10959). Parts of this building are still visible on the First Edition Ordnance Survey Map. While it is likely that the mill indicated on Yates map is indeed a second mill, it is possible that the original mill wasn't so far away, and the infilling of the mill race was part of a general reclamation of the mill lands suggested by the document of 1746 that culminated in the culverting of Bilston Brook sometime in the early 19th century.

By the early 17th century a picture emerges of a well-established iron industry. The availability of cheap coal and iron, with additional good quality sand and limestone contributed greatly to the industrial development of Bilston, and the region in general. Early industries were localised and organised as domestic industries and this lead to specialisms, such as Wolverhampton and Willenhall with locks, and Dudley and Sedgley with nails (Cope 1976). Bilston made chapes and buckles, though at the height of the industrial revolution during the early 19th century, this staple industry was nearly extinct (Whites Directory 1834). From the records of the Rev. Richard Ames, we know that from the period 1716-1730 there were about 100 bucklemakers, over fifty chapemakers and a few toymakers, boxmakers, hingemakers, tinder-box makers, locksmiths and japanners (Cope 1976). These early 18th-century craftsmen worked in their own homes or small backyard workshops, or premises which and were sufficiently established to take apprentices. Very often they would also have interests in land and livestock, raising crops, mining coal and minerals and felling timber (ibid.) The small number of freeholders who voted at the general election of 1747 suggests that Bilston at this time was still strongly tied to the manor.

5.2.4 Industrial Revolution

As with every village, town and city in the county, the industrial revolution had a massive effect on the development and growth of Bilston. In 1695, a census taken for

an Act of Parliament counted 1002 people living in Bilston, and by 1771 this had risen to 3875. The first national census of 1801 recorded 6914 inhabitants, and ten years later this number had risen to 9646. By 1821 the population was over 12000 (Collins 1991). The natural resources of the Black Country were exploited to the full, and mines, furnaces and workshops dominated the area.

As the need for communication and movement increased, so the transport infrastructure in and around the town improved. From the early 18th century onwards a number of improvements were made to the local road network and new roads were built, though the Bilston network was not fully 'turnpiked' until 1766. Oxford Street, to the northeast of the study area, was constructed in 1809, bypassing the previous principal north-south thoroughfare into the village by Bridge Street. The canal to the south of Bilston was authorised by an Act on 24 February 1768 and engineered by James Brindley. It linked the centre of Birmingham with the Staffordshire and Worcestershire canal, then under construction (ibid.) The study area, situated as it is between the main part of the town and the canal, would have certainly experienced redevelopment and an increase in activity due to the new transport systems in the vicinity. Much of the development of Bilston at this time took place parallel to the main east-west road of Church Street/High Street and the main north-south road of Oxford Street/Lichfield Street. Otherwise the town remained a relatively rural settlement laid along these roads. The study area, in contrast, became more and more industrialised, covered with colliery fields, furnaces and ironworks.

5.3 Detailed History of the Study Area.

The study area from the mid to late post-medieval period onwards underwent a large amount of development and increased industrial usage. While the construction of the new improved roads through Bilston and the canal to the south undoubtedly encouraged this development, there is evidence to suggest that the study area, specifically around Bilston Brook was already being utilised. The proposed medieval mill on Bilston Brook has already been discussed, but Woolleys factory (BCSMR 10642 and BCSMR 10918) may have had origins that predated the construction of the canal, if the later mill in this area became part of the factory works themselves.

Woolleys factory can be first identified on the Cholera map of 1832 (Fig. 7) as two building complexes with a large pond on the north side of the southern complex. It is also shown on the 1839 map (Fig. 8), though the pond is no longer extant. Woolley was renowned for the manufacture of screws, presumably on this site (White 1998). If this is the site advertised in the Aris Gazette of 1748 then at that time it was in joint corn milling and other industrial use. It is suggested that may have been used for metal rolling or gun boring, but there were also millstones for grinding enamel. Members of the Woolley family are mentioned in the Staffordshire Directory of 1793 as chape makers and bag lock makers etc, which at the time, along with enamelling, were the staple industries of Bilston. E Woolley is mentioned in Whites directory of Staffordshire for 1834 as an iron manufacturer, with references to bar, rod and sheet iron, though his premises in the directory are referred to as being in Stonefields. The two complexes are also shown on the tithe map of Bilston (1848, Not illustrated), though now annotated as Stonefield's Iron works, and, while Woolley was still the tennant of the house in the area, the works were occupied by J W Vernon and owned

by John Bickley, possibly a relative of Benjamin Bickley. The works were still present on the 1887 First Edition Ordnance Survey Maps, but were no longer present at the time of the 1903 Second Edition.

What appear to be two linked furnaces are identified adjacent to the culverted Bilston Brook on a mining map of 1848 (Bankfield Colliery BCSMR 10913, map not illustrated). These are unnamed and it is not clear whether they were associated with any of the surrounding works (White 1998). The 1887 Ordnance Survey shows a small building in this area and this was still there in 1903 and 1919, but was gone by 1938 when the area south of the Brook was cleared and laid out as a sports ground.

Several furnaces and ironworks were constructed in the vicinity of the canal, including Capponfield Ironworks and Furnaces (Plate 5), Bankfields Ironworks, Barbors Field Furnaces and Bovereux Furnaces. These sites changed names, changed owners and were redeveloped over time, though all were likely to have existed as a direct result of the construction of the canal.

Capponfield Ironworks is first identified on the Cholera Map of 1832, and is referred to as Parks and Otway (BCSMR 10643). Gradually is came to be known as Capponfield Ironworks, and it is suggested by Davies that it was once part of the Chillington Group of ironworks, although later held by Molineaux and Jordan. It was still in use in 1903, but by 1919 had been largely demolished except for a few small buildings in the lee of the canal arm (White 1998). To the west of the ironworks were Capponfield Furnaces (BCSMR 10645). The historic sources for this site are contradictory but broadly the site was established by 1805 (Riden and Owen) by Smith Read and Co. From 1823-1830 there was no output, and between 1839 and 1881 it was run by Bagnall and Sons. In 1882 the firm was taken over by T & I Bradley and in the 20th century run by Bradley and Foster (ibid.). The chapel built on the site by the Bagnalls, probably in the 1850's was transferred c.1882 to become St Pauls Church, West Bromwich (ibid.). Amongst the furnaces were several canal To the west again was Capponfield Settlement (BCSMR 10906). This basins. comprised two large houses, including Capponfield House (BCSMR 10799) which was built by J Bagnall in 1842, no doubt for the manager of Capponfield Furnaces (Davies 1986). This house stood in mature well kept gardens, and was near to Capponfield Terrace which comprised about 10 good workmens houses (ibid.). The whole was situated around a small village green, all under the shadow of the awesome Capponfield Furnaces (ibid.).

Bankfields Ironworks lay immediately north of the canal, on the west side of Glasshouse Bridge, in a small rectangular spur of Sedgley Parish (BCSMR 10645). In the 1830s it was referred to as Mabury's Works but by 1848 it was known as the Bankfield Ironworks. By 1887 the core area had been extensively developed, but by the Second Edition Ordnance Survey of 1903 the buildings had been demolished and only the canal basin on the west survived. By 1938 the site had been redeveloped as a petroleum depot and the buildings now on site are modern. However, during the walkover, a cast-iron fence of 19th century date (Plate 6) was identified along the west side of Bankfield Road, which may have been associated with these works. Likewise, a series of brick structures was also identified, of unknown origin or purpose.

To the north of Capponfield Ironworks and to the west of Bankfield Ironworks were Barbors Field Furnaces (BCSMR 10655). According to Davies this site came into use c.1825 and was operated by Thomas Banks. It passed through many hands before being taken over by Barbors Field Iron Company in 1881, although the site had been unused since 1877. The site was blown out in 1884 (White 1998). Cartographic evidence is not in total agreement with this, as the site was not described as disused in 1887 and was depicted on the Second Edition Ordnance Survey in 1903. In 1919 there were still buildings on the site but by 1938 all had gone except the canal basin (*ibid.*). The earlier history is also of interest, the schedule of a Bilston map (purportedly of 1799) refers to an engine in this general area, indicating earlier works (*ibid.*).

Bovereux Furnaces were located to the northeast of Banksfield Iron Works (BCSMR 10952). In 1849 the site was run by Baldwin & Co with two blast furnaces. The site was called Bovereux Lower in 1862-70 and Bovereux thereafter. In 1872 it was run by the Tame Iron Company (White 1998). It was shown as disused on the 1887 Ordnance Survey First Edition, and by 1903 the site had been cleared.

6.0 Discussion

6.1 From White 1998

Although the historic core of Bilston lies to the north of the study area, the study area itself is no less important for understanding the history and development of the town. It is likely that during the medieval period the northern part of the area was open fields of the township of Bilston, and the southern portion within fields of the manors of Bradley and Sedgley. It is likely that small-scale mining for ironstone and coal could have taken place in either the medieval or earlier post-medieval periods within the study area. Small-scale stone quarrying would also have occurred although the main Bilston Quarries lay on the west side of the Coseley Road.

Associated features are uncertain but a path linking Bilston to Bradley on the line of the later Bankfield Road is probably medieval in date (White 1998). Although there is a 17th century reference to a new bridge, where its line crossed the Bilston Brook, there must also have been an earlier crossing in this area. It is suggested in some sources that the earlier Bilston Watermill also lay in this vicinity, which would have been an important industrial site in its own right, being active from the 14th century (at the latest) until the mid 18th century (*ibid.*). It is also possible that this mill is Woolleys house, adjacent to the second, later, mill, and Woolleys factory. The earliest maps indicate a series of properties along the Brook and they may have had an industrial function. Although the second watermill, which lay in the area of the Woolley factory, is only documented from 1748 it could potentially have been a substantially earlier site also (*ibid.*).

By the late 1760s the canal, which forms the southern edge of the survey area, had been built with the encouragement of local landowners who then proceeded with a massive programme of industrial development within the broader area. This involved ironstone mining and iron production, but also exploited the local coal reserves (which lay beneath the ironstone deposits) to support this process. The main canal is

still intact although most of the bridges are either modern or altered. By the latter part of the 19th century there were a series of canal basins supporting works located beside the canal. The location of these can be identified on the ground, but they have all been filled in (*ibid*.).

By the latter part of the 18th century iron production in the Bilston area was on an extremely substantial and internationally important scale. It is certain that a number of works in the study area will have been in production by this time, but there is no clear detailing of the development of the various works and it is possible that a number of the smaller building groups may represent the continuation of work on earlier production sites. The industry declined following the end of the Napoleonic Wars in the early 19th century, but had expanded again by 1887 when virtually the whole area was covered with works, buildings and associated features. It should also be noted that some works had also closed by this time, and there was a continual decline thereafter as resources were worked out (*ibid.*).

Coal seams lay below the ironstone deposits and these were extensively mined from the 18th century (at the latest) onwards. Ordnance Survey and other maps do not locate or name these various mines which may have operated in conjunction with nearby ironworks. Generally large-scale workings radiated below ground from relatively small groups of surface buildings. A series of (annotated) mining maps exist for the area from about 1848 onwards and these indicate at least two separate collieries in the study area. However dates and ownership details are sparse. Reputedly a number of the workings flooded in the 1860s and mining in the area was abandoned (*ibid.*).

Two railway lines – the Oxford, Worcester and Wolverhampton (on the west) and the Birmingham, Wolverhampton and Dudley (on the east) were cut through the survey area in the 1850s. Bilston West station that served the former lay within the survey area, but was subsequently demolished. The line of the latter still survives along the edge of the study area and one bridge (BCSMR 5376) abuts the study area (*ibid*.).

The heavy industrial exploitation of the area prevented large scale housing development. Occasional houses lay across the study area but with the exception of Capponfield the only clusters in the 19th century, were the development of Dudley Street and development in the area of Brook Terrace. All these areas have now been demolished (*ibid*.).

The 20th century has seen the virtually wholesale clearance of the area and comprehensive re-landscaping. There are a cluster of newer industrial buildings, generally along the canal, and a new housing estate west of (the extended) Dudley Street and north of the canal (*ibid*.).

7.0 Implications and Recommendations

7.1 Implications

As has been highlighted there are a large number of recorded sites for the area (Table 1, Appendix 2), but with the exception of the mill site, and the possible medieval road

(Bankfield Road) they are generally post-medieval in date. Most are industrial in character, and though the evidence is somewhat tenuous, some may be related to the Bilston flax industry, so far unrepresented in the archaeological record (White 1998). The later Bilston Mill had multiple industrial functions, one of which was the grinding of enamel, another important Bilston industry that supplied a national market.

Ironworks in Bilston were of national and international importance in their time and the study area held a number of the towns major works. Evidence is still slight, but hints that there was a number of other early iron production sites in the study area of probable 18th century date. However, these remain unnamed and are not fully documented.

All the main works and other buildings have now been demolished and much of the area heavily landscaped. The varying height levels across the study area indicate that much of the archaeological evidence was completely removed. In areas where the original ground level seems to survive, there has been subsequent re-building which will also have affected the survival of below ground deposits (ibid.). However, the area of the Bilston Brook may be the exception. Although the original line has been obliterated it is still possible to project the line of the later (early 19th century) straightened route and it is likely that survival along this line will be better than elsewhere in the survey area (Figs. 13-16). Additionally, the remains of earlier unrecorded sites are more likely to survive in this area. There is also the possibility of archaeological remains in the vicinity being waterlogged. This will have increased the chances of the survival of good organic, or other environmental, remains which would be of particular importance to our understanding of the early historic development of both Bilston and the wider Borough. The proposed reinstatement of the Brook would provide a good opportunity to recover these remains should they survive.

7.2 Recommendations

Further recommended work within the study area should therefore concentrate on specific areas of potential archaeological survival (Figs. 13-18) and on specific research issues concerning the area as a whole, in both a local and national context.

The overall aims for further work will be to

- To locate and assess any medieval remains and deposits, specifically the location of Bilston Mill, and the environmental potential of Bilston Brook.
- To assess the nature, date and survival of early industrial activity within the study area.
- To identify and record any archaeological remains relating to the later, nationally important, iron and coal industries in Bilston

7.2.1 Grouting

Prior to the re-development of the study area, a programme of mineshaft capping is to be implemented (Fig. 13). A plan of the known or suspected mine shafts has been

drawn up, the locations of which are normally accurate to within 5 - 10m (Jim Addams pers. comm.).

Grouting Phase 1

The initial phase of these works involves the drilling of 10cm wide holes on a 1m x 1m grid from the surface in order to locate the mineshaft. Within the areas identified as having potential archaeological survival there are few known mine shafts and therefore it may not be necessary for archaeological monitoring during this phase.

Grouting Phase 2

Phase 2 of the capping and grouting will involve subsequent infilling of the voids and the capping of the mineshaft and it is recommended that those mines located in areas of archaeological potential be monitored as larger areas of potential archaeology may be exposed. Any information gained about the extent of surviving archaeology within these areas and the extent of truncation, landscaping of depth of overburden would be invaluable in informing future archaeological mitigation strategies.

In any areas where archaeological remains are found to be substantial, a programme of further excavation is recommended in order to preserve by record any remains that will be destroyed during the development.

7.2.2 Areas of archaeological interest

Specific areas of potential archaeological survival identified through this survey are shown on Fig. 13 (Areas 1-5).

Area of Archaeological Interest 1 (Fig. 14)

Recommended work in this area would include archaeological monitoring during any works in the vicinity of Bankfield Road and the Bilston Brook in order to locate and assess any surviving medieval remains associated with the old road and bridge, and to determine the location and environmental potential of the brook. Archaeological trial trenching is recommended in order to locate and assess the buildings adjacent to the Bilston Brook and to determine, where possible, if these buildings relate to the Bilston Mill.

Area of Archaeological Interest 2 (Fig. 15)

Recommended work in this area would include archaeological trial trenching in order to locate the original line of Bilston Brook, and to assess the environmental potential of any remains identified. Further trial trenching would be recommended in order to locate the furnaces identified adjacent to the brook and to assess the nature, date and survival of these structures. Archaeological monitoring may be recommended during any works associated with the reinstatement of the Bilston Brook.

Area of Archaeological Interest 3 (Fig. 16)

Recommended work in this area would include archaeological trial trenching in order to locate Woolleys house and to determine, if possible, if this building related to Bilston Mill. Remains of a second mill, and archaeological deposits relating to both pre-canal and post-canal industry may survive in the vicinity of Woolleys factory. Further trial trenching here would be recommended in order to assess the nature,

extent and survival of any archaeological deposits relating to the north and south complexes of this factory.

Area of Archaeological Interest 4 (Fig. 17)

Recommended work in this area would include archaeological monitoring during any works involved with Bankfield Road in order to locate and assess any remains associated with the possible medieval footpath, and to determine the nature of the brick structures identified to the west of Bankfield Road. Archaeological recording of Glasshouse Bridge and the cast iron fence would also be recommended if either of these structures were to be affected by the development.

Area of Archaeological Interest 5 (Fig. 18)

Recommended work in this area would include archaeological trial trenching in the location of Capponfield Furnaces and Capponfield Settlement, in order to assess the nature, extent and survival of archaeological deposits. It is also possible that the canal basins contain environmental deposits or remains associated with early industrial activity or canal transport and this should be taken into consideration if these are to be re-excavated.

7.2.3 Additional areas of interest

In addition to these general areas of interest, the walling along the east side of Dudley Street (BCSMR 10954, Fig. 2) is one of the few surviving indicators or earlier industrial activity in the area and if possible this should be retained within any subsequent redevelopment (White 1998). If it is to be demolished it should be recorded in advance and, if possible, the iron working waste blocks should be retained for landscaping (or similar) within the new development.

Where substantial or significant remains are identified, further archaeological excavation may be recommended. A further site visit is also recommended prior to any decision made concerning the exact location of any trial trenches, in order to assess logistical problems such as access and removal of significant amounts of overburden in these areas.

8.0 Acknowledgements

This project was commissioned by Wolverhampton City Council. Thanks are due to Mike Shaw for his help and advice, who monitored the project on behalf of Wolverhampton City Council. Thanks are also due to Jim Addams from Wolverhampton City Council for his advice on mineshaft capping, and to the staff at Wolverhampton Archives and Local Studies Centre and to the staff at Lichfield Record Office for their assistance. Eleanor Ramsey conducted the documentary research and wrote this report. The site visit was conducted by Eleanor Ramsey and Dr Malcolm Hislop. Kirsty Nichol edited this report, and monitored the project on behalf of Birmingham Archaeology. The illustrations were prepared by John Halsted.

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9.3 Cartographic Sources

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1799 Map of Bilstone Liberty (copy)

1812 Map of the mines of Lord Dudley

1832 (Cholera) Map of the Town of Bilston

1839 Map of the Township of Bilston (Tithe Apportionment map) surveyed by R. Timmis

1848 Bilston Tithe Map (and Apportionment)

1887 Ordnance Survey 1:2500 Staffs LXII.16

1887 Ordnance Survey 1:2500 Staffs LXVII.4

1903 Ordnance Survey 1:2500 Staffs LXII.16

1903 Ordnance Survey 1:2500 Staffs LXVII.4

1919 Ordnance Survey 1:2500 Staffs LXII.16

1919 Ordnance Survey 1:2500 Staffs LXVII.4

1938 Ordnance Survey 1:2500 Staffs LXII.16

1938 Ordnance Survey 1:2500 Staffs LXVII.4

APPENDIX 1

Bilston Urban Village, Bilston, Back Country

Written Scheme of Investigation for a Desk-based Assessment

Bilston Urban Village, Bilston, Back Country

Written Scheme of Investigation for a Desk-based Assessment

1.0: Introduction

This document outlines the programme of work required to undertake an archaeological desk-based assessment of the above site for which outline planning consent has been granted to Advantage West Midlands. The development proposal would involve the redevelopment of land that was one main focus for early industrial development in Bilston, which was located along the banks of the Bilston Brook and the canalside from 1770 onwards.

It should be noted that this written scheme deals only with the enhancement of an existing desk-based assessment of the site (White 1998). Further, more extensive, archaeological excavation, or watching brief during groundworks, may be required. The primary aim will be to locate, more exactly than previously, known sites on the ground and to provide archaeological information, which can be used to determine the likelihood and nature of further archaeological mitigation. Any variation in the scope of archaeological work would be agreed with the Black Country Archaeologist prior to implementation.

2.0: Site Location

The proposed development area lies between the present town of Bilston and the line of the canal (NGR SO 94 95), and covers approximately 40ha of land that was previously used for industrial purposes and is largely derelict at present. The site is bounded by the Black Country Route and Brook Terrace to the north, the proposed line of the new Metro link to the east, Coseley Road and Broad Lanes to the west, and the canal, Highfields Road and Carder Crescent to the south.

3.0: Archaeological Background

The historic settlement of Bilston is recorded as a small hamlet in Domesday and as being part of the Kings lands. The town developed into a centre of regional importance during the medieval period, with building plots laid out along the main road. The earliest available cartographic evidence for Bilston reflects this, depicting the town as a semi-rural settlement laid out along the turnpike road, with industrial activity taking place around the periphery.

The principal focus of the early industrial development was the canal corridor, originally the Brindley Canal, which was constructed to link Birmingham and Wolverhampton, and which bounds the study area to the south. Basins off the canal were associated with Banks Works, Mabury's Works and Aldwin's Works. There was also the Woolley factory situated on the Bilston Brook, which passed through the study area roughly east to west and is believed to be culverted today. The brook is

believed to have been one of the boundaries for the main medieval manor in Bilston, and the mill may reflect continuity of land use relating to this significant, and lesser known period in the town.

The 18th and 19th century development of the town may appear, on the surface, formulaic of many others situated in the midland coalfields, where industry grew in the shadow of existing market towns along new communication corridors such as canals and later the railway. These major changes in transportation, of both raw and finished goods, were the catalyst for an era of unparalleled expansion. In light of this the study area has the potential for revealing significant information relating to the formative years of the Industrial Revolution, a period in history that shaped the Midlands giving the Black Country its own distinctive character.

4.0: Fieldwork

4.1: Aims

The objective of this archaeological desk-based assessment and walk over survey is to determine the likely survival and significance of archaeological and palaeoenvironmental remains within the proposed development site. The desk-based assessment will attempt to identify the need for any further archaeological work in advance of the planning application, and will identify requirements for any *in situ* preservation of archaeological remains, or for their recording in advance of, or during, development. Results will be put in a local, regional, national or international context as appropriate.

4.2: Method

The desk-based assessment will comprise a site inspection and walk over survey, and an examination of relevant primary and secondary sources. All sources consulted during the assessment will be listed in the report. The report will include a gazetteer of all archaeological and non-archaeological interventions and other 'events' relating to the development site. All known archaeological remains and disturbances will be mapped and related to a modern Ordnance Survey base map at an appropriate scale. The assessment will be carried out in accordance with the guidelines laid out by the Standard and Guidance for Archaeological Desk-Based Assessments (Institute of Field Archaeologists 1999).

4.3: Reporting

The results of the archaeological evaluation will be described within a fully illustrated report, which will include the following:

- (a) Description of the archaeological background.
- (b) Method.
- (c) A narrative description of the results and discussion of the evidence, set in their local and regional context, supported by appropriate plans and sections.
- (f) Discussion, including implications and recommendations for development.
- (g) A copy of the WSI

The written report will be made publicly accessible, as part of the Black Country Sites and Monuments Record within six months of completion.

5.0: Staffing

The documentary and cartographic analysis will be undertaken by Eleanor Ramsey, who will be assisted for the walkover survey by Malcolm Hislop. Kirsty Nichol (Assistant Project Manager) will monitor the project for Birmingham Archaeology.

6.0: Archive

The site archive will conform to the guidelines set down in Appendix 3 of the Management of Archaeology Projects. The written, drawn and photographic archive, will be placed with an appropriate repository within a reasonable time of completion of the project. Advice will be taken from the Planning Archaeologist.

7.0: Timetable

It is anticipated that the documentary research and report writing will be undertaken over a period of 10-11 days, with a report being produced by the end of October.

8.0: General

All project staff will adhere to the Code of Conduct of the Institute of Field Archaeologists.

The project will follow the requirements set down in the appropriate Standard and Guidance notes prepared by the Institute of Field Archaeologists.

Birmingham Archaeology, October 2003.

APPENDIX 2

Gazetteer of Sites Recorded on the SMR

BCSMR No.	Description	Included in Appendix	Located in Study Area	In White	Additional/ new sites
2251	Two coal pits nr windmill field	•			•
2560	Windmill between Darlaston and Bilston	•			-
5328	Hall Green School	•			•
5376	Railway bridge, Brook Street			•	
5378	Bilston West Station	•	† .	•	
5624	W.Brief 32-34 Dudley Street, Bilston	•	•	•	
5810	Bilston Settlement	•	 		•
5882	Wednesbury Oak Loop canal		-	•	 •
5886	Oxford Worcester and Wolverhampton railway		*	•	
5887	Birmingham Wolverhampton and Dudley railway			•	
8719	Watermill (site) Bankfield Road/Brook Terrace	•	•	•	
8733	Poss. Watermill site w of Dudley Street, Bilston	•	•	-	
9464	Glassworks at Bilston			•	
10642	Woolley Factory (Ironworks – south complex)	•	•	•	
10643	Parks and Otway (Capponfield Ironworks)		 	•	
10645	Marbury's Works (Banksfield Ironworks)			•	<u> </u>
10652	Bovereux Furnaces (Holcroft) Bilston		•	•	
10654	Capponfield Furnaces (Bagnall Street) w of canal	•	•	•	
10655	Barbors Field Furnaces (Holcroft) w of Dudley St.	•	•	•	
10744	Medieval Ironworking, Bilston	•			•
10778	Bilston Sandpits	•	 		-
10799	Capponfield House (Site) e of Broadmoor Road	- -	•	•	-
10906	Capponfield Settlement, Sedgley	•	•	•	
10907	Stonefield Colliery, Bilston	•	**		-
10908	Slagheap, Ladymoor	•	•		
10909	Bridge, Bilston Brook; Bilston to Bradley lane		•	•	+
10910	The Boat Public House			•	<u> </u>
10913	Furnaces, immed. s of Bilston Brook, Bradley	•	•	•	
10914	Buildings, nw of Bankfields Ironworks, Bradley	•	•	_	
10915	Barborsfield Colliery, Bradley		•	•	
10916	Buildings (Brook Terrace) s of Bilston Brook	•		•	
10917	Buildings, n of Bilston Brook	•	•	•	
10918	Stonefields Furnaces/factory ironworks (n complex)		•	•	
10920	Dudley Street, Bilston		•	•	
10950	Bilston Urban Village Survey	•	•		-
10951	Glasshouse Bridge		-	•	•
10952	Canal Basin, east of Glasshouse Bridge			•	
10953	Buildings, west of The Boat PH			•	+
10954	Wall, e side Dudley Street, Bilston	•	•	•	 -
10956	Canal Basin, north of Pothouse Bridge		-	•	
10957	Canal Basin, w of Railway	•	•		 -
13146	Canal Basin, Capponfield	•		•	
13505	Footpath/road Bilston to Bradley	•	•	•	+
13506	Cast Iron Fence, Bankfield Road		•		•
13507	Brick Structures, Bankfield Road	•	•		•

Table 1: BCSMR Entries from Hilary Whites previous desk-based assessment and new entries not covered in the previous desk-based assessment.

- * Line of railway passes through study area, but no longer exists except as embankment in places.
- ** Stonefield Colliery is mainly under school but may have extended into study area.

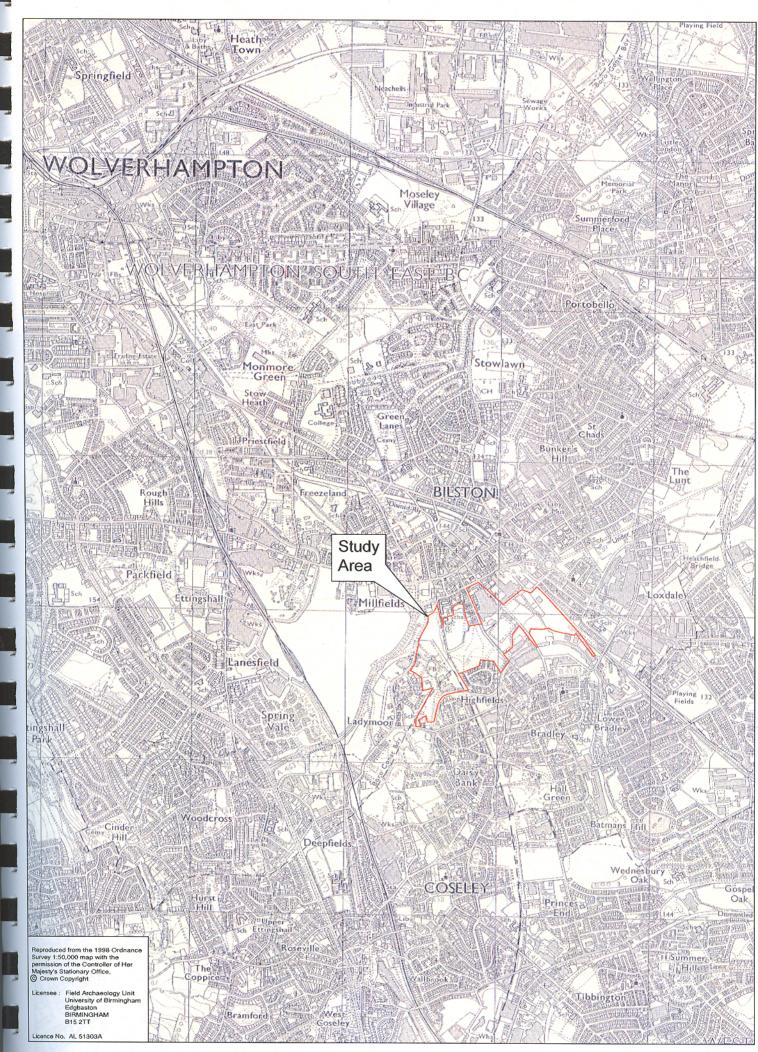


Fig.1

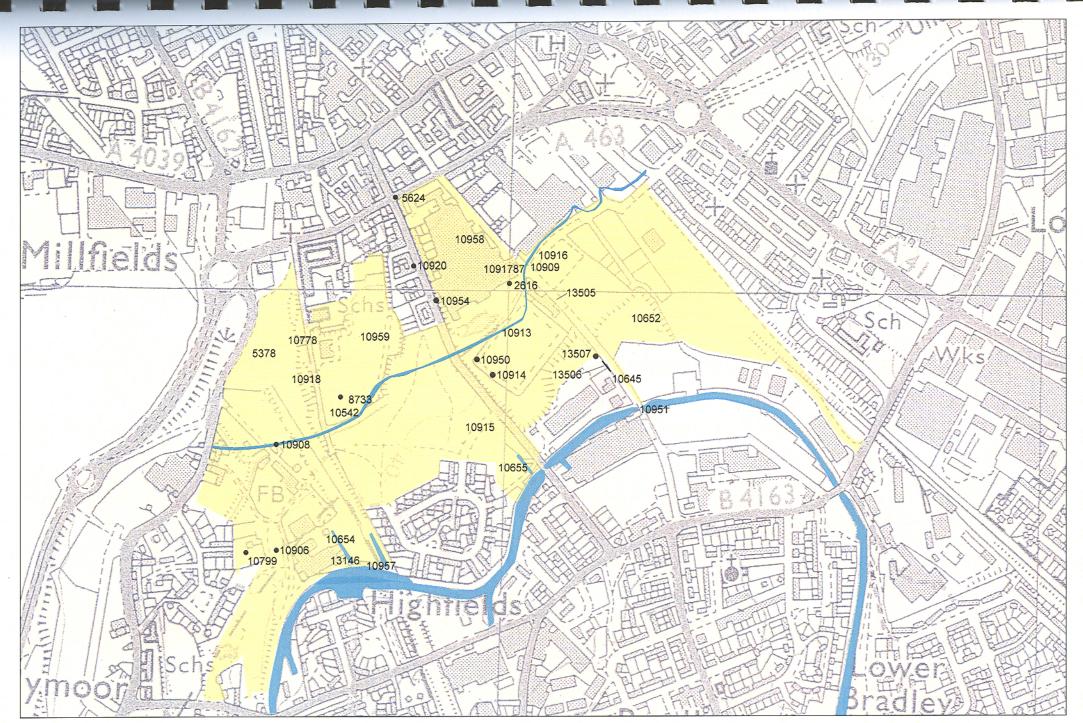


Fig.2

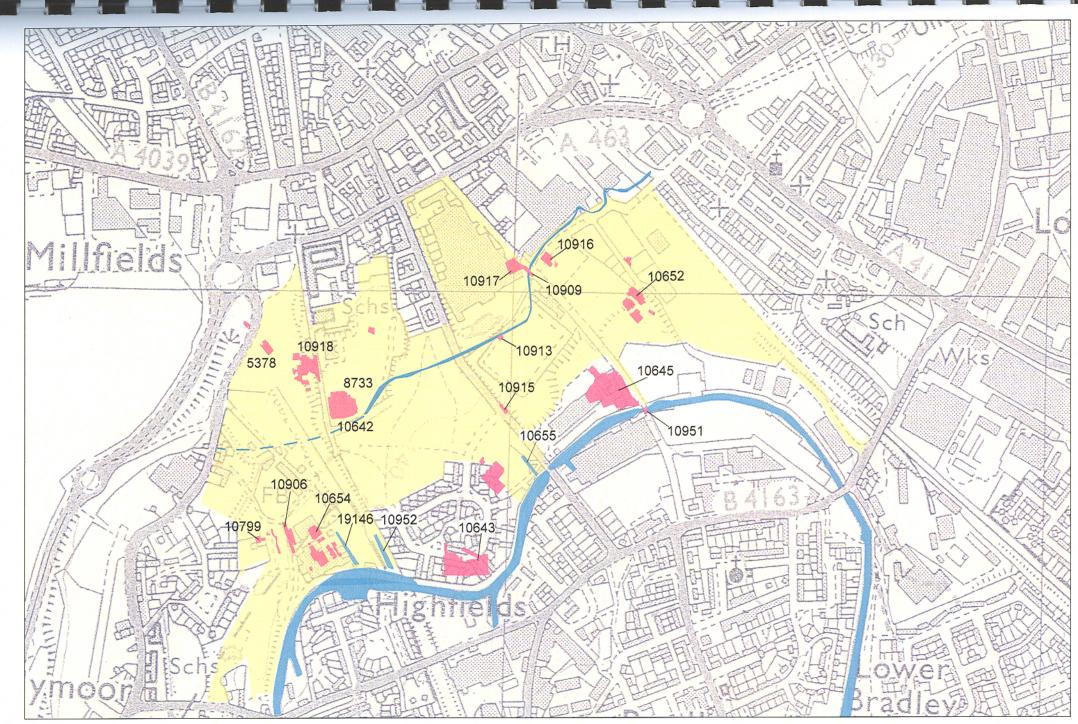


Fig.3

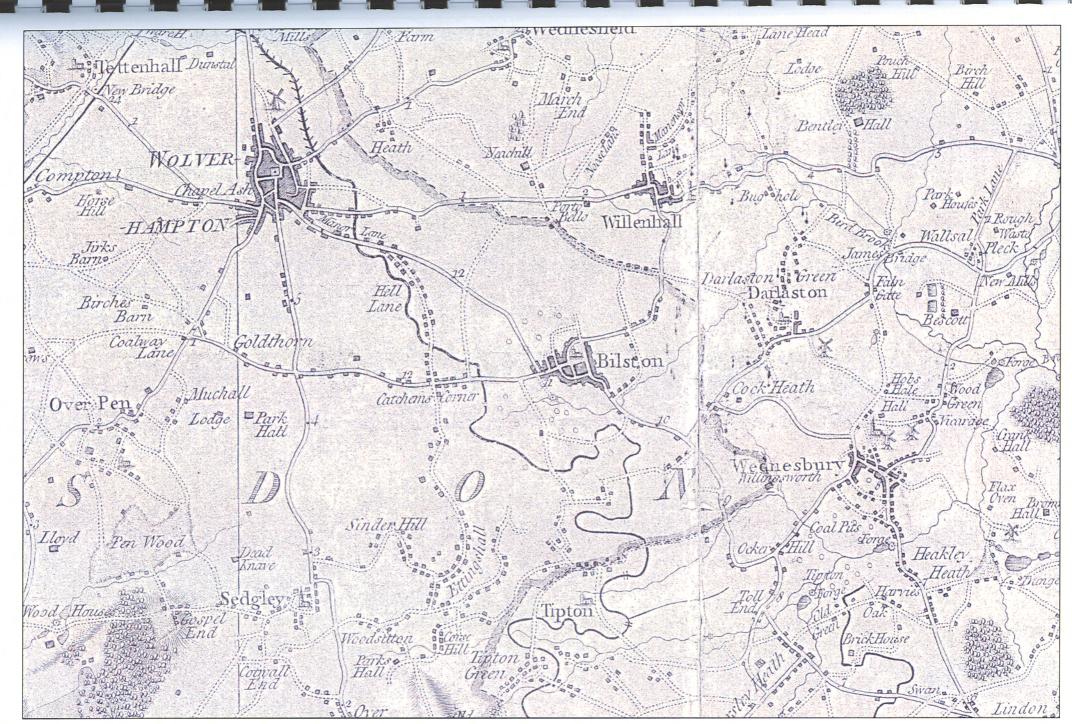


Fig.4 (1775)



Fig.5 (1799)

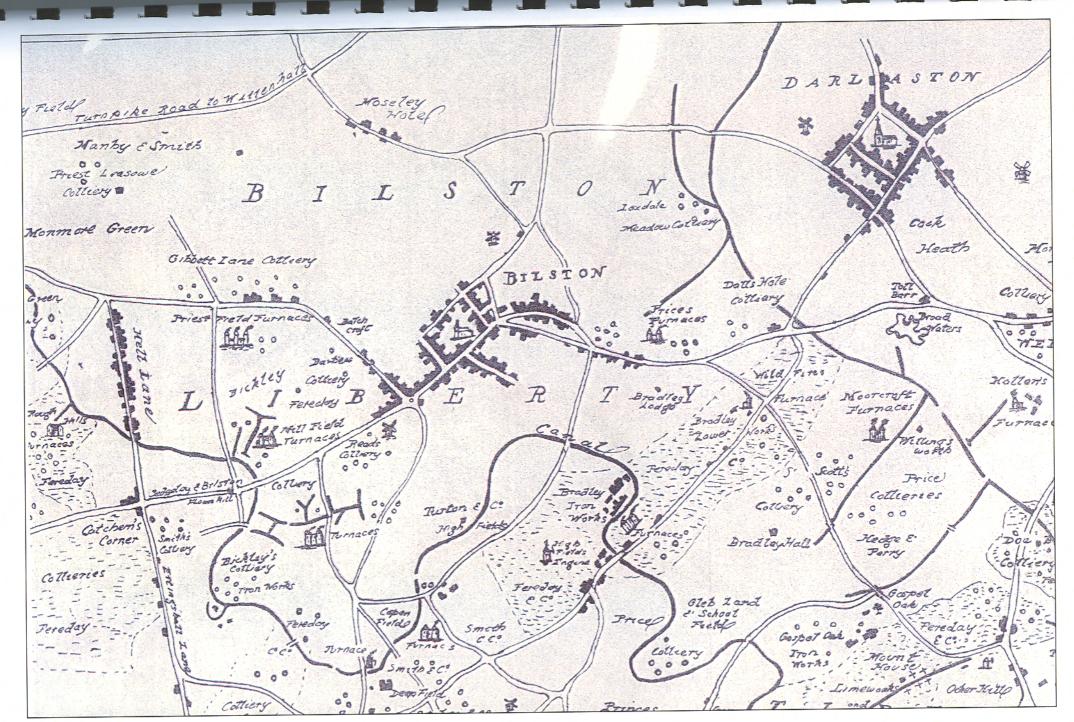


Fig.6 (1812)

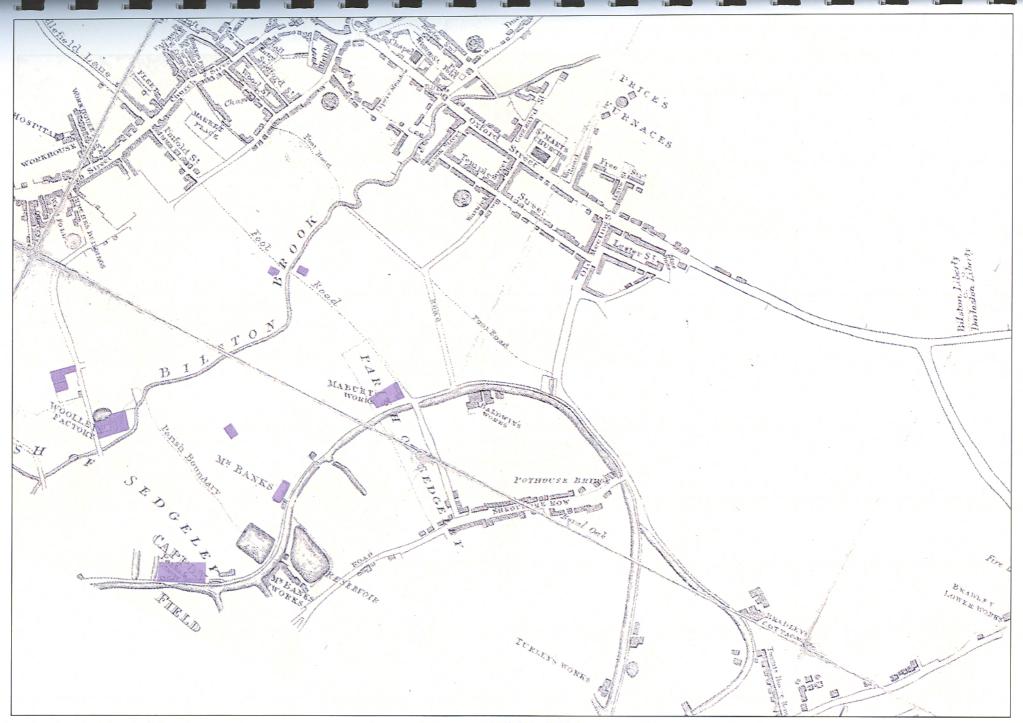


Fig.7 (1832)

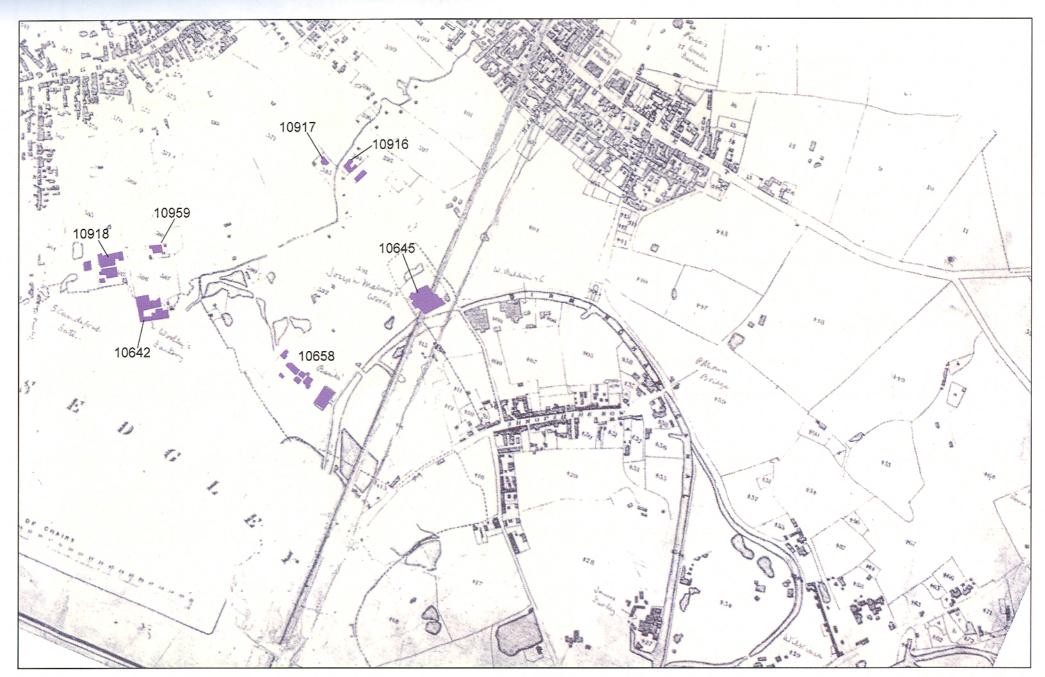


Fig.8 (1839)

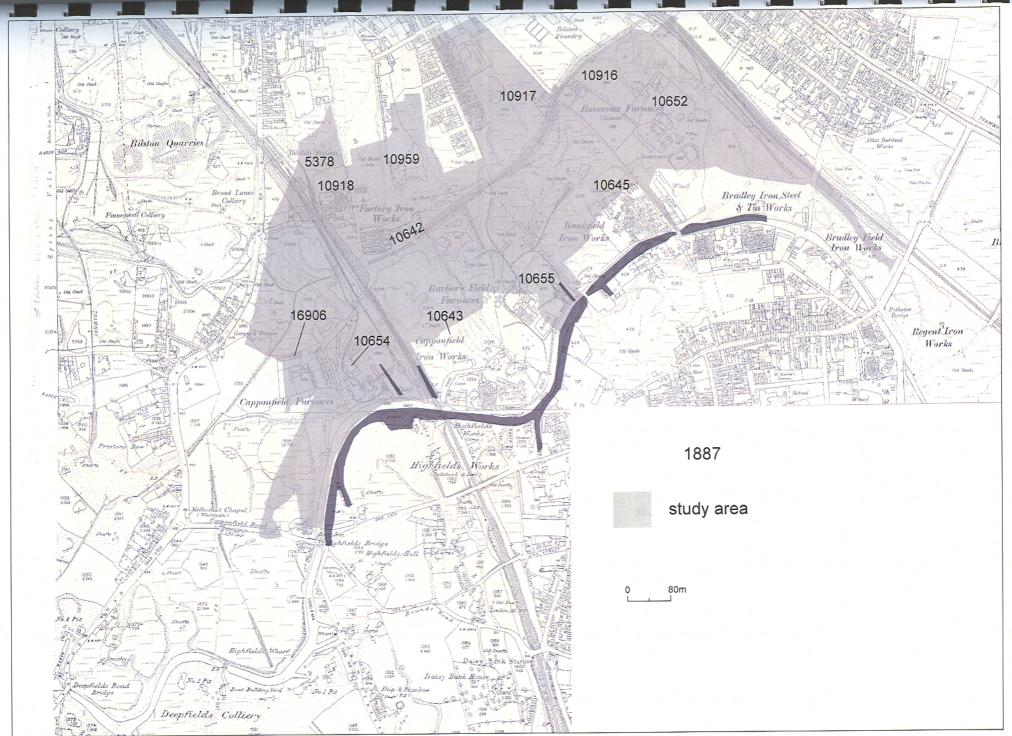


Fig.9

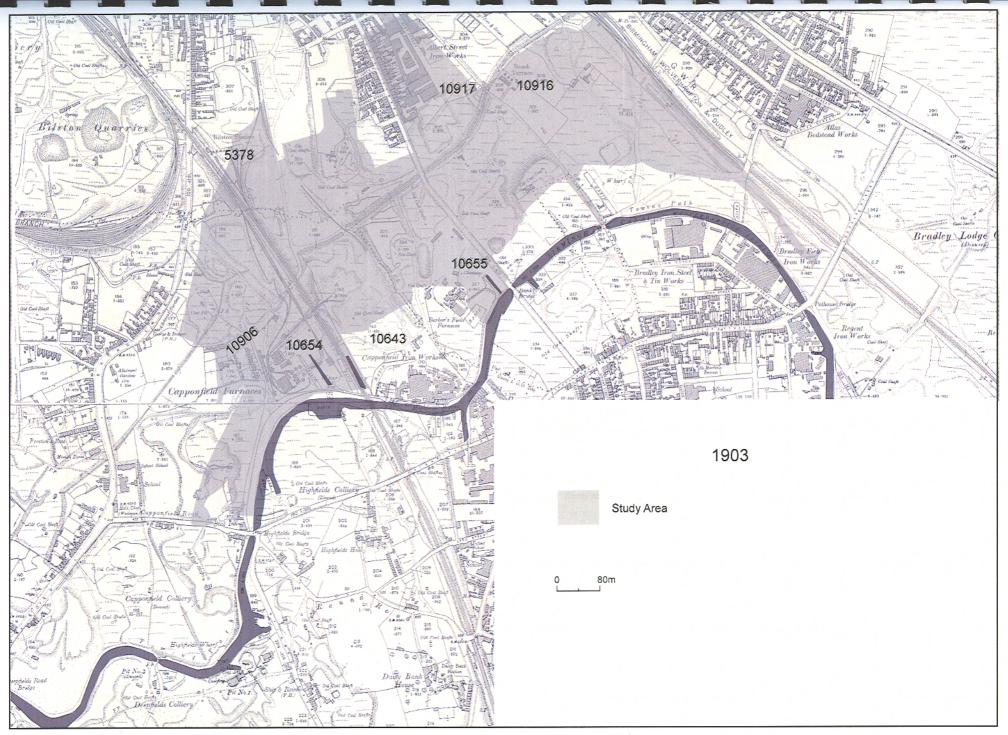


Fig.10

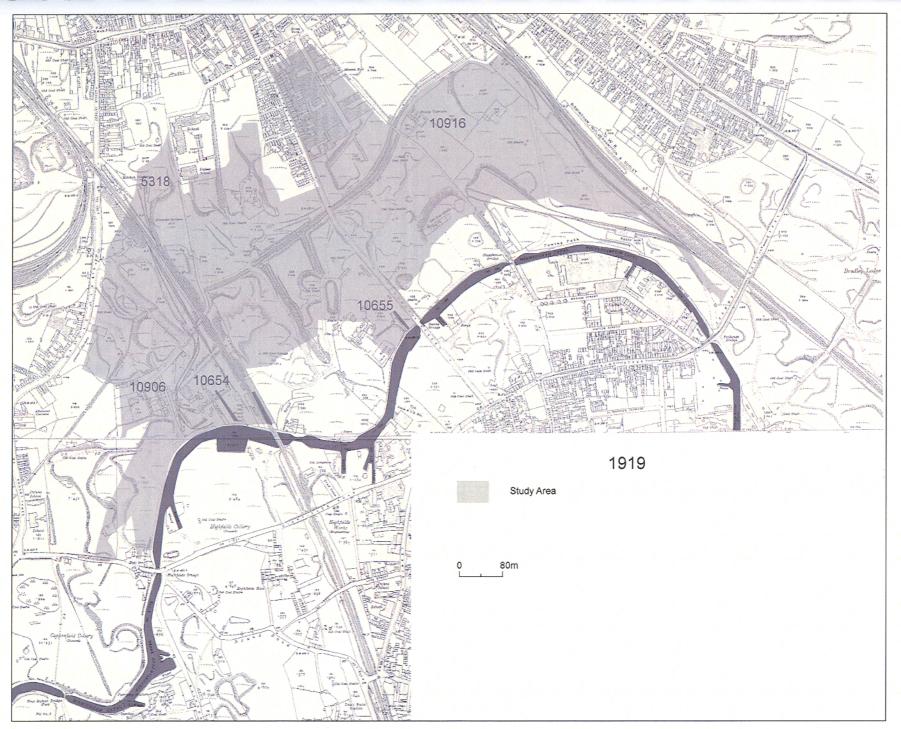


Fig.11

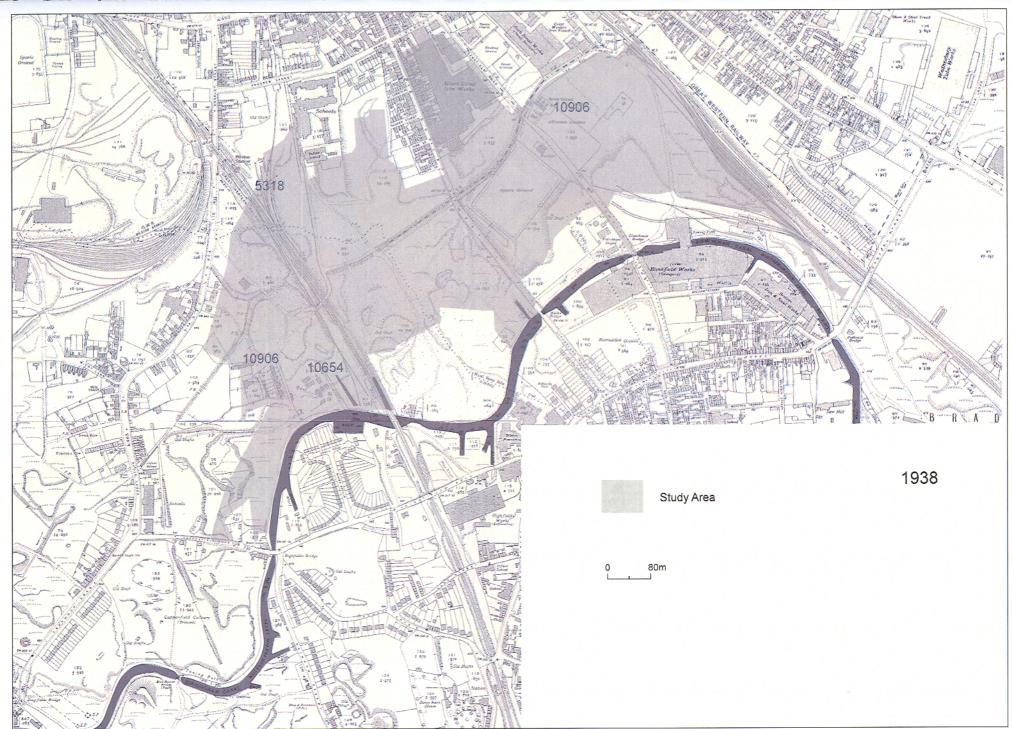


Fig.12

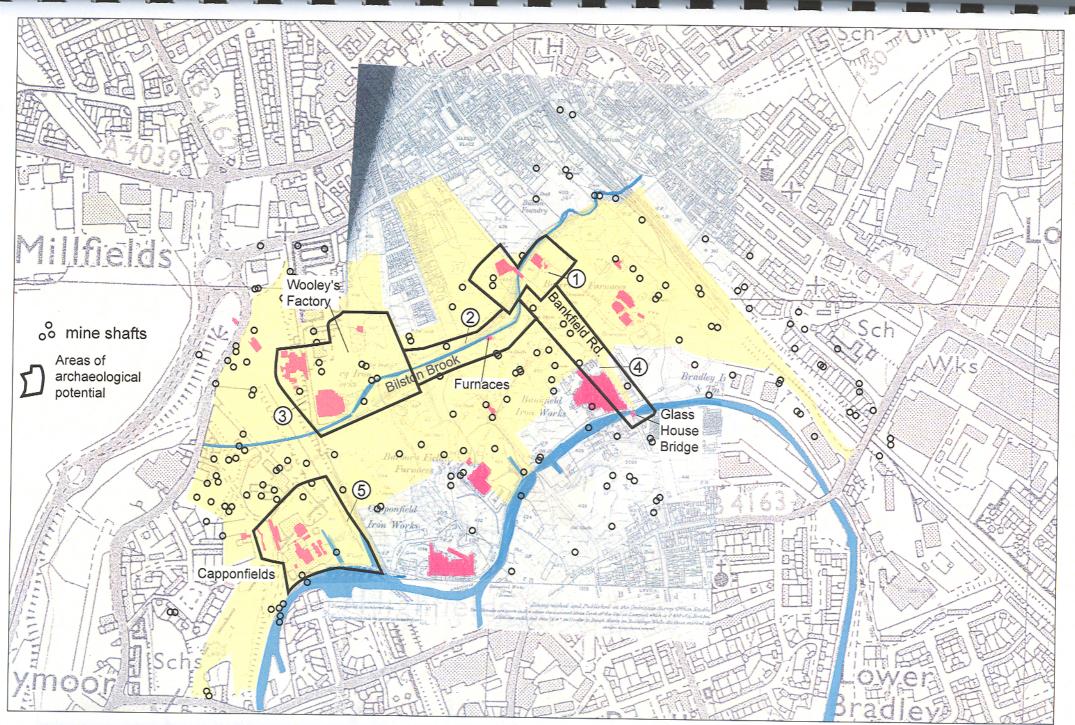


Fig.13

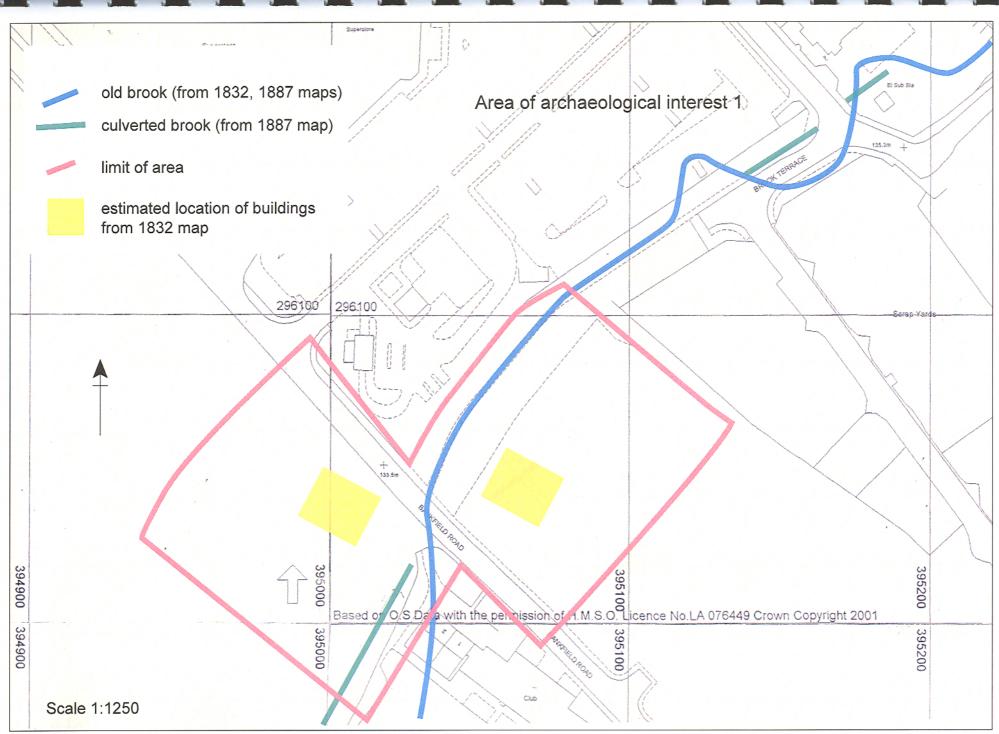


Fig.14

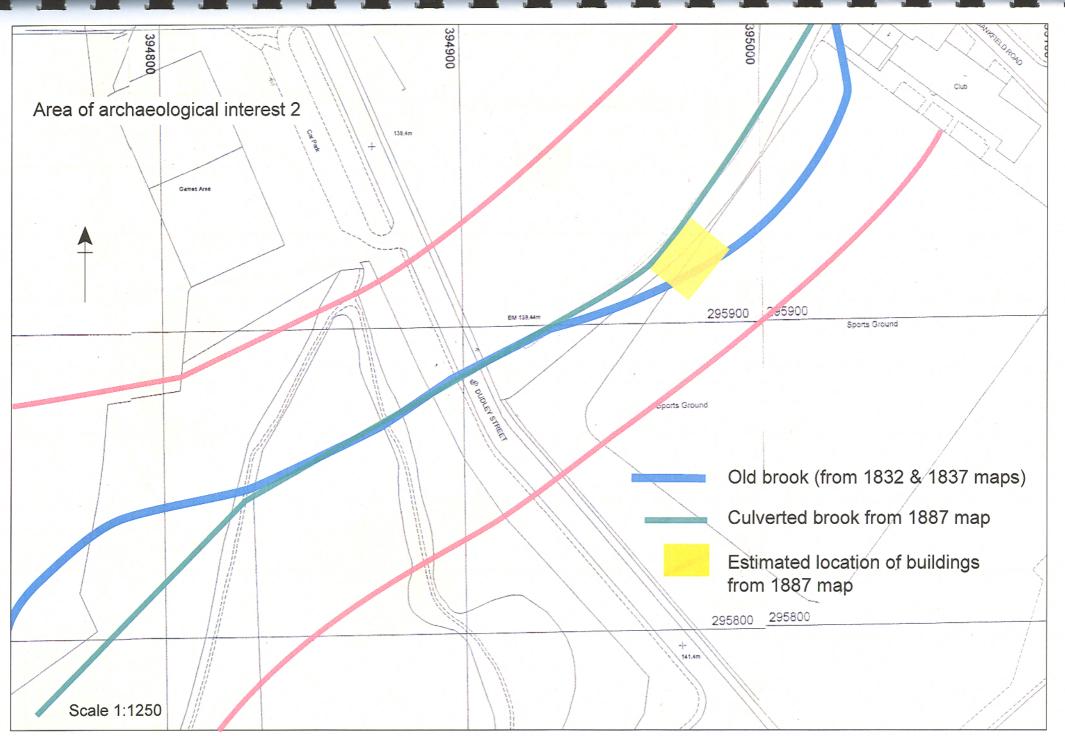


Fig.15

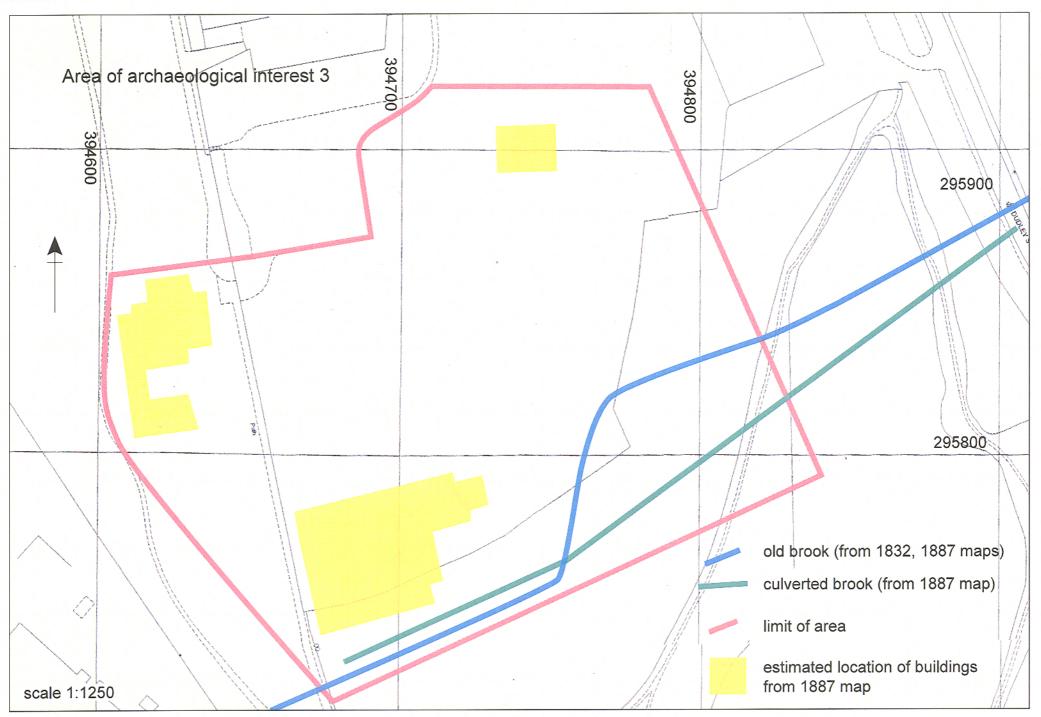


Fig.16

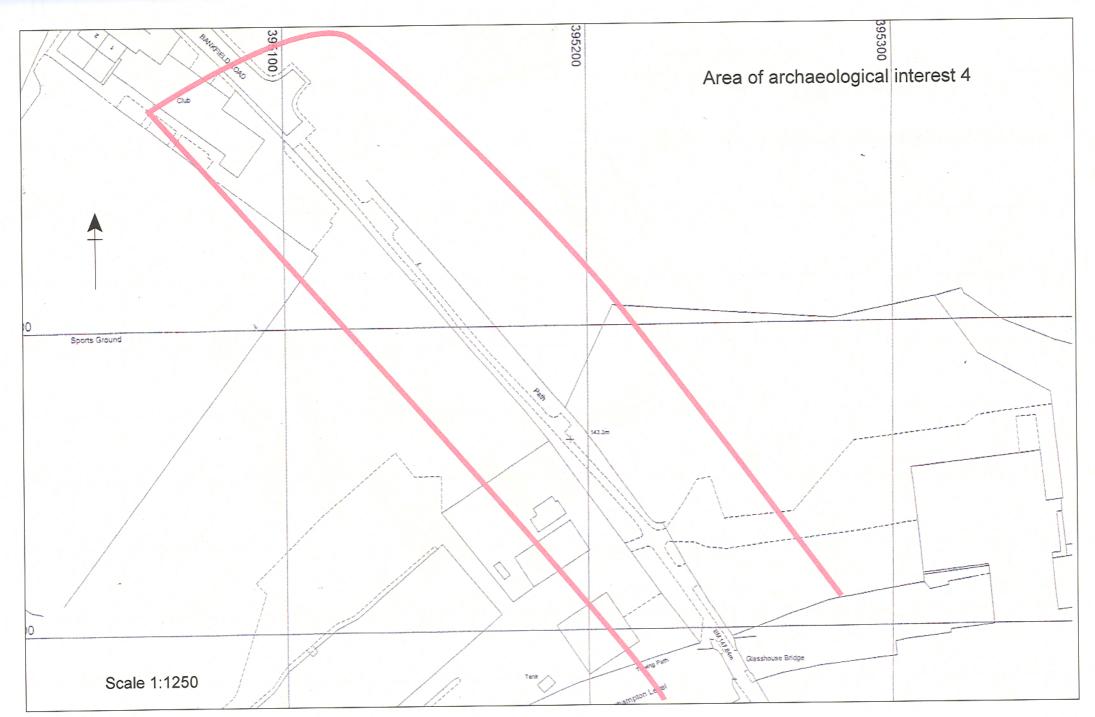


Fig.17

Fig. 18

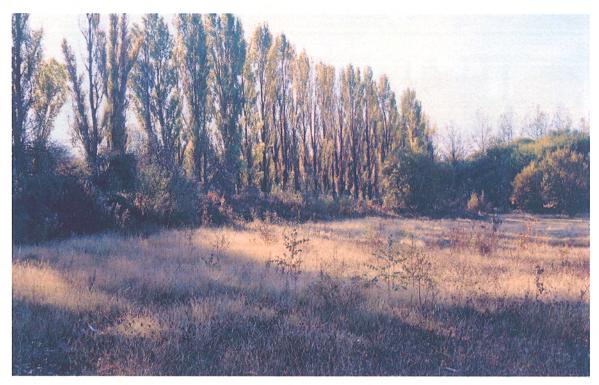


Plate 1



Plate 2



Plate 3



Plate 4



Plate 5



Plate 6



Plate 7