

Sprotbrough Weir

Sprotbrough

South Yorkshire

Archaeological Desk-based Assessment

Summary

An Archaeological Desk-based Assessment was undertaken of Sprotbrough Weir, located south of the village of Sprotbrough in advance of proposals by the Environment Agency to establish a fish-pass at the southern end of the weir. The weir was in operation by the early 18th century with a walk mill also recorded at the southern end of the weir. The walk mill was used for processing cloth until the late 18th century and was subsequently used for grinding flint for use in pottery manufacture. The mill went out of use in the late 19th century and the building demolished in the early 20th century.



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Report Information

Client: Environment Agency
Address: Phoenix House, Global Avenue, Leeds, LS11 8PG
Report Type: Desk-based Assessment
Location: Sprotbrough Weir, Sprotbrough
County: South Yorkshire
Grid Reference: SE 5376 0140
Report Number: 1949
Project Number: 3416
Site Code: SWE
Date of fieldwork: 1st April 2009
Date of report: April 2009
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Authorisation for
distribution: -----

ISOQAR ISO 9001:2000

Certificate No. 125/93

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1 Introduction

Archaeological Services WYAS (ASWYAS) was commissioned by the Environment Agency to undertake an archaeological desk-based assessment of Sprotbrough Weir, Sprotbrough, South Yorkshire. The assessment was undertaken in advance of proposals to install a fish pass on the southern side of the weir.

Site location and topography

Sprotbrough Weir crosses the River Don between the south bank and a small island located within the river, approximately 750m to the south of the village of Sprotbrough, centred at SE 5376 0140 (Figs 1 and 2). It lies approximately 8km to the south-west of Doncaster and 6km north-west of Mexborough. The weir lies at a height of approximately 10m AOD and the land rises rapidly to the north-west and south-east.

The study area comprises all the land within a 250m radius of the centre of the proposed development site (Fig. 2).

Geology and soils

The underlying solid geology within the proposed development site comprises Lower Magnesian limestone (BGS 1993), overlain by shallow, well drained calcareous fine loamy soils (Soil Survey of England and Wales 1980).

2 Methodology and Sources

The following sources of information have been consulted in order to meet the requirements of the desk-based assessment and are in line with guidelines laid down by the Institute for Archaeologists (IfA 2008).

Archaeological archives and databases

Information on previous archaeological finds and investigations within the study area was obtained from the South Yorkshire Sites and Monuments Record (SMR), Sheffield, and from the Archaeology Data Service website (<http://ads.ahds.ac.uk>). The Doncaster Archives was consulted for historic maps and plans, antiquarian histories and other relevant documentary sources.

Listed Buildings and Scheduled Monuments

Details of Listed Buildings were obtained from the SMR and English Heritage's 'Images of England' website (www.imagesofengland.org.uk). Information on Scheduled Monuments was obtained from the SMR, the Archaeology Data Service website and the government's 'MAGIC' website (www.magic.gov.uk).

Published and unpublished sources

A range of published and unpublished material has been researched and consulted. This includes academic articles together with general sources on the area and its wider archaeological and historical background. These are listed in the bibliography.

Geological and soil surveys

Information on the underlying geology and soils within the study area was taken from data collected by the British Geological Survey (1993) and the Soil Survey of England and Wales (1980).

Walkover survey

A walkover survey was undertaken on the 1st April 2009, in order to assess the survival of previously recorded and documented features, to identify any further archaeological sites visible on the ground and to determine the potential for any future archaeological investigations.

3 The Study Area

Identified archaeological sites, buildings and features

A total of 14 archaeological sites, features and historic buildings have been identified within the study area. These are discussed below and have been catalogued in Section 4.

Designated sites and areas

The study area contains three Listed Building (A to C). No Scheduled Monuments, Registered Parks and Gardens or Registered Battlefields lie within the study area.

Previous archaeological investigations

No archaeological investigations have been undertaken within the study area.

Archaeological background, sites and features

Palaeolithic to Bronze Age periods

The earliest human activity within northern Britain probably followed the retreat of the ice sheets around 10,000 BC, as small nomadic groups moved north with the improving climate. Evidence for human activity in the Palaeolithic period is sparse in South Yorkshire, although stray finds of flint objects, such as those found in Edlington Wood, located approximately 2.8km south of the Sprotbrough Weir (NMR No. SK 59 NE 23), demonstrates that the landscape was utilised during this time (Manby 2003).

The post-glacial landscape largely comprised treeless tundra, but by the early Mesolithic period, about 7600 BC, this gave way to woodland as the climate improved. Such environmental change increased the potential for human activity as the spread of woodland

led to an expansion in animal and plant resources. The nomadic nature of Mesolithic groups mean that they have left few remains and archaeological evidence for this period is largely limited to finds of flint implements (Manby 2003), such as the scatters of worked flint found approximately 2.7km to the south of Sprotbrough Weir (NMR No. SK 59 NW 58; Wymer and Bonsall 1977), and 2.7km to the south-west (NMR No. SK 59 NW 60).

The Neolithic and early Bronze Age periods are traditionally seen as marking the introduction of farming, as nomadic hunter-gatherer subsistence gave way to agriculture and the domestication of animals. The population probably remained semi-nomadic throughout this period however, and evidence for sites is typically represented by scatters of flint, pottery and burnt stone (Manby *et al* 2003). The Neolithic and early Bronze Age periods are also characterised by the introduction of large ceremonial and funerary monuments (Manby *et al* 2003), such as the King Hengist Rein Long Cairn, situated approximately 1.3km north of the proposed development site (Scheduled Monument No. 13238). Although no evidence for human activity in the Neolithic and Bronze Age periods has been recorded in the study area, excavations at a rock shelter in Scabba Wood, approximately 1.2km to the north-west of Sprotbrough Weir, recorded at least two burials which appear to have been placed within a cist, further fragments of burnt human bone, pottery and worked flint (NMR No. SE 50 SW 52; Chamberlin 1998).

Iron Age and Romano-British period

The typical settlement pattern in Yorkshire by the Iron Age was of rural farmsteads surrounded by field systems and enclosures, linked together by a series of trackways (Haselgrove 1999). No Iron Age activity has been recorded in study area, although cropmarks possibly representing settlements have been identified from aerial photographs in Cusworth Country Park (NMR No. SE 50 SE 84), approximately 3km north-east of the proposed development site.

By the later Iron Age period, Sprotbrough lay on the boundary between the Brigantes and the Coritani. After the Romans invaded England, the Brigantes, were initially allied to the Romans under their Queen Cartimandua, although in AD 68, Cartimandua was deposed and the Romans invaded the territory. By AD 72, the area was in the full control of the Romans. The nature of the relationship between the Coritani and the Romans during the early stages of the invasion is not known (Bennet 1999), however it is thought that by AD 47 the Roman army had gained full control of the Coritani's territory (Creighton 1990).

Evidence for Roman activity in the study area is provided by a hoard of late 3rd century AD coins (2), found approximately 135m north of Sprotbrough Weir and a cast bronze bead was found approximately 200m to the west (1). Later Iron Age and Roman pottery was also found at the Scabba Wood rock shelter, along with a number of coins which may represent a disturbed coin hoard (NMR No. SE 50 SW 52; Chamberlin 1998). Other Roman finds found near the study area include two beehive gritstone querns, found approximately 650m to the east of the proposed development site (NMR No. SE 50 SW 34), and a Roman coin was

found in a back garden in Warmsworth in 1962, approximately 850m to the south (NMR No. SE 50 SW 15).

Post-Roman to Modern periods

There is little archaeological evidence for settlement in South Yorkshire during the post-Roman and Anglo-Saxon periods. After the withdrawal of the Romans, much of West and South Yorkshire lay in the kingdom of Elmet, which was conquered by the Northumbrian kingdom in the early 7th century. The study area is located near the southern boundary of the territory held by the Northumbrian kingdom at this time (Loveluk 2003).

The settlements of Sprotbrough and Warmsworth are probably later Saxon in date and both appear in the Domesday Book (Williams and Martin 1992). The first reference to a mill at Sprotbrough is in a charter from 1279, which describes how William Fitzwilliam let to Henry Carpenter the cornmill. A Deed of Feoffment from 1546 refers to four water mills in estates at Sprotbrough and Plumtree (Nottinghamshire) held by Philip Copley, while a lease from 1629 between William and Godfrey Copley to Francis Newall included 'waterbourne mills standing in and upon the river Dun' (WEA Local History Group 1969).

The first plan to show a weir (5), not reproduced here, in this location was drawn probably by 1705 (WEA Local History Group 1969, 45). The plan also shows two mills positioned on either side of the weir, which probably represent Mill House corn mill (4) and what was later called Flint Mill (8). The 1705 plan also shows the tenterfield – where the tenter frames which held the fulled cloth to dry were placed – on the northern side of the river (WEA Local History Group 1969, 45).

Palmer's plan of 1722 (Fig. 3) reveals that Flint Mill, which lay immediately to the south of the Sprotbrough Weir at the site of the proposed fish pass, was earlier known as 'Walk Mill' (8). The process known as 'walking' (also known as 'fulling') is where the cloth was trampled by foot in water to remove the grease and dirt and to allow the cloth to shrink and thicken. The cloth was then stretched across the tenter frames (WEA Local History Group 1969, 45). Palmer's plan of 1722 shows the Sprotbrough Ferry (6), which lay a short distance to the south of the weir, and was in use until the Sprotbrough Bridge was built in the mid 19th century (C). The 1722 plan also shows 'New Cut', which may indicate that the river on the southern side of the island was deliberately cut to by-pass a natural meander in the River Don.

A lease from 1756 reveals that Godfrey Copley let the mill to Solomon Holmes, a fellmonger and oil leather dresser and one of the terms of the lease included the upkeep of the weir, using wood and stone provided by Godfrey Copley (WEA Local History Group 1969, 46).

The building appears to have been used as walk mill until the late 18th century, after which it was used as a flint mill. The flint processed here was first burnt in kilns located near the mill before being reduced to fragments by stampers. It was then ground to a powder in the mill

using power provided by dual wheels. The ground flint was then mixed with potters clay (WEA Local History Group 1969, 47).

The Warmsworth Tithe map of 1838 shows the mill as an 'L' shaped building, with the northern range appearing to lie within the River Don, although the south-eastern side of the weir is shown abutting a projected area of land. A second, rectangular building is shown to south-east of the 'L'-shaped building (Fig. 6). The layout of the mill is largely confirmed by the 1847 Sprotbrough Tithe map (Fig. 7). White's Directory of 1838 names the occupier of the flint mill as Joseph Green although by 1848 the flint mill was occupied by Mr Samuel Barker, the proprietor of the Don Pottery at Swinton (WEA Local History Group 1969).

The building seems to have been remodelled by 1854, now appearing as a north-west to south-east orientated rectangular building, with a north-east to south-west projecting range on the south-west side (Fig. 9). The mill now appears to be surrounded on three sides by land. A series of small buildings, possibly representing cottages, lie to the south-east. The 1854 Ordnance Survey Map labels the building as 'Old Mill' and while it is known that mill was briefly unoccupied in the mid-19th century, the Burton family are recorded as living there in 1868. In 1872 the building was again in use as a flint mill and it was occupied by a Mr Harris, who managed the mill for a Spanish company. The flint mill was closed for the last time in the 1880s (WEA Local History Group 1969). The building is last shown on the 1903 Ordnance Survey map, after it had gone out of use (Fig. 10) being demolished sometime before 1931.

The Corn Mill, located on the island on the north side of the weir, remained in use until the 1930s (4; WEA Local History Group 1969, 48). Lime extraction and processing also formed an important part of the local economy in Sprotbrough, and in the mid-18th century, a hamlet housing workers from the nearby Levitt Hagg Quarry lay in the southern end of the study area (7), close to the site of lime kiln (10). A second limestone quarry and associated kilns is shown on the Sprotbrough Tithe map of 1847 in the north-east of the study area.

Catalogue of Archaeological Sites and Buildings

Archaeological features

Catalogue entries have been ordered geographically from west to east, and given a numerical identifier, with their locations shown on Figure 2. The catalogue entry includes a National Grid Reference (NGR) number. Where an archaeological feature has an associated 'SMR' number the information has been obtained from the South Yorkshire SMR. All further information is referenced in the bibliography.

1. Roman cast bronze bead

SMR 2829

SE 5356 0140

A Roman cast bronze bead was found in 1983, approximately 30m north of Nursery Lane.

2. Roman coin hoard **SMR 2634** **SE 5366 0148**

A Roman coin hoard was found using a metal detector spread over an area approximately 20m wide on the north side of Nursery Lane. The hoard includes two silver coins of Postumus (AD 259 to AD 268), five of Claudius Gothicus (AD 268 to AD 270) and one of Salonina (AD 268).

3. Limestone quarry and kilns **SE 5369 0154**

The site of a quarry is shown on the Sprotbrough Tithe map of 1847, located to the north of the Sheffield and South Yorkshire Canal (Fig. 7). The Ordnance Survey map of 1854 shows a number of lime kilns located within the quarry (Ordnance Survey 1854; Fig. 9).

4. Mill House corn mill **SMR 4174/02** **SE 5375 0146**

Mill House corn mill was located on the island within the River Don (Pierson 1971). It was built by the early 18th century and was in use until the 1930s (WEA Local History Group 1969).

5. Sprotbrough Weir **SE 5375 0140**

A weir had been constructed across the River Don near Sprotbrough by 1705 (WEA Local History Group 1969).

6. Sprotbrough Boat Ferry **SE 5376 0130**

The Sprotbrough Boat Ferry, shown on Palmer's Plan of 1722 (Fig. 3), was used for crossing the River Don until the construction of Sprotbrough Bridge in 1864.

7. Quarrying hamlet and meeting house **SMR 4171** **SE 5376 0117**

A hamlet housing workers from the Levitt Hagg Quarry was located on the south side of the River Don. The first dwelling on the site was constructed by the mid-18th century, and by 1925 around 24 dwellings housing some 100 people were present on the site (Pierson 1971).

8. Site of Walk Mill and Flint Mill **SMR 4174/01** **SE 5377 0137**

A building situated on the south side of the River Don adjacent to the weir is first shown on a plan dating to 1705. The first known use of the building is as a walk mill for processing cloth, although by the late 18th century it was used as a flint mill, providing ground flint for use in pottery production. The mill finally went of use in the late 19th century and was demolished in the early 20th century (WEA Local History Group 1969). A series of earthworks were identified during the site visit which may represent structural remains (Plate 3).

9. Crane **SE 5377 0134**

The site of crane is shown on the Ordnance Survey map 25 inch editions of 1892 (not reproduced here) and 1903 (Fig. 10) on the south side of the River Don (Ordnance Survey 1892; 1903).

10. Lime kiln **SMR 4172** **SE 5380 0118**

A lime kiln was located at the northern end of Levitt Hagg hamlet. It may have been the earliest of the kilns constructed in this area and was in use by 1755 (Pierson 1971).

11. Sheffield and South Yorkshire canal **SE 5385 0159**

The Sheffield and South Yorkshire Canal was cut by the 19th century (Figs 7 and 8).

Listed Buildings

The Listed Buildings catalogue entries have been ordered geographically from west to east, and given an alphabetical identifier, with their locations shown on Figure 2. The catalogue entry includes a National Grid Reference (NGR), and the SMR Number and Listed Building Reference (e.g. Ref. 6/96) where applicable. The Images of England reference number has also been included (e.g IoE No. 5329646).

A. Boat Inn **IoE No. 334571** **SE 5365 0140**

The Boat Inn, formerly known as Boat Farmhouse, was built in the 17th century. It was altered in the mid 19th century and in 1985. It is Grade II listed (ref. 7/150).

B. The Toll House **IoE No. 334559** **SMR 4175** **SE 5377 0157**

The Toll House is located at the north side of the bridge over the River Don. It was built in 1849 for Sir Joseph William Copley and is Grade II listed (ref. 7/138).

C. Sprotbrough Bridge **IoE No. 334861** **SE 5387 0147**

Sprotbrough Bridge was probably built in 1864 by Benjamin Brundell and William Arnold for Sir Joseph William Copley. The central span was replaced in 1897 using ironwork by Newton Chambers & Co. Ltd of Sheffield. It is Grade II listed (ref. 1/87).

5 Conclusions

The site of the proposed fish-pass at the southern end of Sprotbrough Weir is in an area formerly occupied by a walk mill and flint mill. The weir and mill are first depicted on a plan drawn in around 1705, although as there is documentary evidence for water mills in Sprotbrough from at least the 16th century, it is possible the site was occupied from the later Medieval period. The earlier cartographic evidence suggests the building lay partially within the River Don, although the Ordnance Survey mapping from the mid-19th century onwards shows it surrounded on three sides by land, possibly formed through deliberate landscaping. The mill is known to have been in use until the late 19th century and was demolished in the early 20th century. Earthworks probably representing the remains of the mill were identified on the site during the walkover survey (Plate 3).

Given the potential for archaeological remains at the location of the proposed fish pass, further archaeological investigation may be required to determine the nature and extent of any remains within the site. This should form part of an overall archaeological strategy to be agreed with the South Yorkshire Archaeology Service.

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