

**An Archaeological Watching Brief at
Long Horse Bridge, Shardlow Greenway,
Derbyshire**



View of the River Trent from the eastern bridge platform area

ARS Ltd Report 2011/52
May 2007

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Archaeological Research Services Ltd

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EXECUTIVE SUMMARY

In May 2011 Archaeological Research Services Ltd were commissioned by ECUS Ltd on behalf of British Waterways to undertake an archaeological watching brief at Long Horse Bridge, Shardlow Greenway, Derbyshire. The monitoring was carried out during groundworks for the construction of a bridge across the River Trent, and associated access route for the works.

The work involved a topsoil strip of a temporary haul route from Wilne Lane car park in Shardlow to the bank on the west side of the river, along with the excavation of the river banks themselves for the insertion of the bridge abutments.

No features of archaeological significance or buried land surfaces were revealed.

1. INTRODUCTION

1.1. Location and scope of work

- 1.1.1. In May 2011 Archaeological Research Services Ltd were commissioned by ECUS Ltd on behalf of British Waterways to undertake an archaeological watching brief at Long Horse Bridge, Shardlow Greenway, Derbyshire (Fig. 1). The work was carried out during groundworks for the construction of a footbridge across the River Trent.

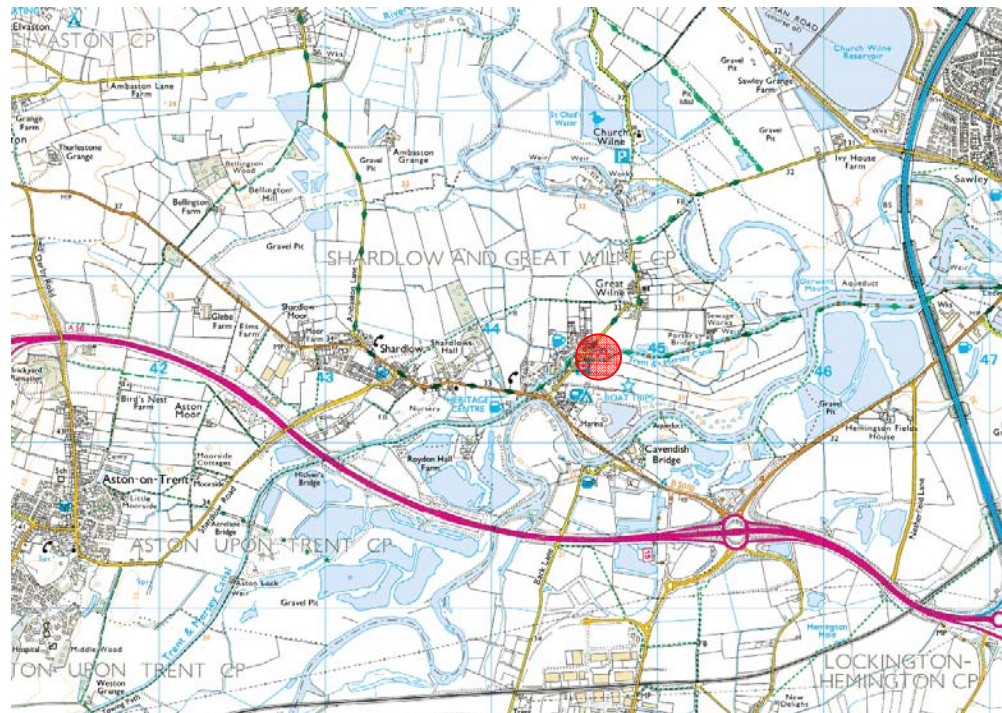


Fig. 1 Site location

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- 1.1.2. The site is centred at NGR SK 44587 30475 and consists of a stripped access route running from the public car park on Wilne Lane to the area of the main excavation on the east and west banks of the River Trent close to the gravel pits, now a series of fishing lakes. The site is close to the M1 motorway and the A50.

1.2. Geology and preservation

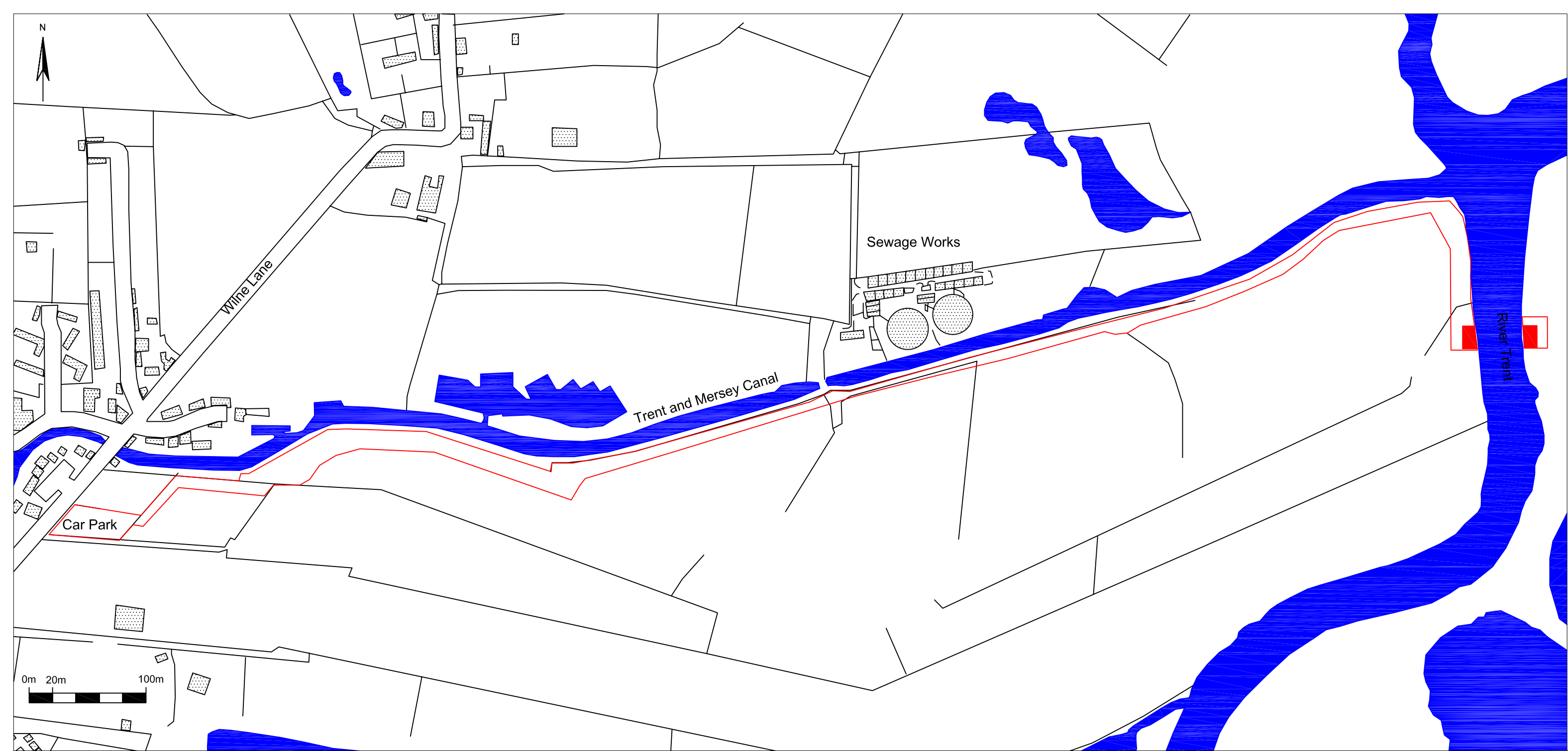
- 1.2.1 The solid geology of the site consists of Branscombe Mudstone Formation with Hemington Member silt and gravel towards the site compound, Branscombe Mudstone Formation with clay silt sand and gravel alluvium on the East and West of the river (British Geological Survey 2007).
- 1.2.2 The area of the site was heavily flooded on several occasions, notably in 1965. This may have affected the preservation of any remains originally in the area.

1.3 Historical Background

- 1.3.1 The Trent and Mersey Canal was constructed in 1776 through an Act of Parliament and was opened in 1777. It linked the Trent and Mersey rivers in order to assist the Staffordshire pottery industry.
- 1.3.2 The Derbyshire HER records 16 sites within 1km of the development area. These records suggested that remains of Roman to Post-Medieval origin may have been present in the immediate area of the site.
- 1.3.3 Due to the location of the site on the gravel terraces of the River Trent it was possible that prehistoric remains may have been present. Prehistoric remains have previously been discovered in gravel quarries within or close to the village of Shardlow, most notably the Hanson Logboat, discovered at Hanson's Quarry in Shardlow in 1998 (www.derby.gov.uk).

2. METHODOLOGY

- 2.1 The specification required that a watching brief should be carried out to observe any ground works taking place for the proposed development, in order to identify any potential archaeological remains. This involved monitoring the topsoil stripping of a temporary haul route from the compound at Wilne Lane public car park to the bridge construction site, and the excavation of the areas on the east and west banks of the River Trent for the bridge abutments.
- 2.2 The temporary haul route was stripped in 100-150mm thick layers using a tracked excavator and a toothless ditching bucket. The abutment trenches were also excavated by machine, using a back-acting toothless ditching bucket under continuous archaeological supervision. The machine removed the topsoil (001) and (006) in level spits until the first potential archaeological horizon was exposed. The surface was then cleaned as necessary using hand tools in order to expose any archaeological features.
- 2.3 A single context recording system was employed. Each layer encountered was given a unique context number and a full written description. Photographs were taken in black and white print and colour transparency in order to record the ground work.







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Site Code: LHB11
 Date: 21/06/2011
 Drawn: KM

Figure 2: Site Plan

Key:

-  Area of excavations
-  Area of deep excavations around bridge abutments
-  Waterways
-  Buildings

Notes:

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3. RESULTS

3.1 *Topsoil (001)*

The topsoil layer on the western bank and on the temporary haul route was dark greyish brown in colour and consisted of sandy silt with small pebble inclusions. It was consistent in colour and texture throughout this area of the site. The topsoil was very shallow in depth along the temporary haul route, at a maximum of 0.2 metres, but deepened to a maximum of 0.3 metres at the western river bank.

3.2 *Subsoil (002)*

The subsoil (002) covered the whole of the temporary haul route and was not excavated to any depth. It consisted of dark brownish orange sandy clay with a small amount of gravel included in the matrix.

3.3 *Debris Deposit (003)*

Approximately 15 metres from the start of the topsoil strip on the temporary haul route a layer of modern debris was uncovered underlying the topsoil (001) but overlying the subsoil (002), approximately 10 metres in length and stretching the width of the excavated area (fig. 3). The layer consisted of a coarse dark deposit of cinders and clinker with a large amount of broken pottery, broken glass, metal waste and animal bone included. The animal bone appears to be from butchered livestock. Pottery from within the deposit dates it to the Victorian era and the 20th Century.



Figure 3: View of the stripped temporary haul route. The dark band shows the location of the debris deposit (003).

3.4 *Subsoil (004)*

The subsoil deposit from the western bank of the river differs substantially from the subsoil along the haul route. This area of the riverbank is in the lee of a bend

in the river, causing a large build up of silt and organic material. The deposit was dark greyish black in colour and very silty. The high organic component was indicated by the colour and by a strong, almost peaty smell. The true depth of the subsoil deposit is unknown as the base had not been reached when the excavations reached their limit. The trench was 8.6 metres in length by 4.5 metres in width and was excavated to a depth of 1.6 metres. At this depth the base of the trench was beneath the water table and the natural substratum or any other subsequent layers were not visible. It is unlikely that this deposit is very ancient as modern debris (for example polythene wrapping and fragments of Staffordshire Blue and White ware pottery) was found within it, to a depth of approximately 1.2 metres.

3.5 *Subsoil (005)*

The subsoil from the eastern bank of the river was significantly different to the subsoil on the western bank. It was mid orangey brown in colour and consisted of silty sand with some patches of gravel (fig. 4). Patches of darker clayish material within the deposit indicated the previous location of trees on the bank. A large amount of root disturbance was evident, further indicating that the bank had been previously wooded.



Figure 4: View of the stripped eastern bank showing the subsoil (005).

3.6 *Topsoil (006)*

The topsoil on the eastern bank was similar to that of the western side, however, it was slightly more orange in colour and was present to a depth of approximately 0.4 metres.

3.7 No features, finds or deposits of archaeological significance were revealed during the excavation process.

4. CONCLUSIONS

- 4.1. The spread of debris (003) is likely to be a dump of household rubbish occurring at some point during the early 20th century. The deposit is not archaeologically significant.
- 4.2. There were no archaeological features, deposits, buried land surfaces or small finds located within the trenches.

5. ARCHIVE DEPOSITION AND PUBLICATION

- 5.1. A digital and paper archive will be prepared and deposited with Derby Museum and Art Gallery by September 2011. This will consist of all primary written documents, plans, sections, photographs and electronic data associated with the project. An accession number has been requested from Derby Museum and Art Gallery. A request was submitted prior to commencement for an accession number and this is still forthcoming.
- 5.2. A summary of the project, with selected drawings, illustrations and photographs will be submitted within 2 years of the completion of the project to the Derbyshire Archaeological Journal for publication. The results of the work will be published at least in summary form in the Derbyshire Archaeological Journal.

6. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

- 6.1. Any publicity will be handled by the client.
- 6.2. Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

7. STATEMENT OF INDEMNITY

- 7.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

8. ACKNOWLEDGEMENTS

- 8.1. Archaeological Research Services Ltd would like to thank all those involved in this project, in particular Andrew Burn of ECUS Ltd, Jamie Walton of May Gurney and Dave Barrett of Derbyshire County Council.

9. REFERENCES

British Geological Survey (2007). *Geological Survey 1:50000 Map*. Southampton: Ordnance Survey.

Derbyshire County Council *The Hanson Logboat*.
<http://www.derby.gov.uk/LeisureCulture/MuseumsGalleries/ArchaeologytreasureTheHansonLogboat.htm> (Accessed June 2011)

APPENDIX I: CONTEXT REGISTER

Context Number	Context Description
001	Topsoil western side of the site
002	Subsoil under stripped access route
003	Debris layer
004	Organic subsoil on western riverbank
005	Subsoil on eastern bank
006	Topsoil on eastern bank

APPENDIX II: ARCHIVE CONTENTS REGISTER

**An archaeological watching brief at Long Horse Bridge, Shardlow
Greenway, Derbyshire**

ARS 2011/52

Archive Contents Register

- 1 x Watching brief report – Hard copy
- 1 x Photographic register

- 52 x Black & white prints
- 52 x Negatives for above
- 52 x Colour slides

- 1 x Context register
- 6 x Context sheet

- 1 x Digital CD: containing
 - Watching brief report
 - Digital Photographs



APPENDIX III: OASIS FORM

OASIS DATA COLLECTION FORM: England

[List of Projects](#) | [Manage Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

[Printable version](#)

OASIS ID: archaeol5-100470

Project details

Project name	Long Horse Bridge, Shardlow Greenway
Short description of the project	In May 2011 Archaeological Research Services Ltd were commissioned by ECUS Ltd to undertake an archaeological watching brief at Long Horse Bridge, Shardlow Greenway, Derbyshire. The monitoring was carried out during ground works for the construction of a bridge across the River Trent, and associated access route for the works. The work involved a topsoil strip of a temporary haul route from Wilne Lane car park in Shardlow to the bank on the west side of the river, along with the excavation of the river banks themselves for the insertion of the bridge abutments. No features of archaeological significance or buried land surfaces were revealed.
Project dates	Start: 06-05-2011 End: 20-06-2011
Previous/future work	No / Not known
Any associated project reference codes	ARS 2011/52 - Contracting Unit No.
Type of project	Recording project
Site status	None
Current Land use	Grassland Heathland 2 - Undisturbed Grassland
Monument type	NONE None
Significant Finds	NONE None
Investigation type	'Watching Brief'
Prompt	Direction from Local Planning Authority - PPS

Project location

Country	England
Site location	DERBYSHIRE SOUTH DERBYSHIRE SHARDLOW AND GREAT WILNE Long Horse Bridge, Shardlow
Study area	2.00 Kilometres
Site coordinates	SK 44587 30475 52.8695786347 -1.337543349980 52 52 10 N 001 20 15 W Point

Project creators

Name of Organisation	Archaeological Research Services Ltd
----------------------	--------------------------------------

Project brief originator	ECUS Ltd
Project design originator	ECUS Ltd
Project director/manager	James Brightman
Project supervisor	Kate Mapplethorpe
Type of sponsor/funding body	Developer
Name of sponsor/funding body	May Gurney

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Derby Museum and Art Gallery
Digital Contents	'none'
Digital Media available	'Images raster / digital photography','Text'
Paper Archive recipient	Derby Museum and Art Gallery
Paper Contents	'none'
Paper Media available	'Context sheet','Photograph','Plan','Report','Unpublished Text'

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Watching Brief at Long Horse Bridge, Shardlow Greenway, Derbyshire
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APPENDIX IV: SPECIFICATION



ECUS

environmental • consultancy

Long Horse Bridge, Shardlow Greenway

Written Scheme of Archaeological Investigation

Report prepared by:
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March 2011



ECUS Ltd

Report to: British Waterways
Head Office
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Report Title: Long Horse Bridge, Shardlow Greenway – Written Scheme of
Archaeological Investigation

Revision: **Final**
Issue Date: January 2011
Report Ref: 3103

Originated By: Andrew Burn
Heritage Consultant Date: 29th March 2011

Reviewed By: Simon McCudden
Principal Archaeologist Date: 31st March 2011

Approved By: Simon McCudden
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1. Introduction

- 1.1.1 ECUS have been commissioned to plan, manage and implement an archaeological watching brief, following an approved and specific Written Scheme of Investigation (WSI) during the construction of a new Greenway Route and a new bridge at Longhorse Bridge, Derbyshire (central national grid reference: SK452305). Figure 1 shows the route and location of the construction works in relation to the Trent and Mersey Canal and Appendix 1 provides more detailed plan.
- 1.1.2 The archaeological watching brief is being undertaken in accordance with the requirements of Planning Condition 7, relating to archaeology which forms part of the planning permission for the overall scheme of works.
- 1.1.3 The proposed route of the new Greenway runs through fields of improved grassland and marshy floodplain parallel to the Trent and Mersey Canal.
- 1.1.4 A detailed walkover survey of the site has, so far, identified two areas of potential archaeological interest (Figure 2, Appendix 1), on which the watching brief will focus. The first of these is a long linear ditch alongside the current track in the centre of the development is and a V shaped drain close to the old bridge footing. The bridge footing itself should also be a priority of the watching brief in order to identify any evidence of a former route way or precursor to the current bridge.
- 1.1.5 This WSI defines the areas within the proposed scheme of works that will be monitored and the basic methodology to be followed. In addition this WSI details the management process to be followed in deciding if and when any construction works will need to be stopped and or changed in certain areas based on any significant archaeological findings in order to reduce any downtime experienced by the Principal Contractor.

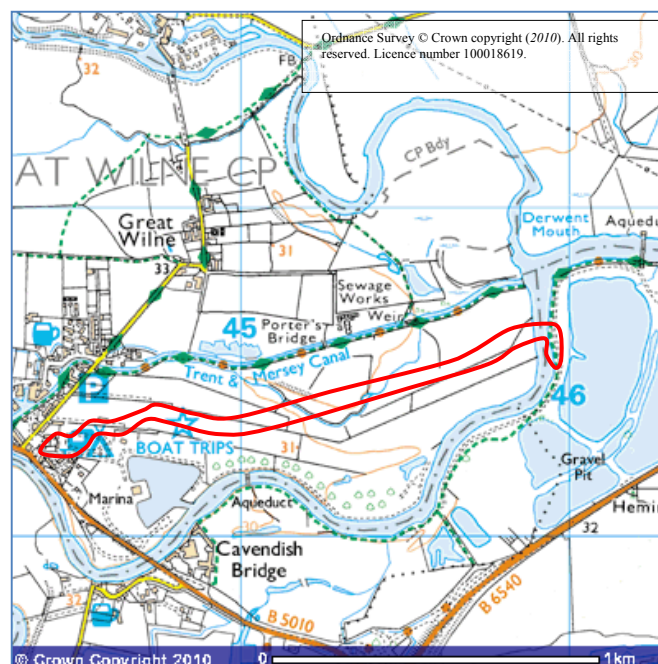


Figure 1: Site location in red



2. Site Description and Scope of Works

- 2.1.1 The proposed works at Shardlow involve the construction of a multi-user trail between the village of Shardlow and Long Horse Bridge. The construction works consist of a new stone laid track together with new fencing, access points and gates for vehicles, horses, pedestrians and for the differently abled. New crossings for culverts will be constructed in two main areas in order to improve drainage and the proposed route will link to Porter's Bridge, providing access to the northern bank of the canal. A new bridge will be constructed at the eastern end of the trail replacing an earlier bridge. Detailed diagrams are provided in Appendix 1.
- 2.1.2 To facilitate the construction of the greenway and Long Horse Bridge, timber bogmat will be used to provide a temporary track along certain areas of the route. The bogmat will form a 5 m wide track and be used between the car park at Shardlow and the first culvert at Point A. The total footprint of works measures approximately 1.5 km in length and 5 m in width, widening at the eastern end to encompass the replacement of Long Horse Bridge. The bogmat will be laid along the line of the greenway. No temporary track will be required after Point A and plant will run directly on along the route of the greenway.
- 2.1.3 There are two culverts along the route and these will require strengthening and improving for the greenway. Towards the eastern end, the greenway will merge with the towpath *via* a stone access ramp.
- 2.1.4 The footprint of works is parallel to the existing canal towpath and involves landtake of both improved and marshy grassland. The hedgerow and associated trees that separate the towpath from the greenway will be largely retained, with the exception of the stretch at the eastern end where the greenway joins the towpath and lead to the newly constructed Long Horse Bridge. A gap of approximately 5 m will be made in the existing hedge to allow the greenway to merge with the existing towpath. The existing hedgerow and associated trees will then be retained to the south of the path, where practicable. Some minor landtake of other hedgerows along the proposed route will also be required to accommodate the greenway. The habitats present on site at the time of survey are shown in Figures 2a, 2b and 2c (Appendix 1).
- 2.1.5 The site is located within a predominantly rural area, with the adjacent land comprising further improved grassland, arable fields and flood meadows. In the wider area, the cities of Derby and Nottingham are present to the north-west and north-east, respectively, and the towns of Ashby-de-la-Zouch and Loughborough to the south-west and south-east, respectively.

3. Archaeological and Historical Background

- 3.1 The Trent and Mersey Canal was constructed through an Act of Parliament from 1766 and opened in 1777 to link the Rivers Trent and Mersey and to assist the pottery industry in Staffordshire. Although the nearby villages of Wilne and Shardlow contain significant heritage assets/buildings associated with the industrial uses of the canal, there have been archaeological findings dating from the Iron Age and Roman periods at the nearby Chapel Farm, Shardlow in advance of gravel extraction works towards the south east of the proposed scheme. A potential Roman building has also been identified at Great Wilne (Table 1).
- 3.2 Crop mark evidence for possible prehistoric enclosures has also been identified at Breaston, including complexes and field systems.
- 3.3 Evidence from the Environment Agency Flood Management schemes indicate that the area of the proposed construction works has been heavily flooded, notably in 1965.
- 3.4 The Derbyshire HER records 16 sites within 1km of the development area (Table 1). These suggest that the area has potential to contain evidence ranging from the Romano-British to Post medieval periods. It is apparent that as well as the Industrial origins of the canal, the Romano-British should also be a focus of the watching brief, due to the relatively high concentration of sites in the area.
- 3.5 The development is also located on the gravel terrace of the river Trent, an area proven to be rich in archaeological remains. Previous excavation upon and in the vicinity of the gravel terrace has yielded evidence of prehistoric activity from the Palaeolithic onwards and this is reflected in the large number of prehistoric sites recorded in the county HER. There is currently no excavated prehistoric evidence within the development area and only cropmark evidence in the immediate vicinity.

Table 1: Archaeological sites recorded in the HER as being within 1km of the site.

Site Name	Parish	Grid Reference
Iron Age-Romano-British settlement, south of Chapel Farm, Great Wilne	SHARDLOW AND GREAT WILNE	SK 444 305
Romano-British building east of Barn Farm, Great Wilne	SHARDLOW AND GREAT WILNE	SK 449 308
Cropmark complex 400m SSE of Ivy House Farm	BREASTON	SK 462 314
Trent Corn Mill No. 1, The Wharf, Shardlow	SHARDLOW AND GREAT WILNE	SK 442 303
Romano-British Site, Great Wilne	SHARDLOW AND GREAT WILNE	SK 448 308
Breaston, Cropmark site: semi-circular ditch	BREASTON	SK 447 315
Wilne Mills, Church Wilne	DRAYCOTT AND CHURCH WILNE	SK 447 315
Great Wilne: Chapel Farm burials	SHARDLOW AND GREAT WILNE	SK 448 308



New Connexion Methodist Chapel and Sunday school, Wilne Lane, Great Wilne	SHARDLOW AND GREAT WILNE	SK 448 307
Possible medieval waste tip, east of Chapel Farm, Great Wilne	SHARDLOW AND GREAT WILNE	SK 449 307
Wesleyan Methodist Chapel, The Wharf, Shardlow	SHARDLOW AND GREAT WILNE	SK 444 305
Medieval pottery scatter, Shardlow	SHARDLOW AND GREAT WILNE	SK 449 311
Holden House outbuilding, 1 Canal Bank, Shardlow	SHARDLOW AND GREAT WILNE	SK 442 302
Wilne Mill, Church Wilne	DRAYCOTT AND CHURCH WILNE	SK 447 315
Cropmarks: Circular, Linear and Enclosure	BREASTON	SK 458 313
Porters Bridge, Trent & Mersey Canal, Shardlow.	SHARDLOW AND GREAT WILNE	SK 452 305



4. Methodology

4.1 Aims and Objectives of the Archaeological Watching Brief

4.1.1 The main aim of the archaeological watching brief is to;

- Provide, where appropriate, information on any archaeological remains and where relevant include this information as part of the addition of new knowledge of this area.
- Identify those specific areas of potential archaeological interest as shown on Figure 2 to the south of Porters Bridge and the narrow ditch between Porters Bridge and the Derwent mouth Lock.
- To help, where practical, to maintain the overall programme of the construction works by addressing the needs of archaeology quickly and efficiently.

4.1.2 The main objectives of the proposed archaeological watching brief are to;

- Identify any significant archaeological features.
- To avoid, where practical, the disturbance of any significant archaeological remains.
- To record, where appropriate, information on the archaeological features.

4.2 Fieldwork

4.2.1 The methodology has been developed in consultation with British Waterways and with the Development Control Archaeologist at Derbyshire County Council. All elements of the archaeological watching brief shall be carried out in accordance with the Institute of Field Archaeologists *Standards and Guidelines for Archaeological Watching Briefs*. (2001) and with the IfA Code of Conduct (IfA, 2008b) and all relevant standards and guidance.

4.2.2 The construction of the temporary haul route will be undertaken in April 2011 to enable the movement of vehicles and machinery along the route and facilitate the construction of the greenway. The two ditch crossing points will also be constructed at this time.

4.2.3 The topsoil for the greenway will be stripped in 100-150mm thick layers using a wheeled or tracked excavator with blade/bucket attachment. A toothless ditching bucket should be used in order to lessen the risk of destruction to any archaeological remains before any such remains are observed. The actual thickness of topsoil removed will vary due to the nature of the depth to firm strata, however it is estimated that approximately 200 mm of soil will be stripped along the length of the greenway to enable the construction of the track.

4.2.4 Where practical, excavation of topsoil can be undertaken rapidly with an excavator, however deposits lying between the bottom of the topsoil and the top of natural subsoil should be removed in level spits, until either the top of the undisturbed natural subsoil or the water table are encountered.



- 4.2.5 Due to the waterlogged nature of certain parts of the route, soil samples for environmental analysis may be taken from within any significant archaeological features. The need for this will be determined iteratively on site.
- 4.2.6 ECUS Ltd will provide an qualified archaeologist at all times during any ground works within specified area to undertake the watching brief. A mechanical excavator will be used for the ground work and the archaeologist on site will ensure that a toothless ditching bucket will be used. The on site archaeologist will be given the opportunity to stop site work in order to investigate potential archaeological features and adequate time will be allowed for recording any such features.
- 4.2.8 A written, drawn and photographic record will be maintained during the watching brief and all significant archaeological remains will be recorded and/or retrieved. The onsite drawings will follow the archaeological drawing conventions in MoLAS' *Archaeological Site Manual* (2002). All excavations will be recorded in accordance with normal principles of archaeological evaluation upon pro forma context sheets. All significant architectural features will be photographed (with scale) *in situ* and their location recorded on a plan of the site.
- 4.2.9 Where archaeological features and/or deposits are identified during the watching brief, then a sufficient quantity of the said features will be investigated by hand to allow their date, nature and degree of survival to be ascribed. All features thus investigated will be recorded in plan and section and significant archaeological finds recovered will be retained for analysis. Any archaeological features identified will be photographed and drawn in plan at a scale of 1:20 and in section at a scale of 1:10. The stratigraphy, where relevant and apparent, will be recorded within the area of the excavation.
- 4.2.10 For brick structures, the record will include details of brick dimensions and type (handmade/machine-made, plain/frogged), mortar (colour, composition, hardness) and the extent of structures (number of courses, thickness in skins).
- 4.2.11 A plan of the excavated areas will be maintained, features noted and section lines recorded. All drawings will be carried out at an appropriate scale and all contexts will be recorded using a single context recording system. The site archive will include plans and sections at an appropriate scale, a scale photographic record, and full stratigraphic records on recording forms/context sheets or their electronic equivalent. Should archaeological features be present then the locations and height AOD of the features will be accurately fixed, surveying in either the planning baselines or the features themselves.
- 4.2.12 The watching brief will be undertaken in accordance with the Institute of Field Archaeologists *Standards and Guidelines for Archaeological Watching Briefs*.(2001). Any human remains discovered will initially be left *in-situ* and, if removal is deemed necessary, this will be undertaken in accordance with the relevant Ministry of Justice regulations.
- 4.2.13 The onsite archaeologist will ensure that heavy plant or machinery will not be operated in the immediate vicinity of archaeological remains until the remains have been recorded. Contractors and plant operators will be notified that any observations of archaeological remains must be reported immediately to the



archaeological officer on site.

- 4.2.14 A risk assessment will be undertaken before commencement of the work and health and safety regulations will be adhered to at all times. No personnel will be allowed to enter any area of construction works deeper than 1.2 metres, regardless of whether any significant archaeological features are encountered.

4.3 Artefact collection and recording

- 4.3.1 Artefact collection policy will be concerned with the provision of adequate samples for meeting the objectives of the work. Discarded artefactual materials will be described and quantified through assignment to broad categories in the field. Analysis of finds will be undertaken, as necessary, by suitably qualified specialists. Retained finds will be cleaned, marked, catalogued and packed in materials, as appropriate, for long term storage (see 5.3. Archive Deposition below).
- 4.3.2 Unstratified finds will only be collected where they contribute significantly to the project objectives or are of particular intrinsic interest. Finds of "treasure" will be reported to the Coroner in accordance with the Treasure Act (1996).
- 4.3.3 Collection policies for structural remains and industrial residues have been set out by the Society of Museum Archaeologists (SMA, 1993). The presence of such materials within a context will be recorded even where comprehensive retention is not considered appropriate.
- 4.3.4 It is not considered likely that waterlogged, palaeoenvironmental or human remains will be encountered at any stage of this project. However, should such remains be identified work will cease and a meeting arranged between ECUS Ltd, the landowner and the Derbyshire County Council Development Control Archaeologist to discuss further procedures.

4.4 Archaeological Monitoring of the Construction Works

- 4.4.1 We recommend that work in the two areas identified as being of archaeological potential (Figure 2) is undertaken as soon as possible in order to minimise the risk of delays to the construction works and to enable an appropriate amount of time to be given to recording those areas, should any significant archaeological remains be revealed.
- 4.4.2 The remaining areas of construction works can be subject to watching brief with an archaeologist on site at all times depending on the overall construction programme. It would be beneficial to both the overall programme and project budgets if monitoring visits can be timed to maximise the amount of time spent on site each day and minimise the number of visits and travel costs.
- 4.4.3 Prior to commencing works on site, ECUS will agree with the client the approximate times, in relation to the construction programme, that ECUS will need to be on site to undertake the works as detailed and will notify the client should there any changes become apparent.
- 4.4.4 ECUS will liaise directly with either the client representative on site or the construction contractor's lead supervisor.



- 4.4.5 Construction works will only be requested to stop, through the client representative if any significant archaeology is encountered.
- 4.4.6 ECUS will liaise with the County Archaeologist, where appropriate, on the client's behalf after first consulting the client.
- 4.4.7 The County Archaeologist may wish to visit site, depending on the findings and ECUS would manage this visit following liaison with the client representative.



5. Reporting

5.1 Following completion of the fieldwork ECUs Ltd will produce a report containing the following elements:

- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections, illustrating height AOD (following the conventions in MoLAS' *Archaeological Site Manual* (2002))
- Conclusions
- Supporting data – tabulated or in appendices
- Index to archive and details of archive location
- References
- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the DCA brief
- A copy of the OASIS form

5.2 Copies of the final report will be deposited with the Derbyshire Historic Environment Record.

5.3 Archive Deposition

5.3.1 A digital, paper and artefactual archive will be prepared by ECUS Ltd, consisting of all primary written documents, plans, sections, photographs and electronic data which will be deposited with the Derby City Museum who will assume responsibility for archiving the material.

5.3.2 All artefacts and associated material will be cleaned, recorded, properly stored and deposited in the archive (see above). If any specialist analysis is required of artefactual or environmental material, ECUS Ltd will sub contract an appropriate specialist to undertake the work.

5.3.3 A full set of labelled, illustrative photographs of the site, excavation, features, layers and selected artefacts will be supplied to the HER and deposited with the archive as digital images on a CD ROM along that will be attached with the report.

5.3.4 Written confirmation of the archive transfer arrangements, including a date (confirmed or projected) for the transfer, will be included as part of the final report.

5.3.5 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).



6. Confidentiality, Publicity and Copyright

- 6.1 Archaeological works can and do attract public interest and being close to a public footpath next to the canal members of the public and local boat owners will be able to observe the construction works.
- 6.2 Any questions raised by the public, either on site, or through other enquiries will be made known to the client representative as soon as possible.
- 6.3 ECUS will be pleased to assist, where appropriate and agreed with the client any relevant information for any publicity material.
- 6.4 The results of the archaeological work will be submitted to the client in the first instance for review, comment and approval before issue to the County Archaeologist.

7. Resources and Programme

- 7.1 All archaeological personnel involved in the project will be suitably qualified and experienced professionals.
- 7.2 The watching brief works are scheduled to run between February and October 2011 in accordance with the construction schedule and reports issued generally within 6 weeks of the completion of the works.

8. Access, Security and Health and Safety Arrangements

- 8.1 All ECUS personnel attending site will attend a site induction by the Principal contractor and sign in and out of site during each monitoring visit.
- 8.2 ECUS will provide all relevant Risk Assessments and Health and Safety Plans to the Client and Principal Contractor.



9. References

Birmingham Archaeology. *Shardlow Quarry, Derby*. www.barch.bham.ac.uk
(Accessed December 2010)

IfA (2008a) *Standards and Guidance for Archaeological Evaluation Works*. Institute for Archaeologists. Reading.

IfA, *Code of Conduct*, Revised edition, October 2008 Institute for Archaeologists. Reading.

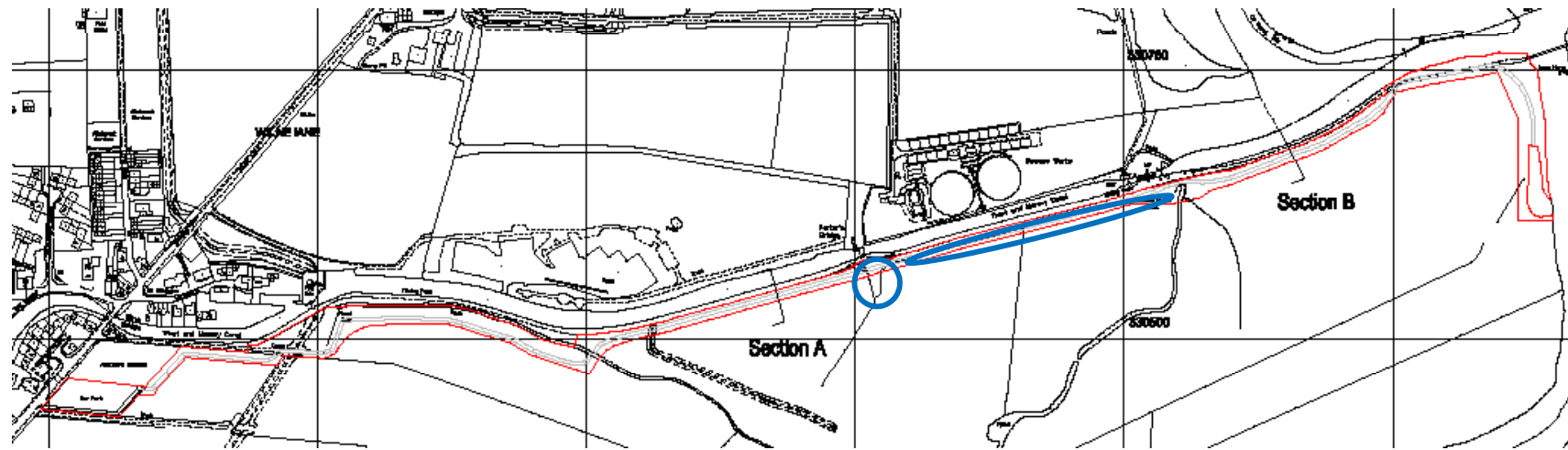
IfA, *Standard and Guidance for an Archaeological Watching Brief*, Revised edition, September 2001 Institute for Archaeologists. Reading.

Trent and Peak Archaeology (Derbyshire SMR) *Palaeochannels of the Trent at Chapel Farm, Shardlow and Great Wilne Derbyshire*. Unpublished Report.

[www.waterscape.com/canals - and - rivers/trent - and - mersey](http://www.waterscape.com/canals-and-rivers/trent-and-mersey) (Accessed December 2010)



Appendix 1 – Detailed plans



- Legend:
- Areas of archaeological potential
 - Footprint of works

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Figure 2: Areas of archaeological interest	Date: January 2011
Scale: Schematic	ECUS Ref: 3103