DESK-BASED ASSESSMENT OF THE CHURNET WORKS, MACCLESFIELD ROAD, LEEK, STAFFORDSHIRE

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INVESTOR IN PEOPLE Project 3319 Report 1681

Contents

1.	Background	2
1.1	Reasons for the project	2
1.2	Project parameters	2
1.3	Aims	2
2.	Methods	2
2.1	Study area	2
2.2	Other methods	4
2.3	Results	4
2.4	Impact assessment criteria	4
2.5	The methods in retrospect	5
3.	Archaeological and historical context	5
3.1	Topography	5
3.2	Geology and soils	5
3.3	Historic environment	5
3.	3.1 Prehistoric and Roman	5
3.	3.2 Medieval	6
3.	3.3 Post-medieval and modern	6
3.	3.4 Historic buildings adjacent to the site	8
3.	3.5 Features of the Historic Environment adjacent to, and within the site1	0
3.4	Statutory and other designations1	1
4.	Potential impacts1	1
5.	Mitigation1	2
6.	Residual effects1	2
7.	Publication summary1	2
8.	Acknowledgements1	3
9.	Personnel	3

Appendix 1. Features of the historic environment registered with the HER

Figures Plates

Desk-based assessment of the Churnet Works, Macclesfield Road, Leek, Staffordshire

Justin Hughes

Part 1 Project summary

A desk-based assessment was undertaken on land off Macclesfield Road, Leek, Staffordshire (NGR SJ 97727 56939). It was undertaken on behalf of Arthur Amos Associates, landscape design consultants to Sainsburys Ltd who intend to apply for a proposed mixed use development. This study will form a part of the application.

The aims of this assessment were to summarise the character and extent of any identified features of the historic environment, indicate their significance, the impact of the proposed development and identify mitigation measures, where appropriate.

The town of Leek has a long held connection with the industrial production of silk, dyes and textiles. Many of the mills were located adjacent to the area which this assessment addresses, and with good reason. The site is traversed by the River Churnet which has been used, and its course modified for agricultural and industrial purposes, since medieval times. The monks of Dieulacres Abbey resided to the north of the site from as early as the 13th century. They maintained two mills through the medieval period, the exact location of which are unknown, although two were recorded during the Reformation in 1538-40 off Mill Street. In the 1740s, the river's course was manipulated to provide power to the corn mill built by the prominent canal engineer, James Brindley.

A leat of probable post-medieval date crosses the site and is considered to be of importance to the town's industrial history. At the southeast entrance to the Churnet Industrial Estate a stone footbridge of 17th-18th century date straddles the river. A further 18th-19th century industrial site, to the south of the assessment area, is recorded as a mineral works, associated with the extractive industry, and survives as a brick-vaulted, rock cut chamber.

There are a number of listed buildings adjacent to the site, most notably the mid 18th century Brindley Corn Mill, within the mill complex which is a scheduled ancient monument. Consideration will therefore need to be given to the visual setting of these structures which lie close to the proposed residential area.

The Churnet works' northern boundary meets an area of open ground which lies within the proposed development area. Although little is known archaeologically, beyond the physical presence of the leat, the grassed area lies within the river's floodplain and has the potential to contain alluvium, palaeochannels and well-preserved organic remains.

It is recommended that further staged archaeological investigation be undertaken on the site. Although the details of the design of the proposed development are not finalised, it is recommended that an evaluation with trenches on a grid array across the northern portion of the site and any available areas adjacent to the river within the southern half be undertaken. The field evaluation would aim to determine the presence or absence of significant features and their character if present, which would inform any subsequent mitigation strategy. This should include environmental sampling in order to locate and define potential palaeo-environmental remains. Should no significant deposits be identified at this stage, then it may be argued that no further works be required. However should deposits be identified, then evaluation should extend into the area currently occupied by the Churnet Works themselves.

Part 2 Detailed report

1. Background

Reasons for the project

A desk-based assessment was undertaken on land off Macclesfield Road, Leek, Staffordshire (NGR SJ 97727 56939). It was undertaken on behalf of Arthur Amos Associates, for their client Sainsbury's Ltd, as part of a pre-planning application evaluation of the site's potential for development.

1.2 **Project parameters**

The project conforms to the *Standard and guidance for archaeological desk-based assessment* (IFA 2001), Planning Policy Guidance Notes 15 '*Planning and the Historic Environment*', and 16 '*Archaeology and Planning*' and relevant EIA guidance and Legislation.

1.3 Aims

The aims of the desk-based assessment were to summarise the character and extent of any identified features of the historic environment, indicate their significance, the impact of the proposed development and identify mitigation measures, where appropriate.

2. Methods

2.1 Study area

The study area comprised the site (Fig 1, Plates 1 and 2) and any features of the historic environment within 500m, although a brief summary of the Dieulacres Abbey site is also given as it lies less than 1km (off Abbey Green Road) beyond the northern perimeter of the proposed development.

Prior to fieldwork commencing, a search was made of the Staffordshire Historic Environment Record (HER), County Records Office and the William Salt Library, Stafford. The following sources are relevant to the study area:

Cartographic sources

- Extract from county map of Stafford, 1832 (Fig 2)
- Leek in 1838 unpublished: Leek in Maps, William Salt Library collection, Fig 3.
- Leek in 1862 unpublished: Leek in Maps, William Salt Library collection, Fig 4.
- 1st edition Ordnance Survey, 1888, Staffordshire Sheet VIII NW, 6": 1 mile, Fig 5
- Leek in 1898 unpublished: Leek in Maps, William Salt Library collection, Fig 6.
- 3rd edition Ordnance Survey, 1925, County series VIII.5, 25":1 mile, Fig 7
- Extract from Ordnance Survey, 1937, sheets SJ 96/9756 & SJ 96/9757, 25": 1 mile, Fig 8

Aerial Photographs

- CPE/UK/1935 2391, 1935
- RUN 42 FILM 93 007, 1963
- Documentary sources
- Barnett, R, 1994 Archaeological watching brief: Abbey Farm, Leek, Staffordshire Stoke-on-Trent Museum Archaeology Unit
- Bateman, T, 1861 *Ten years' diggings in Celtic and Saxon grave hills in the Counties of Derby, Stafford and York.* Pages 183-4
- Cockin, T, 2000 The Staffordshire Encyclopaedia
- Crowe, C, 2002 Silk Street Car Park, Leek, Staffordshire: archaeological excavation report (AAA Archaeological Advisors)
- Horowitz, D, 2005 The place names of Staffordshire
- Klemperer, W D, 1995 *Dieulacres Abbey, Leek: an archaeological survey* Stoke-on-Trent City Museum Archaeology Unit
- Meeson, R A, 1992 Notes on an archaeological watching brief and a report of archaeological evaluation site of Dieulacres Abbey, Staffordshire County Council
- Ragg, J M, Beard, G R, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 *Soils and their use in midland and western England*, Soil Survey of England and Wales, **12**
- Tringham, T, 1993 Staffordshire studies volume 5 Staffordshire Record Society
- Tringham, T, 1999 in Morgan, P, and Phillips, A.D.M, (ed) *Staffordshire histories* collections for a history of Staffordshire, 4th ser., 19). Keele: Staffordshire Record Society
- VCH VIII, Currie, C R J and Greenslade M W (eds), 1996 Victoria County History of Staffordshire, VII

The following sources have also been cited in this assessment.

- DoE, 1990 *Planning Policy Guidance Note 16: Archaeology and Planning (PPG 16)*, Department of the Environment
- DoE, 1995 *Planning Policy Guidance Note 15: Archaeology and the historic Environment (PPG 15)*, Department of the Environment
- HEAS, 2009 Proposal for an environmental assessment at the Churnet Works, Macclesfield Road, Leek, Staffordshire, Historic Environment and Archaeology Service, Worcestershire County Council, unpublished document dated 13 January 2009, P3319
- If A Standard and guidance for archaeological desk-based assessment, Institute for Archaeologists
- Soil Survey of England and Wales, 1983 Midland and Western England, sheet 3, scale 1:250,000 + Legend for the 1:250,000 Soil Map of England and Wales (a brief explanation of the constituent soil associations)

2.2 **Other methods**

A site visit was undertaken on 13 February 2009.

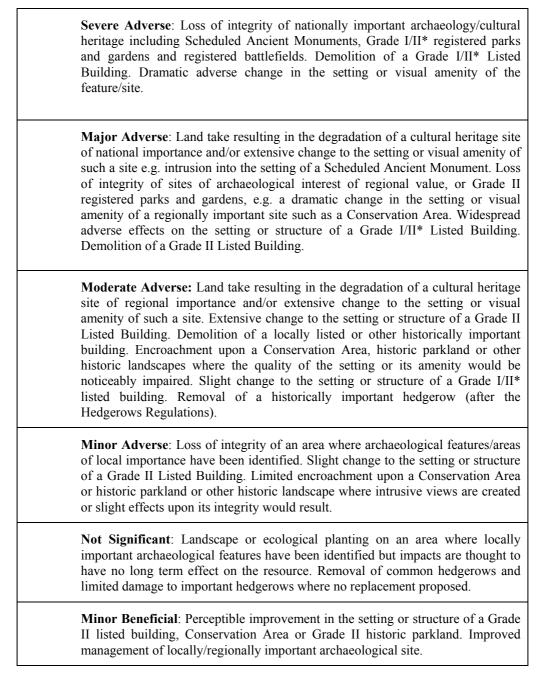
2.3 **Results**

The results are mapped on Figure 9 and the details of individual features of the historic environment are given in Appendix 1. Event records have been omitted where this would repeat information in other record types, and would not materially affect the assessment.

2.4 Impact assessment criteria

The criteria cited in Table 1 have been used.

Table 1: Significance Criteria for Cultural Heritage Issues



Moderate Beneficial: Perceptible improvement in the setting or structure of a Grade I/II* listed building, Conservation Area or Grade I/II* historic parkland. Improved management of nationally important archaeological site.

2.5 **The methods in retrospect**

The methods adopted allow a high degree of confidence that the aims of the assessment have been achieved.

3. Archaeological and historical context

3.1 **Topography**

The study area is located to the northwest of the town of Leek, off the Macclesfield Road (Fig 1). The southern half of the site is currently being used by a number of industrial traders, the northern half is grassed, open ground. The River Churnet bisects the site from northeast to southwest, its course then turning west. The town centre lies less than 1km to the southeast on a spur of higher ground.

The site gently rises from the west to the east (c 46.7m AOD to c 48.7m AOD). It comprises an area of approximately 9.78 hectares and is bounded by watercourses on all sides, along with Macclesfield Road (A523) to the south and by Abbey Green Road to the east.

The southern half of the site is presently occupied by a number of industrial units, mainly constructed with fabricated materials, and the northern half remains as an open piece of grassed land.

3.2 **Geology and soils**

The site lies within the Bromsgrove Soil Association (541b), comprising well-drained reddish coarse loamy soils over sandstone but deep in places. Fine loamy soils with slowly permeable subsoils do also occur within this geological belt of Permo-Triassic and Carboniferous sandstone and siltstone (Soil Survey of England and Wales 1983).

3.3 Historic environment

3.3.1 **Prehistoric and Roman**

No prehistoric settlement activity has been identified within the town or indeed within the immediate vicinity of Leek. However, a small number of artefacts, of late prehistoric date, including a barbed flint arrowhead (PRN 00349) and two finds of a bronze axe hammer and a leaf-shaped arrowhead (PRN 01736) have been reported within c 500m of the site (Crowe 2002).

A Bronze Age barrow (known as Cock Low, PRN 00350) was partially excavated in the early 19th century where ash and charcoal layers were recorded. Burnt human bones and a flint implement were recovered (Bateman 1861) and a cinerary urn was retrieved when the monument appears to have been demolished in the early 20th century. Two different grid points were cited for this structure and it is only clear that it lay to the south of the assessment area, between Waterloo Street and Spring Gardens (VCH VII).

There is very little evidence for any Roman activity but it has been conjectured that there was an early Roman *castellum* (station) and that a Roman road from Buxton passes close to parish of Leek and Lowe (Cockin 2000). The only reference for Roman activity is from a late 18th century coin hoard recovered about 3km south of the town (Cockin 2000).

3.3.2 Medieval

The place-name Leek is thought to originate from the Old English word *Lece* or from the Norse *Loetar*, both meaning 'hilltop' settlement. This origin for the name is postulated *Gelling* (Tringham 1999) but is contradicted by Cockin (2000) who believes that the Old Norse name of Loekr means brook or stream. This may constitute evidence of early medieval occupation of the Viking/Danelaw era. Sources state that Earl Aelfgar of Mercia held several estates (including Leek) before the Domesday survey of 1086. An estate in the fee of Leek was also established, in the late 11th century, by Earl Hugh I of Chester. By this time the parish was one of a chain of manors, linking the Earl's Estate to others in his ownership in the East Midlands, connected by the 'Earl's Way' which runs from Congleton to Ashbourne via Leek. The medieval parish was the largest in the county with chapels at Cheddleton, Horton and Ipstones (Tringham 1993).

Documentary evidence points to a settlement being established at Leek in the 11th century and the manor of *Lec* probably included the town and the neighbouring townships of Tittesworth, Bradnop, Onecote and Leekfrith (Tringham 1993, fig 2).

It is not clear when St Edward's Church (PRN 06655) was founded. Only post-Conquest fabric survives, but in a charter from the 1230s, it is attributed to Edward the Martyr who died in 978. Although it has been suggested that the church is more likely to have been constructed during the reign of Edward the Confessor (1042-1066; Tringham 1999) a small settlement was presumably close by. The church itself lies on the west side of the modern town and close to the market place (PRN 50214) where the right to hold markets and fairs was first granted in 1207 (Cockin 2000).

Monastic activity is well attested to the north of the site from 1214, when Earl Ranulph III (6th Earl of Chester) established the Abbey of Dieulacres or Dieu la Cresse with a grant of corn mills in Leek and Hulme. The monks of this Cistercian Order were removed from Poulton Abbey in Cheshire (VCH VII). Earthworks and remains of the stone-built monastery have been identified by geophysics and by building recording (Klemperer 1995) and by small-scale excavations (Meeson 1992; Barnett 1994), with finds and structures dated to the 13-15th centuries. Each of these studies has thrown light on the form and size of the Abbey, so that a ground plan of the buildings and ranges is re-constructible. However, little is known of the wider estate which monastic orders normally held. The Abbots' lands may well have included plots along the west bank of the Churnet, as it flows south, across the assessment area. The Abbey was dissolved during the reformation in 1538-40, when two mills in Mill Street were recorded under its ownership (Cockin 2000). It is unclear if these represent those granted to the abbey in the early 13th century

In spite of the documentary evidence for Saxon and medieval activity in the immediate area, there have been no archaeological finds of these periods within or adjacent to the site.

3.3.3 **Post-medieval and modern**

In 1641 a settlement, known as Bridge End, was recorded along the Macclesfield to Leek Road where it crossed the river. This is immediately adjacent to the present site (VCH VII).

Prior to the industrial age, references to Leek's late medieval development are sparse but the main industries appear to have been the making of buttons by 1485, ribbons, handkerchiefs, and shawls, mohair working, clock and watch making and in the later 19th century the manufacture of boxes and bobbins for the silk and cloth industry (VCH VII; Cockin 2000).

The association with silk-weaving is first documented in the 1670s and the craft is thought to have been brought by French Huguenots (VCH VII). By the 19th century there were 36 mills, most of which were curiously located within the residential areas of the hilltop town. However, suburbs developed in Mill Street (immediately adjacent to the site) and in Belle Vue Road (to the south).

By the time Brindley's Corn Mill opened in 1752, 2,000 people were employed in the town's industrial endeavours (VCH VII). Silk and textile production expanded in the 19th century and mills and dyeworks are evident along the western route out of town, fronting onto both sides of Macclesfield Road (Figs 3 and 4). The Churnet Valley railway, which opened to the west of the site in 1849, provided an additional trade route for the sale of silk and textile products.

The extract from the county map of 1832 (Fig 2) does not show any of this building detail but does illustrate that the site extended across two townships; Leek and Lowe, south of the River and in Tittesworth to the north.

The 1838 map of Leek (Fig 3) is the earliest drawing which shows the modifications made to the river's meander in the southeast of the site, presumably to channel water for the operation of the Brindley Corn Mill. An L-shaped building also appears to the immediate west of the corn mill, but it is not clear who the proprietor was or what its function may have been, and it is not clear whether the current, empty unit on the same plot, retains any of this structure. A mill, named Hencroft's, occupies the only unit to the north of the river at this time, within a plot of land owned by a Miss Clowes.

Mill Street has residential properties along both sides, as it runs towards the main road.

Kiln Lane, adjacent to the site, south of Macclesfield Road, has a possible connection with the mineral workings site described below (Section 3.3.5).

The 1862 map of Leek (Fig 4) shows a small rectangular building with access off Abbey Green Road, within Miss Clowes land, which appears to have been divided into two plots. Industrial units, to the west of the L-shaped building are evident to the south of the river east of a land plot belonging to a Miss Gaunt.

The land to the east of Abbey Green Road, owned by Samuel Tatton, has what appears to be residential and industrial properties, including the dye works noted on the earlier, 1838 map.

A further dye works is apparent at adjacent to the western perimeter of the site, close to rock House and Bridge House.

Big Mill, built in 1857, is illustrated to the south of Mill Street (see Section 3.3.4 below).

The units adjacent to the L-shaped unit could well have been dye works and were certainly used for such purposes by 1888 (Fig 5), when the 1st edition OS map of Leek was published. The most notable change is that a slate works has been added to the site occupied by a dye works, to the east of Abbey Green Road. The large "Silk" mill to the south of Mill Street later became known as the Big Mill.

The 1898 map (Fig 6) shows that the Hencroft mill, to the east of the site, has been converted to a print works but, more significantly, there is now a cluster of mill and dye works straddling all routes along the Mill Street/Macclesfield route. The small building within the southeast corner of the site is indicated in greater detail. It appears to be a residential structure with two half-enclosed pigsties adjoining.

Hencroft Print Works is named as a silk mill on the 1925 OS map (Fig 7) and the open ground to the north and west of the river's meander is, for the first time in use, as a football ground, with an associated pavilion. The field boundary, illustrated on the 1862 map, remains. Further residential development is evident to the east of Abbey Green Road and the Bridge House dye works is now referred to as Bridge End. A small complex of apparently agricultural or stable buildings occupies land adjacent to the house and pigsties.

By 1937 (Fig 8) land to the immediate north of the river has been developed, reducing the size of the open, grassed area, and a boundary bank has been constructed across the

northwest to southeast axis of the site. The town's connection with dye works is still evident and many of the structures survive from this period, although the walkover survey established that a good number of the industrial outlets are no longer in use.

By the mid 20th century the silk, dye and textile trades had declined and earlier units, such as the Bridge End dye works, were converted to chemicals production.

3.3.4 Historic buildings adjacent to the site

Brindley Corn Mill (PRN 00175, SAM ST 177, Plates 3 and 4)

The canal engineer James Brindley is known to have had involvement with the millwright business in the Leek area from 1742. He built a water mill for corn production, which was in service by 1752. Two-thirds of the original structure survives; the third section was demolished in 1948 when the Macclesfield Road was widened.

The extant structure is grade II listed, two-storeys high with the original five windows and is made of stone and brick. The mill was operational until 1940 and much of the fabric of the building remains intact, along with interior fixtures and machinery, which were restored in the 1970s in order to re-open the complex as a public amenity. The restored components consist of the wooden undershot wheel, the main wooden shaft, the great spur wheel, a pair of peak stones, a pair of French stones and a 1.2m diameter running stone. The bulk of the tentering apparatus and supporting timbers are also original.

The exterior has a side wall of brick with stone quoins adjoining the north-facing gable wall which was re-built when the third section was removed. A wide, shallow archway with hoodmould and keystone are also intact. The south-facing gable wall is constructed with roughly coursed and squared stonework, with a wheel aligned parallel to it.

The water wheel moved three sets of grinding stones via an internal pit wheel and is clearly visible from the modern roadbridge, which provides access to the Churnet Works from Abbey Green Road.

The listing citation for the building is :

"Remains of corn mill. 1752. Designed and built by James Brindley. Coursed and squared stone and brick with plain-tiled roof. The remaining portion of the building comprises only two thirds of the building, which was partially demolished for road-widening in 1948. EXTERIOR: 2-storeyed, the side wall of brick with stone quoins to original angle to right (left-hand gable rebuilt externally on line of internal partition wall on demolition of rest of building). Wide shallow segmental-archway to left (formerly central to main elevation) with hoodmould and keystone. Lunette over archway. 2 roundarched windows (possibly recut) on each floor to right. Gable return is roughly coursed and squared stonework, with wheel (formerly housed in lean-to timber structure) aligned parallel to the gable. Central round-arched window to upper storey flanked by square windows in stressed chamfered architraves. INTERIOR: internal structure with heavy tie-beams on each floor to support stones and machinery, and curved tie-beam of king-post truss to roof. The mill remained in use until 1940 and retains much of its machinery (restored in the late C20). Breast-shot wooden waterwheel working 3 sets of stones via internal pit wheel (renewed together with the axle shaft in the C19), original timber main shaft and wallower (renewed in the C19). Tentering gear for the 3 pairs of stones represents 3 generations of construction: timber, timber and cast-iron, and cast-iron. 3-window range demolished in 1948 probably comprised original drying floors etc".

Source: http://lbonline.english-heritage.org.uk

Brindley Mill lies within a Scheduled Ancient Monument, which encompasses the mill complex (ST 177).

The Big Mill (PRN 06746 and PRN 06747)

This silk mill is a grade II listed building. It was designed in 1857 by the architect, William Sugden, and was operational until 1992. The building lies between Belle Vue Road and Mill Street, close to the Shade Mill and Printworks (see this section, below). Production changed from silk to mercerised cotton in the early 20th century.

The building is six storeys high with a flat roof, 21 window range and built in an Italianate style, of Flemish bond red brick. An iron-frame lift tower was added at an unknown later date. There is an additional seven storey stair tower of rusticated quoins and window surrounds to each side, suggesting it was erected as a privy tower.

The listing citation for the building is:

"Silk mill. c1860. By William Sugden. Brick with stone dressings, and low-pitched or flat roof not visible. Italianate style. Narrow in plan with 5-window returns. EXTERIOR: 6 storeys, 21-window range. Advanced central 7-storeyed stair tower with arcaded upper storey and overhanging, shallow pyramidal roof. Rusticated quoins and window surrounds to tower, with plain string courses, and moulded cornice over the 6th storey. Shallow projecting bays each side of tower, (possibly built as privy towers?). Fenestration elsewhere has iron-framed windows with continuous stone cills and flat stone lintels, with round-arched windows forming an arcade to ground floor. Central doorway in base of tower with concave reveal with round-arched head, heavy key block and fanlight. Angles stressed by pilasters. Cornice and parapet. Engine and boiler house to rear, but only slight evidence of original power transmission. INTERIOR: not inspected. The mill is an important example of large-scale building for the silk industry, and represents one of the earliest mill buildings on this scale in Leek. It is also a good example of the mill-style developed by William Sugden, the leading mill architect at work in Leek at this time".

Source: <u>http://lbonline.english-heritage.org.uk</u>

The front boundary wall has a separate listing on the buildings register. It was added in the early 1860s and is composed of well coursed and squared stone with ashlar copings.

The Shade Mill (PRN 50900)

This three storey structure lies to the west of the Big Mill and fronts onto Belle Vue Road. It was built in the 1890s with English garden wall bond (red brick) and segmented arched windows on the ground and first floors. It has a hipped roof of slate and is adjoined to a print works (PRN 50901, see this section below) by a bridge. A lift shaft of uncertain date was inserted through the first and second floors and the building originally had a cellar. The millers were textile producers.

The Print Works (PRN 50901)

This building, of c 1900, lies at the southeast corner of the Big Mill complex (PRN 06746, see this section above), is of 3 storeys and constructed in the Flemish red brick style, with stone lintels and sills and wooden framed windows. Its ornate stone double doorway bears a plaque with the company name of Wardle and Davenport who were the prominent mill owners of the district. This structure seems to have been used as a premises for calico printing, close to its neighbouring textile mills.

210, Mill Street (PRN 06748, Plate 5)

Now a Conservative Working Men's Club, this building is grade II listed early 18th century inn. It is built with stone and coursed, squared rubble and has a plain tiled roof. The exterior is three storeys high with a four mullioned window range and has a brick stack in at the west gable end.

The specific listed building is described as:

"House. Formerly inn and now club. Early C18. Coursed and squared rubble with plain-tiled roof. EXTERIOR: 3 storeys, 4-window range with central entrance. Flat 6-panelled door in moulded architrave with pedimented hood carried on brackets. Stone mullioned windows of 2 and 3 lights throughout, all plain chamfered. Moulded string courses over ground and first floors. Brick stack in left-hand gable. INTERIOR: not inspected".

Source: <u>http://lbonline.english-heritage.org.uk</u>

3.3.5 Features of the Historic Environment adjacent to, and within the site

Abbey Green Road Footbridge PRN 06709, Plate 6)

This, grade II listed stone bridge spans the Churnet at the southeast corner of the site. It is probably late 17th or early 18th century in date and is a single span with a shallow arch and a plain parapet with angular copings (see Section 4, below).

The listing citation for the building is:

"Footbridge. C18. Coursed and squared rubble. A single span, shallow arch with string course over, and plain parapet with angular copings".

Source: http://lbonline.english-heritage.org.uk

Broad's Bridge (PRN 06708)

Broad's Bridge spans the river just outside the northeast perimeter of the site, on Abbey Green Road. It was constructed in the 18th century with a fine finely coursed and squared stone and is single span over a shallow segmental archway and has a parapet with flat projecting copings and squared terminal piers.

Leat, Bridge End (PRN 04333, Plates 7 & 8)

A leat, approximately 0.6km in length with a channel up to 0.50m in width, is located along the western and northern perimeter of the site. It would have drawn water from the River Churnet at Broad's Bridge, near to the Dieulacres Abbey site (to the north) and emptied into the river at Churnet Valley Farm (to the south off Macclesfiled Road). Although it is suspected to be post-medieval, its construction date is not known. It may have served a mill, as yet unlocated, but suggested by the grooved slot and sections of masonry lining, or it may have been built to alleviate flooding as it bisects the River's floodplain (See Section 4, below).

Mineral workings (PRN 04423)

Evidence of extractive industrial activity lies to the south of Macclesfield Road, close to the site, in the form of a rock cut chamber, flue and oven and possible associated buildings. The chamber was cut through sandstone and faced with coarsed sandstone rubble and stabilised by a brick vaulting and an arched entrance. The 1838 map of Leek shows a road known as Kiln Lane, which may bee associated with this site (see Section 3.3.3, above).

Highfield Hall and Park (PRN 40060)

This site is a landscape park and appears for the first time on the 1888 6" Ordnance Survey for the Leek and Lowe areas. It was built by Richard Badnall, a local silk dyer, in 1810 and occupied the site until demolition in 1940-1. Surviving elements include Home Farm and the former stable block. (VCH VII).

3.4 **Statutory and other designations**

Research has demonstrated that no statutory designations are applicable to the proposed development site. However, a number of listed buildings and a scheduled ancient monument are located adjacent to, and in the immediate vicinity of, the site.

4. **Potential impacts**

The research undertaken for this assessment has established that settlement existed in the vicinity of the site from the later early medieval period and that in the medieval and postmedieval period the town of Leek and the settlements along the Churnet Valley had a substantial connection with industries associated with silk-weaving and textile production and with dyeing processes. Dieulacres Abbey controlled mills off Mill Street in the medieval period. It is unclear if they also owned other mills along the river. A possible mill site has been mooted alongside the leat on the northwest side of the site. Settlement at Bridge End along the Macclesfield Road to the immediate south of the site is documented from 1641 onwards.

There are as yet no archaeological investigations or finds either on, or within, the vicinity of the study area. The absence of evidence for the prehistoric, Roman and early medieval periods does not negate the potential for remains of these dates to survive on the site. As the site lies within the floodplain, and along the banks of, the River Churnet there is the potential for prehistoric activity, the existence of palaeochannels (former courses of the river) and associated waterlogged environmental remains. The depth and sequence of deposits is currently unknown, as is the presence or absence of alluvial material which may seal archaeological remains to some depth.

The existing 1920s/1930s Churnet works within the southern half of the site are conjectured to have disturbed and truncated the upper horizons, probably to *c* 0.40m depth minimum. The spaces between these buildings are apparently undisturbed, although may contain services. The open ground to the north of the works appear to be undisturbed.

The site covers a considerable area, and there is a potential for significant deposits to exist (especially medieval mills, alluvium and palaeochannels). The lack of archaeological fieldwork in the vicinity and the presence of extant buildings further complicate consideration of the impact of the development.

The development also has the potential to have a **minor adverse** impact upon the remains of a possible mill along the leat on the northwest side of the site, the relationship between Bridge End Leat, the river and its floodplain.

Brindley Mill and other listed buildings, which lie adjacent to the southeast perimeter of site are of 18th and 19th century date. Residential and retail development along this side of the site may be argued to have a **moderate beneficial** effect on their visual setting, in comparison with the existing derelict industrial units on the site. This is of particular reference to the Brindley Mill, which is clearly visible when viewed from the south, north and east, from Macclesfield Road and Abbey Green Road, where it currently meets the Churnet Works entrance.

The Abbey Green Road footbridge, which is registered with the HER, lies within the site perimeter near to the current entrance and its condition will be affected by the proposed residential development. As the extent of this development is presently unknown, the affect is similarly indeterminate.

The proposal for inclusion of a sports ground within the existing open area to the north of the site, would provide a good level of continuity with the football ground which existed on the site of the Churnet Works in the 1920s.

5. Mitigation

The proposed development covers a considerable area and there is potential for significant archaeological and palaeoenvironmental deposits to exist, but this has not been tested.

Planning guidance indicates that field evaluation would be an appropriate approach, but given that the potential may not be realised a staged approach is recommended. The first stage would be to test potential by investigating the circumstances of deposition in this flood plain location. The initial evaluation may consist of a 2% sample of the undeveloped area of the northern part of the site, together with trenches to investigate available areas either side of the river.

Should the results of field evaluation prove negative at this stage no further mitigation may be required. Where results are positive further evaluation may be required, before a mitigation strategy can be formulated. Ideally at least the initial evaluation should be undertaken and submitted as part of the planning application, as it considered likely it will be a requirement of the planning authority before any application is determined.

Any site investigation works, would be concluded by production of an archaeological report (and appropriate publication) to be deposited for public consultation with the HER and a project archive to be deposited at a local museum.

6. **Residual effects**

Implementation of the mitigation proposed above should ensure that there are no residual effects on the historic environment and archaeological resource from the proposed development. Mitigation should ensure that adverse impacts are restricted in scope to **not significant**.

The historic environment is a non-renewable resource and therefore cannot be directly replaced. However mitigation through recording and investigation also produces an important research dividend that can be used for the better understanding of the county's history and contribute to local and regional research agendas.

7. **Publication summary**

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. Arthur Amos Associates is requested to consider the content of this section as being acceptable for such publication.

A desk-based assessment was undertaken on land off Macclesfield Road, Leek, Staffordshire (NGR SJ 97727 56939). The aims of this assessment were to summarise the character and extent of any identified features of the historic environment, indicate their significance, the impact of the proposed development and identify mitigation measures, where appropriate.

The town of Leek has a long held connection with the industrial production of silk, dyes and textiles. Many of the mills were located adjacent to the area which this assessment addresses, and with good reason. The site is traversed by the River Churnet which has been used, and its course modified for agricultural and industrial purposes, since medieval times. The monks of Dieulacres Abbey resided to the north of the site from as early as the 13th century. They maintained two mills through the medieval period, the exact location of which are unknown, although two were recorded during the Reformation in 1538-40 off Mill Street. In the 1740s, the river's course was manipulated to provide power to the corn mill built by the prominent canal engineer, James Brindley.

A leat of probable post-medieval date crosses the site and is considered to be of importance to the town's industrial history. At the southeast entrance to the Churnet Industrial Estate a stone footbridge of $17^{th}-18^{th}$ century date straddles the river. A further $18^{th}-19^{th}$ century industrial site, to the south of the assessment area, is recorded as a mineral works, associated with the extractive industry, and survives as a brick-vaulted, rock cut chamber.

There are a number of listed buildings adjacent to the site, most notably the mid 18th century Brindley Corn Mill, within the mill complex which is a scheduled ancient monument. Consideration will therefore need to be given to the visual setting of these structures which lie close to the proposed residential area.

The Churnet works' northern boundary meets an area of open ground which lies within the proposed development area. Although little is known archaeologically, beyond the physical presence of the leat, the grassed area lies within the river's floodplain and has the potential to contain alluvium, palaeochannels and well-preserved organic remains.

It is recommended that further staged archaeological investigation be undertaken on the site. Although the details of the design of the proposed development are not finalised, it is recommended that an evaluation with trenches on a grid array across the northern portion of the site and any available areas adjacent to the river within the southern half be undertaken. The field evaluation would aim to determine the presence or absence of significant features and their character if present, which would inform any subsequent mitigation strategy. This should include environmental sampling in order to locate and define potential palaeoenvironmental remains. Should no significant deposits be identified at this stage, then it may be argued that no further works be required. However should deposits be identified, then evaluation should extend into the area currently occupied by the Churnet Works themselves.

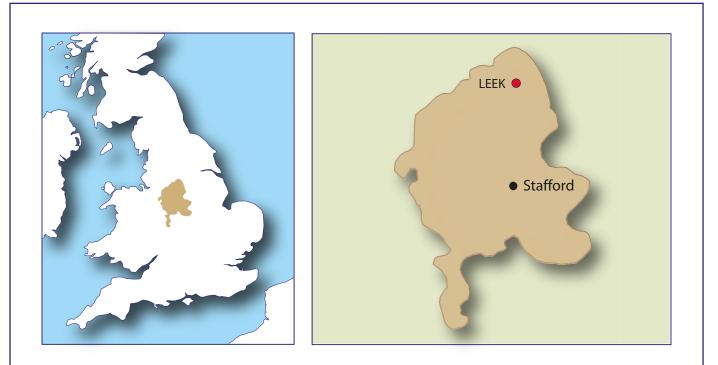
8. Acknowledgements

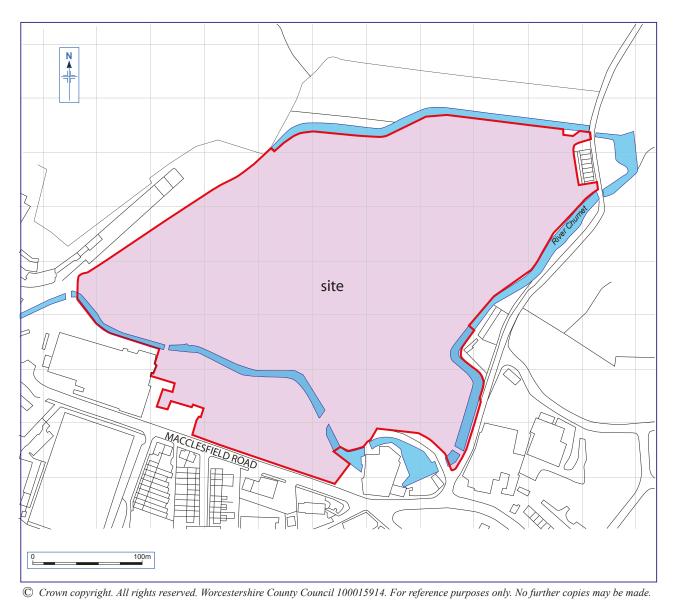
The Service would like to thank the following for their kind assistance in the successful conclusion of this project; Samantha Park (Arthur Amos Associates), Suzy Blake (Historic Environment Officer, Staffordshire County Council), the staff at Staffordshire's County Record Office and at the William Salt Library, Stafford.

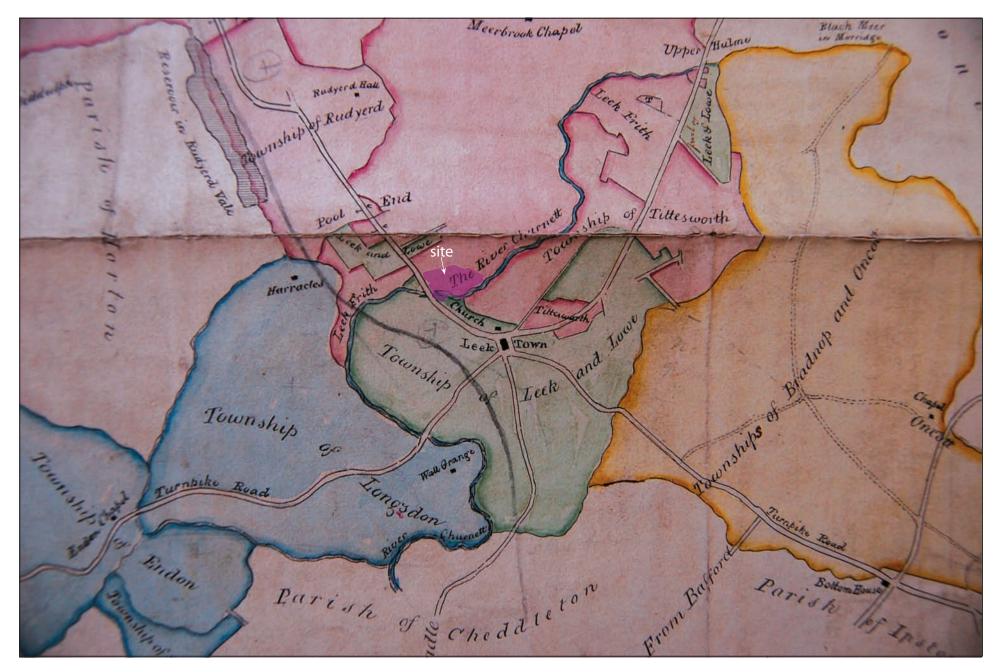
9. **Personnel**

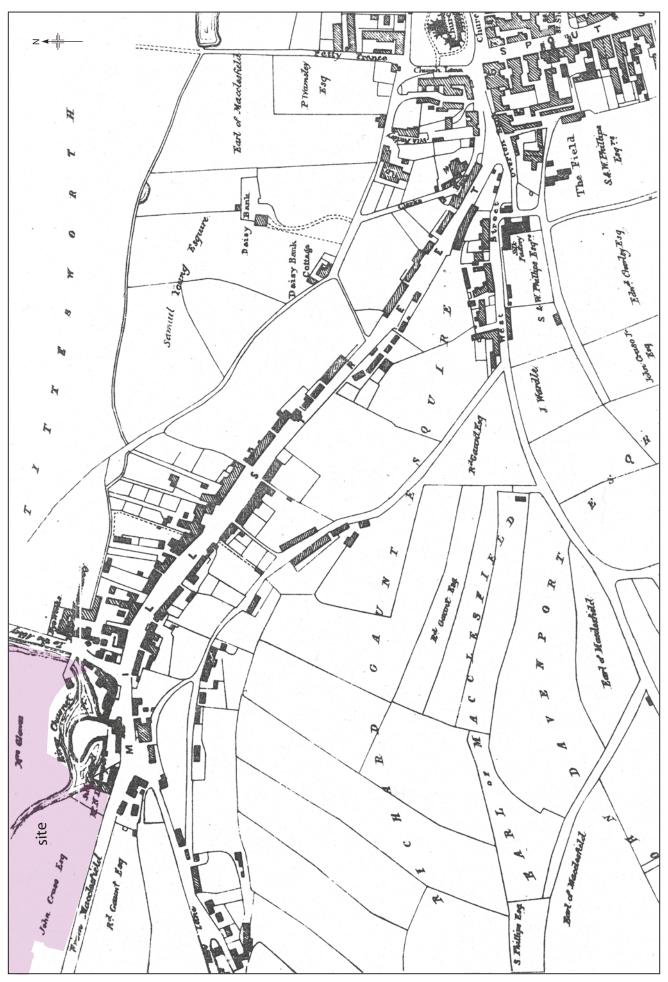
The assessment was undertaken by Justin Hughes. The project manager responsible for the quality of the project was Tom Vaughan. Illustrations were prepared by Carolyn Hunt.

Figures

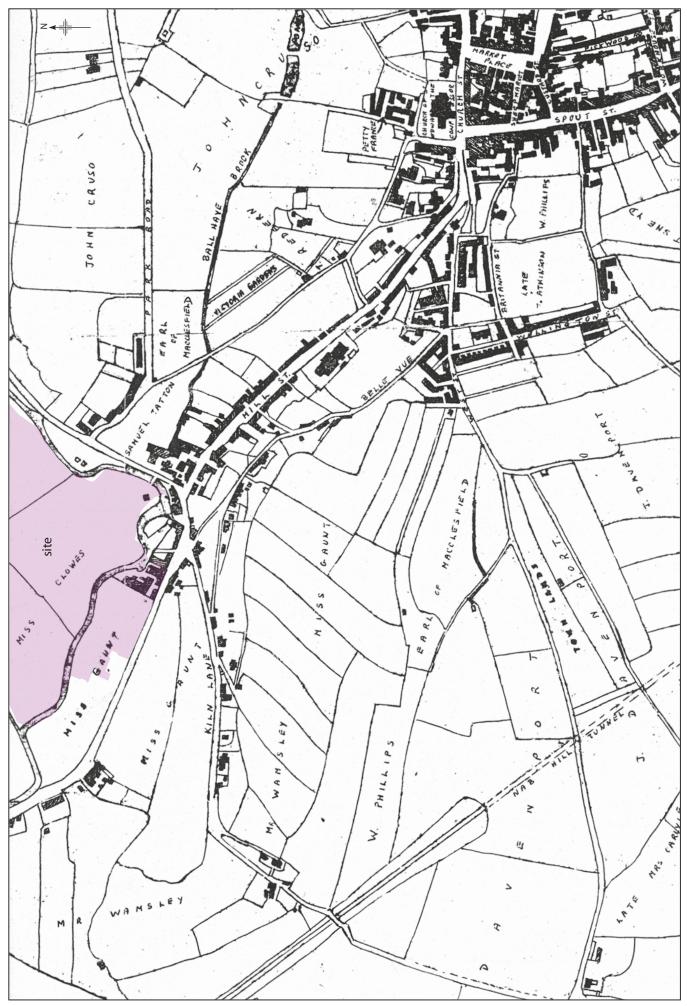


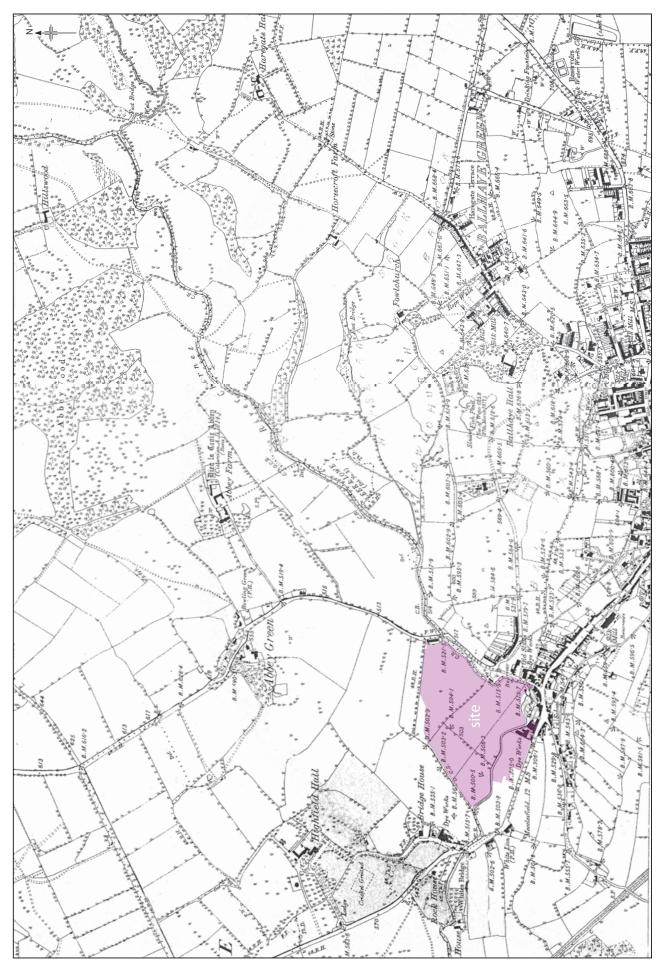






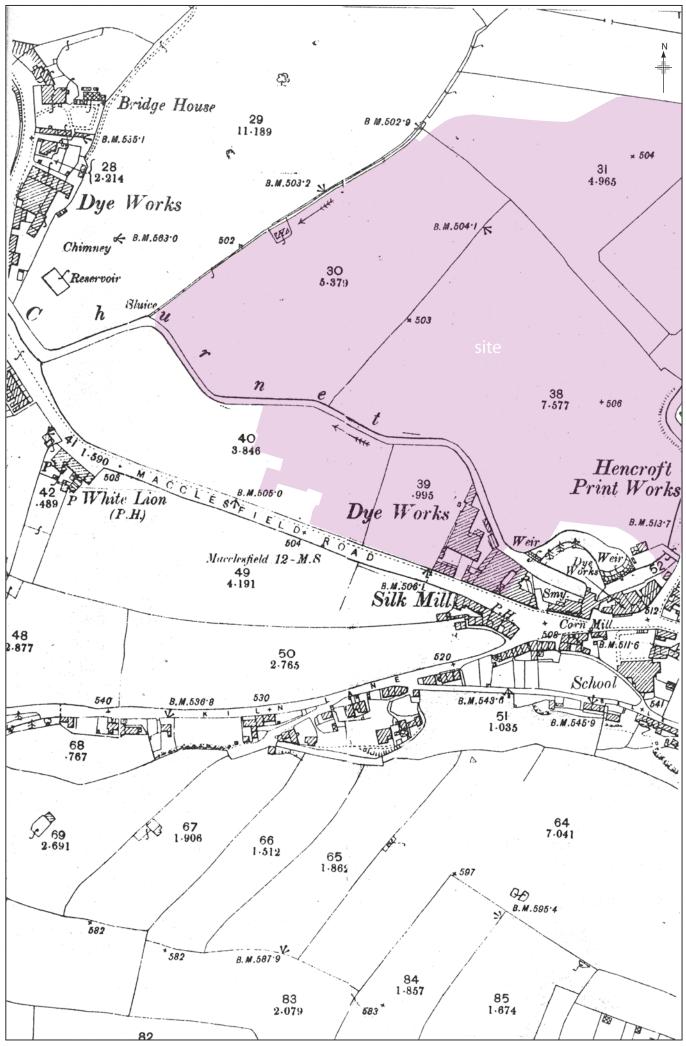
Leek in 1838

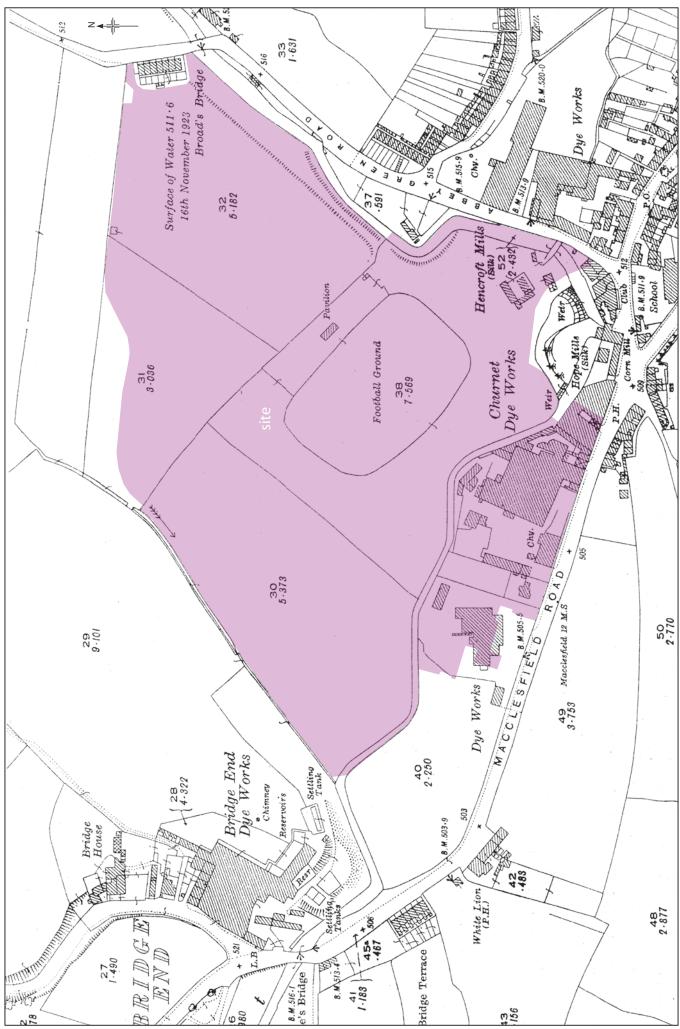




6" 1st Edition OS map of the site area, 1888

Figure 5

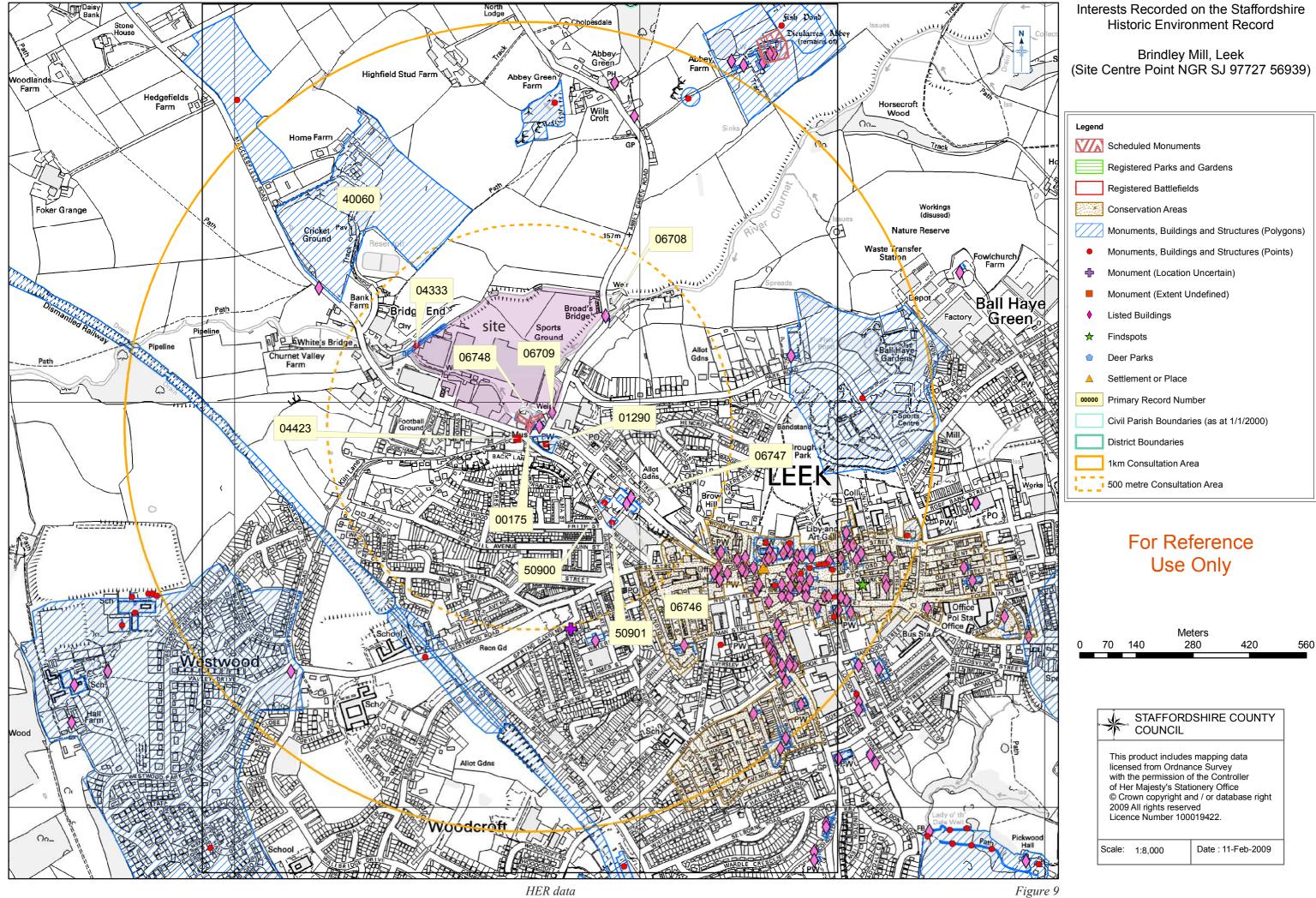




25" OS map of the site area, 1925

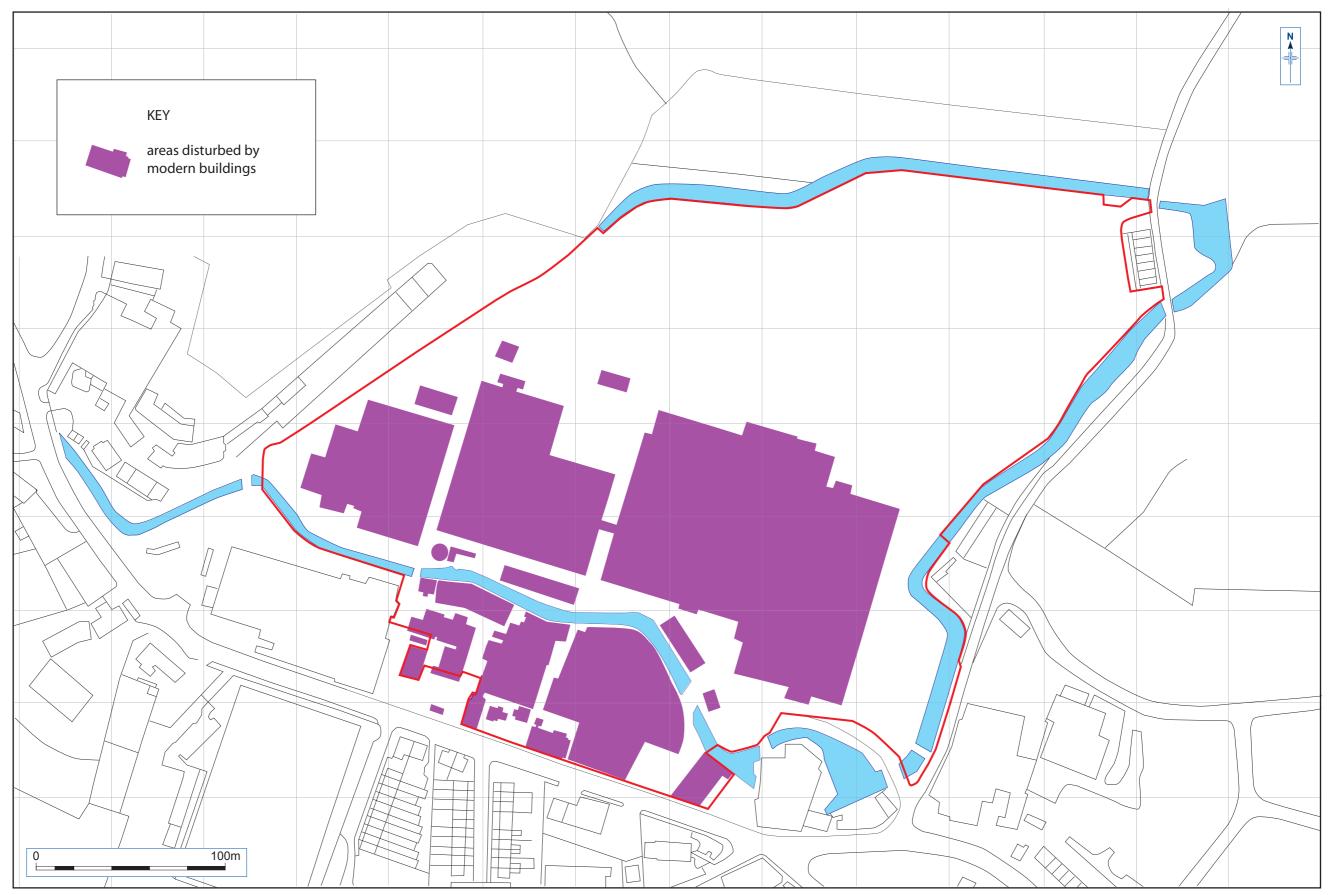


25" OS map of the site area, 1937



HER data

			Meters		
0	70	140	280	420	560



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Areas disturbed by modern building

Figure 10

Plates



Plate 1, the site from Broad's Bridge, facing south



Plate 2, the site from Abbey Green Road entrance, facing west



Plate 3, Brindley Corn Mill, from Mill Street, looking northwest



Plate 4, Brindley Corn Mill, from Abbey Green Road site entrance, looking southwest



Plate 5, 210 Mill Street, rendered building to left, facing southwest



Plate 6, the River Churnet stone footbridge, facing west



Plate 7, Leat, Bridge End, stone-lined section, facing southwest



Plate 8, Leat, Bridge End, facing south

Appendix 1 Teatures of the instoric cuvit onment registered with the filling						
Ref No.	Site name	Grid ref.	Туре	Date	Description	
PRN 00175	Brindley Corn Mill	SJ 97726 56952	Building	18 th century	Water Mill – stone within Scheduled Ancient Monument ST 177	
PRN 00349	Arrowhead findspot	SJ 983 565	Findspot	Bronze Age	Barbed flint arrowhead	
PRN 00350	Cock Low	SJ 9783 5644	Earthwork	Bronze Age	Round barrow	
PRN 01736	Axe-hammer findspot	SJ 98 56	Findspot	Bronze Age	Bronze Hammer	
PRN 01736	Arrowhead findspot	SJ 98 56	Findspot	Neolithic/Bronze Age	Leaf arrowhead	
PRN 04333	Leat, Bridge End	SJ 9746 5715	Ditch structure	Post-medieval	Water Mill component	
PRN 04423	Industrial Site	SJ 9769 5691	Earthwork	Post-medieval	Mineral workings	
PRN 06655	St Edward's Church	SJ 98319 56630	Building	Medieval	Church – stone and brick	
PRN 06708	Broad's Bridge	SJ 9791 5721	Stone structure	Post-medieval	Road bridge	
PRN 06709	Abbey Green Road Footbridge	SJ 9778 5697	Stone structure	Post-medieval	Footbridge	
PRN 06746	The Big Mill	SJ 9796 5675	Building	Mid-19 th century	Mill – stone and brick	
PRN 06747	The Big Mill	SJ 9797 5676	Structure	Mid-19 th century	Boundary wall – stone	
PRN 06748	210 Mill Street	SJ 9775 5694	Building	Post-medieval	Inn/club – stone	
PRN 40060	Highfield Hall Park	SJ 9730 5750	Building/Park	Post-medieval	Landscape Park	
PRN 50214	Leek Market	SJ 98393 56569		Medieval	Market Place	
PRN 50900	The Shade Mill	SJ 9791 5675	Building	Late19 th century	Textile mill - brick	
PRN 50901	The Print Works	SJ 9793 5670	Building	Late19 th century	Print works - brick	
EST 116	Leek		Assessment		Survey	
EST 893	Leek		Assessment		Survey	
EST 895	Leek		Assessment		Survey	

Appendix 1	Features of the historic environment registered with the HER
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