

**BYRON'S POOL LOCAL NATURE RESERVE
TRUMPINGTON
CAMBRIDGESHIRE**

**ARCHAEOLOGICAL MONITORING
(ECB: 3470)**



**Essex County Council
Field Archaeology Unit**

MAY 2011

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Prepared By: Ellen Heppell	Signature:
Position: Project Officer	Date:
Approved By: Mark Atkinson	Signature:
Position: Unit Manager	Date:

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Field Archaeology Unit,
Fairfield Court, Fairfield Road, Braintree, Essex CM7 3YQ.
fieldarch@essexcc.gov.uk
Tel: 01376 331470
Fax: 01376 331428

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Front cover shows the bypass channel being cleared. Photo ECC FAU

BYRON'S POOL LOCAL NATURE RESERVE

TRUMPINGTON

CAMBRIDGESHIRE

ARCHAEOLOGICAL MONITORING (ECB: 3470)

Client: Cambridge City Council

NGR: TL 4354 5459

Oasis Ref: 89535

Local Authority: South Cambridgeshire District Council

Planning Ref: S/1272/10

Date of Fieldwork: December 2010 – February 2011

SUMMARY

Archaeological monitoring and recording was carried out at the Byron's Pool local nature reserve, Trumpington, as part of works to construct and fish bypass channel, fish weir and amphibian pools. The monitoring was carried out by ECC FAU on the behalf of Cambridge City Council, in accordance with a brief of works issued by Cambridgeshire Archaeology Planning and Countryside Advice.

Byron's Pool Local Nature Reserve (LNR 1084814) is an area of semi-natural woodland situated on the south-eastern bank of the River Cam, to the south west of the historic village of Trumpington. Byron's Pool itself comprises a weir pool at the point where the Bourn Brook flows into the River Cam. There have been floodgates at this location since at least 1886 and these were replaced by a weir at some point between 1960 and 1970.

The area of monitored works was situated on the southern side of the Cam, largely upstream of the weir. Within this area of woodland there are four rectangular fish pools, not connected to the main river, which are seasonally wet. There are also a number of overgrown channels in the woodland, not connected to the main river. Both the channels and the pools were heavily silted.

The main monitored elements of the works comprised the clearance and some excavation in the extant fish pools, the excavation of a bypass channel around the weir (largely through clearing an existing channel) and the excavation of a pit for the fish weir.

No archaeological features or finds were identified during the monitored works other than a floodbank dating to the 1960s. The majority of the works comprised the removal of material that had accumulated in existing features during the post-medieval and modern periods. Where excavation cut into the alluvial subsoils no archaeological features or palaeoenvironmental deposits were present. Should such deposits be present in the Byron's Pool Reserve they are likely to be buried at depth.

1.0 INTRODUCTION

This report describes the results of archaeological monitoring and recording carried out at Byron's Pool Local Nature Reserve, during groundworks associated with the construction of a fish pass and other biodiversity improvements at the reserve. The work was undertaken by the Essex County Council Field Archaeology Unit (ECC FAU) on behalf of Cambridge City Council.

As the site was located in close proximity to an area of archaeological significance, a condition was placed on planning consent on the advice of the South Cambridgeshire District Council in response to the planning application (S/1272/10). The condition follows Planning Policy Guidance note 16 on Archaeology and Planning (now replaced by Planning Policy Statement 5: Planning for the Historic Environment). The planning condition states that:

No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Planning Authority. (Developers will wish to ensure that in drawing up a scheme, the timetable for the investigation is included within the details of the agreed scheme). (Reason - To protect the remains from the development and ensure adequate mitigation measures in accordance with Policy CH/2 of the adopted Local Development Framework 2007.)

The investigation was carried out in accordance with an archaeological design brief issued by Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA) in 2010 and a written scheme of investigation prepared by the ECC FAU (2010).

Copies of this report will be supplied to Cambridge City Council, CAPCA and the Cambridgeshire Historic Environment Record (CHER). A digital version of this report will be uploaded, along with a project summary, to the Online Access to the Index of Archaeological Investigations (OASIS) (<http://ads.ahds.ac.uk/project/oasis>). The site archive and copies of the report will be deposited at the Cambridgeshire County Store.

2.0 BACKGROUND

2.1 Topography and Geology (Fig. 1)

Byron's Pool Local Nature Reserve (LNR 1084814; NGR TL 4354 5459) lies to the south west of the historic village of Trumpington, and c. 3.5km to the south-south-west of Cambridge city

centre. The reserve (also known as Old Mill Plantation) is an area of semi-natural woodland situated on the south-eastern bank of the River Cam at no more than 17m AOD. The site is in the floodplain, at the base of a pronounced slope on the south side of the Cam. The solid geology comprises Gault Formation mudstone and West Melbury Marly Chalk Formation chalk, overlain by river gravels and sands. The superficial geology is mapped as alluvium.

Byron's Pool itself comprises a weir pool at the point where the Bourn Brook flows into the River Cam. Lord Byron is thought to have swum in the pool, which is not only reflected in the placename but also mentioned in Rupert Brooke's poem 'The Old Vicarage, Grantchester', written in 1912. This includes the lines "Still in the dawnlit waters cool / His ghostly Lordship swims his pool". There have been floodgates at this location since at least 1886 and these were replaced by a weir at some point between 1960 and 1970 (dates derived from historic mapping). The current weir is a substantial concrete structure with adjacent sluice gate.

The area of monitored works was situated on the southern side of the Cam, largely upstream of the weir. Within this area of woodland there are four rectangular fish pools, not connected to the main river, which are seasonally wet (Fig 2). These were dug to provide fish for the Trumpington Hall Estate. There are also a number of overgrown channels in the woodland, not connected to the main river. Both the channels and the pools were heavily silted.

2.2 Archaeology and History

The following information has been summarised from data supplied by Cambridgeshire Historic Environment Record (CHER Inv. Ref.1145) and the magic.gov.uk website. The location of Scheduled Monuments and selected CHER references are shown on Fig. 3.

No scheduled monuments are located within the site, though three are recorded in the surrounding area:

SAM CB74 – Romano-British complex enclosure system, south-west of Trumpington. Located c.300m south-west of the site.

SAM CB75 – Possible Roman settlement complex north-east of Haslingfield. Identified through aerial photography. Located c.500m to the west of Byron's Pool.

SAM 33283 – Manor Farm, moated site. Located 500m north-west of the site.

Two prehistoric timber trackways were discovered at Lingey Fen, to the west of the site, during the construction of the Cambridge Western Bypass (M11) in 1977 (CHER 044260), beneath 3m – 4m of peat. A possible Bronze Age or Early Iron Age bridle bit, comprising two cheek pieces,

were recovered from spoil heaps resulting from the construction of the M11, also at Lingey Fen, to the west of the site (CHER 10159).

Several large archaeological investigations have been undertaken in the area surrounding the site. Archaeological evaluation and excavation at the Trumpington Park and Ride, some 750m to the east of the site, revealed evidence of multi-period activity dating from the Neolithic to Iron Age, with a significant Late Bronze Age to Iron Age settlement (CHER MCB 15749; Fig 3).

A Romano-British settlement and field system was identified during archaeological evaluation at Trumpington Meadows (Fig. 3), on fields immediately to the east of the site (CHER MCB 17990 - 17991). Sparse evidence of Late Mesolithic/Early Neolithic activity through to the Late Iron Age was also recovered (CHER 17985, 17987, 17988, 18001). In addition, medieval pitting (CHER MCB17999) and post-medieval coprolite extraction (CHER MCB18000) were confirmed. Prehistoric remains were also recorded at the John Lewis Warehouse Site (MCB 16595; Fig. 3).

Other Roman remains in the area include finds of pottery (2nd-4th century), tesserae, tiles, bronze ring, and a coin of Magnentius or Decentius (CHER 04727), recovered in the Parish of Haslingfield (Fig 3).

Very few Saxon finds have been recovered from the 1km search area around the site, with the closest comprising Middle Saxon ditches at the Waitrose supermarket site, close to the centre of the historic village (CHER CB14653).

Historic mapping and placename evidence would suggest that this point on the river was once the site of a watermill; the woods being known as 'Old Mill Plantation' since 1886 (First Edition Ordnance Survey), and that the pool has been named Byron's Pool for at least 124 years, giving some weight to the story that Lord Byron (1788-1824) swam there.

Reference to historic editions of the Ordnance Survey show that the area of the reserve changed little between 1886 and 1960. At some point between 1960 and 1970 the flood gates into Byron's Poll were replaced with a weir. As part of these works the upstream channels around the pools were dammed so they no longer linked to the river (Fig. 2). It would also seem likely that the flood banks on the riverside were improved at this time. In recent years works at the nature reserve have focussed on managing the habitat and improving access, the latter including the construction of a footbridge by the rear and improved paths.

2.3 Scheme of Works

The works at Byron's Pool comprised the construction of a new fish-pass and various other works to provide an amphibian habitat. The main elements of the works were as follows:

- Clearance of the silt from the four fish pools (Fig 4)
- Excavation of the above to facilitate the adjustment of water levels
- Excavation of a 110m bypass channel around the weir (Fig 4)
- Installation of gabions to minimise erosion and felled timber to create pools and riffles
- Excavation of a pit for the fish weir (Fig 4)

3.0 AIMS AND OBJECTIVES

3.1 Aims

The specific aim of the investigation was to determine the presence or absence of archaeological deposits within the works area and to preserve, by record, any archaeological deposits that would have been destroyed by the construction of the fish pass and cleaning of adjacent pools/ponds.

3.2 Objectives

The specific objectives of the investigation was to:

- ensure that any archaeological features exposed during ground works are recorded and interpreted;
- ensure that any significant discoveries of artefact evidence are recorded, retrieved and analysed.

4.0 METHOD

The archaeological work was to comprise the monitoring of any ground works likely to expose archaeological remains. Should deposits of archaeological interest be revealed, they were to be excavated by hand and recorded as appropriate. At the initial design stages it was anticipated that this would require monitoring of the elements of the scheme as set out above. However the level of monitoring was amended, with the agreement of the CAPCA Officer, as the site conditions and nature of the groundworks were not conducive to productive observation. As such the archaeological monitoring took place on the more major tasks, as discussed below.

Fish Pools

Visits were made during the machine clearance of Fish Pools B and D (Fig 4). Visibility was poor as in both cases the features flooded during the course of excavation, standing water was present even when pumps were running.

Bypass Channel

Groundworks in the Bypass channel were limited to the removal of accumulated silts, debris and leaf-mulch, down to the original channel profile, with some minor alterations to slopes. Archaeological monitoring took place in the vicinity of the footbridge and the cleared sides of the channel were also inspected.

Fish Weir

The excavation of the pit in which the fish weir was to be placed was monitored.

ECC FAU is a Registered Archaeological Organisation with the Institute for Archaeologists (IfA) and all work was carried out in accordance with IfA by-laws and guidelines (IfA 1997; 2008) and complied with Standards for Field Archaeology in the East of England (Gurney 2003).

5.0 FIELDWORK RESULTS

Fish Pools

Excavation commenced with the removal of vegetation (reeds) and then the removal of a mulch/leaf litter/ humic layer, c. 0.3-4m thick. This contained occasional branches, twigs, etc., and the occasional piece of modern debris such as glass bottles, brick fragments and tie fragments (not collected). Below this lay a pale grey clay/ silt layer, an alluvial floodplain deposit. No archaeological features were identified or pre-modern artefacts collected.

Bypass Channel

The excavation of the bypass channel by the footbridge removed between 0.7m and 0.3m of material. This comprised leaf litter, mulch and a humic layer. It contained recently deposited branches/logs, perhaps placed to stabilise the drainage channel sides, or simply fallen in.

Fish Weir

The excavation of the pit in which the fish weir was to be placed was monitored. This pit was placed against the edge of the river bank. Sheet piling had been put in place to prevent the river flooding the pit. The pit was 3m by 4m, excavated to a depth of c.1.2m, limiting safe access. The pit was positioned at the head of one of the channels which had been dammed in the 1960s.

The machine excavation exposed driven timber reveting, c. 0.4m from the river frontage; the plank uprights were clearly machine cut, and tied together with wire fastenings. It was also supported by revetment posts to its rear. This reveting and piling was within a solid brown clay floodbank. These features are likely to be the remains of the infrastructure put in when the weir was constructed and the channels dammed.

To the rear (landward) of this bank the ground level was lower, being within the existing channel. This had been filled with silts, humic and soil layers, which had gradually accumulated in it since damming.

6.0 ASSESSMENT OF RESULTS

No archaeological features or finds were identified during the monitored works at Byron's Pool Local Nature Reserve other than features that date to the 1960s. The visible earthworks on the site are likely to be of 19th century date and relate to the water management and fish stocks. The nearby Romano-British settlement site (CB74) is located on even ground above the steeply sloping valley side and is unlikely to have extended down onto it.

Although the visibility during groundworks was poor the results of the monitoring are considered to be reliable as the majority of the works comprised the removal of material that had accumulated in existing features during the post-medieval and modern periods. Where excavation cut into the alluvial subsoils no archaeological features or palaeoenvironmental deposits were present. Should such deposits be present in the Byrons's Pool Reserve they are likely to be buried at depth.

ACKNOWLEDGEMENTS

Thanks go to Cambridge City Council and Ellis Selway for commissioning the work and the contractors, Mackley Construction. The archaeological monitoring was undertaken by Phillippa Sparrow and Ellen Heppell of the ECC Field Archaeology Unit. The project was managed by Mark Atkinson and monitored on behalf of the Local Planning Authority by Andy Thomas of CAPCA.

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APPENDIX 1: OASIS SUMMARY RECORD

OASIS ID: essexcou1-89535

Project details

Project name Byron's Pool Fish Pass, Trumpington, Cambridgeshire

Short description of the project

Archaeological monitoring took place during the construction of a fish pass and other habitat creation. The works largely comprised the clearance of silts and humic layers which had accumulated in 19th-20th century features. The only feature was a 1960s floodbank of the River Cam. No archaeological features or artefacts were identified.

Project dates Start: 15-12-2010 End: 10-03-2011

Previous/future work No / Not known

Any associated project reference codes 2291 - Contracting Unit No.

Any associated project reference codes ECB 3470 - Sitecode

Type of project Recording project

Current Land use Other 15 - Other

Monument type FLOODBANK Modern

Significant Finds NONE None

Investigation type 'Watching Brief'

Prompt Direction from Local Planning Authority - PPS

Project location

Country England

Site location CAMBRIDGESHIRE CAMBRIDGE CAMBRIDGE Byron's Pool Fish Pass, Trumpington, Cambridgeshire

Site coordinates TL 4354 5459 52.1704484319 0.09917964126170 52 10 13 N 000 05 57 E Point

Project creators

Name of Organisation Essex County Council Field Archaeology Unit

Project brief originator Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA)

Project design originator Essex County Council Field Archaeology Unit

Project director/manager Mark Atkinson

Project supervisor Phillippa Sparrow / Ellen Heppell

Type of sponsor/funding body District Council

Name of sponsor/funding body Cambridge City Council

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
Title Byron's Pool Fish Pass, Trumpington, Cambridgeshire

Author(s)/Editor(s) Sparrow, P.

Other bibliographic details 2291

Date 2010

Issuer or publisher ECC FAU

Place of issue or publication Fairfield Court, Fairfield Road, Braintree

Description A4 document - WSI

Project bibliography 2

Publication type Grey literature (unpublished document/manuscript)
Title Byron's Pool Local Nature Reserve, Trumpington, Cambridgeshire

Author(s)/Editor(s) Heppell, E.

Other bibliographic details 2291

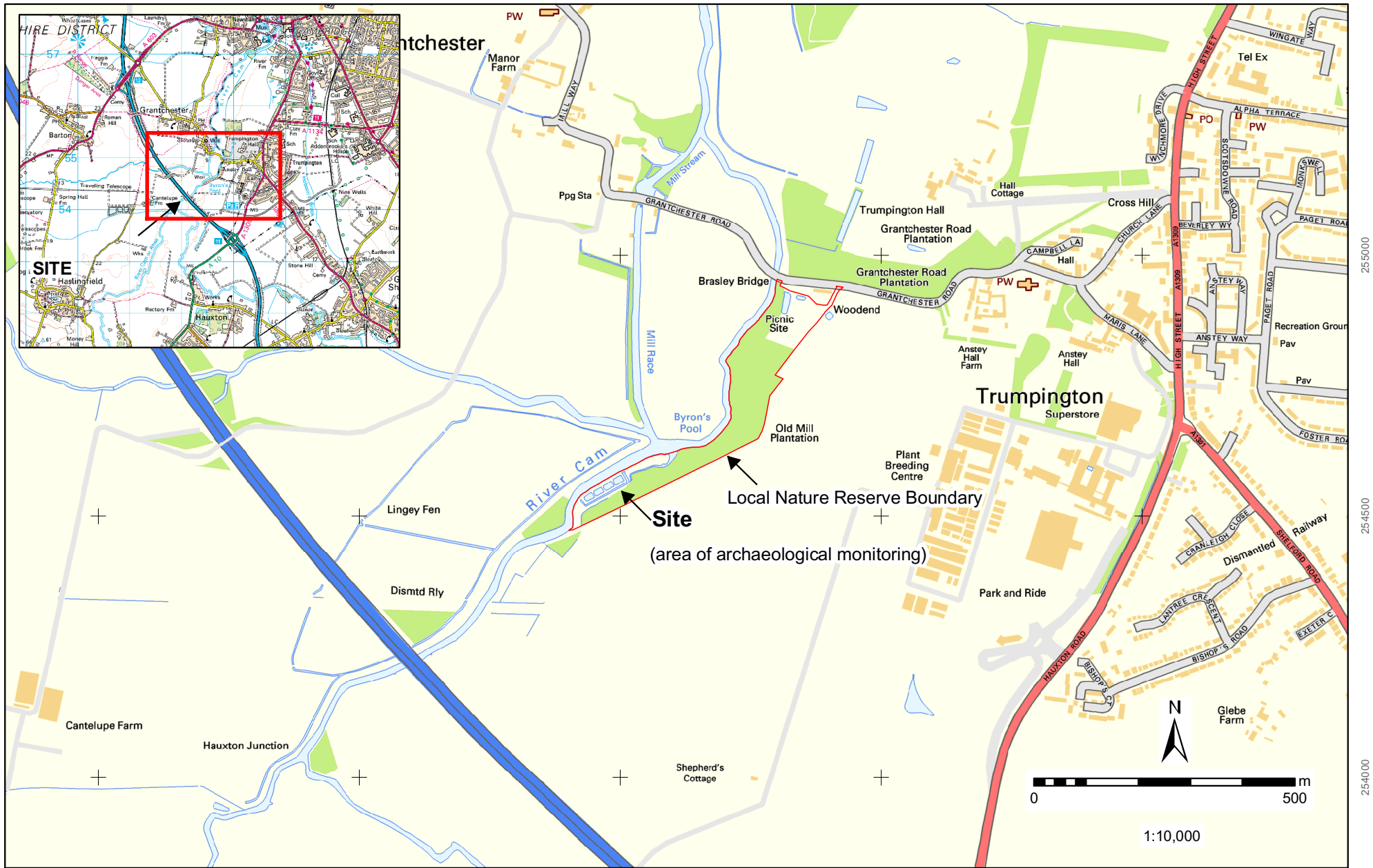
Date 2011

Issuer or publisher ECC Field Archaeology Unit

Place of issue or publication Fairfield Court, Fairfield Road, Braintree

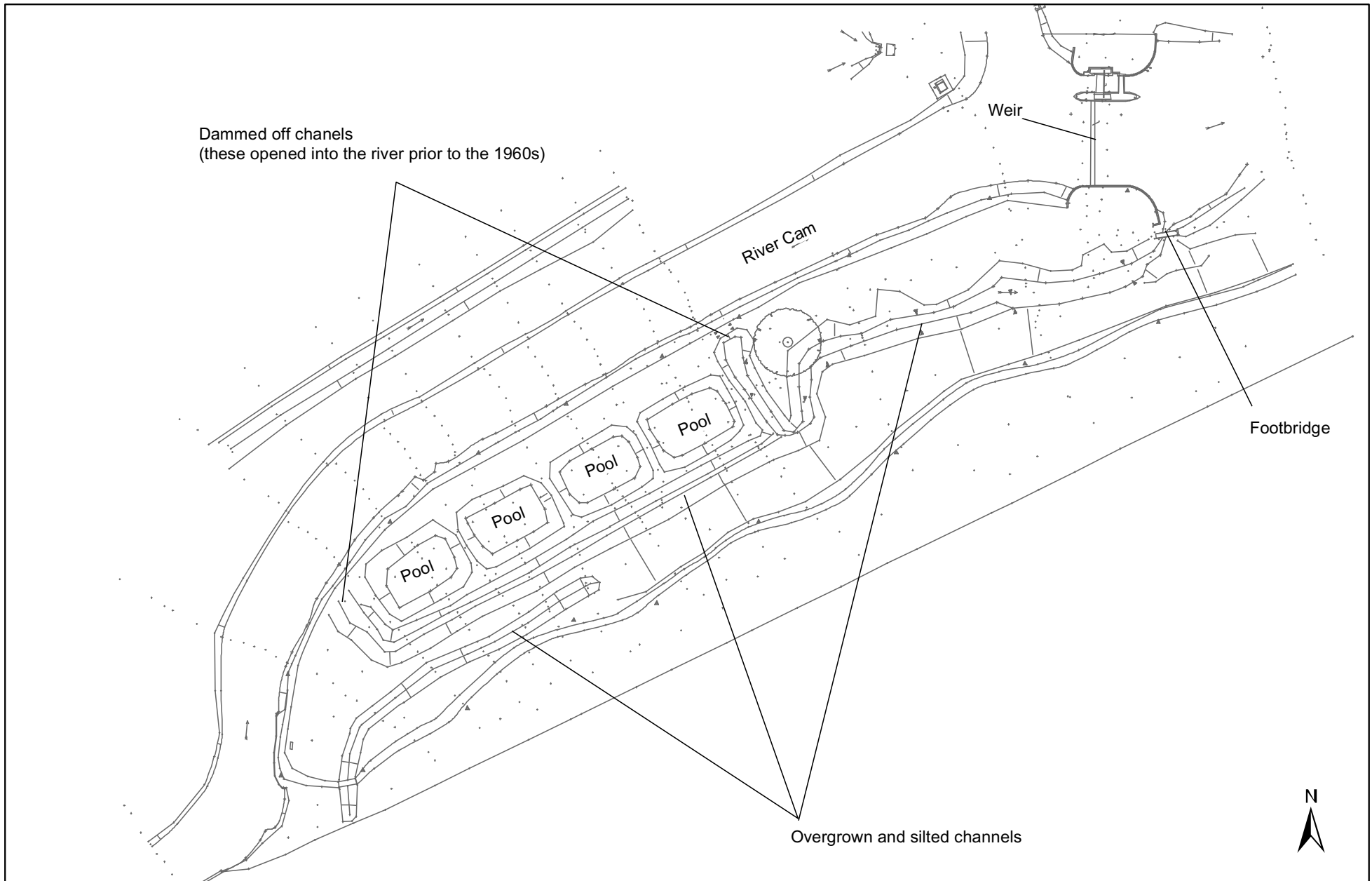
Description A4 Report - text and illustrations

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Entered on 10 March 2011



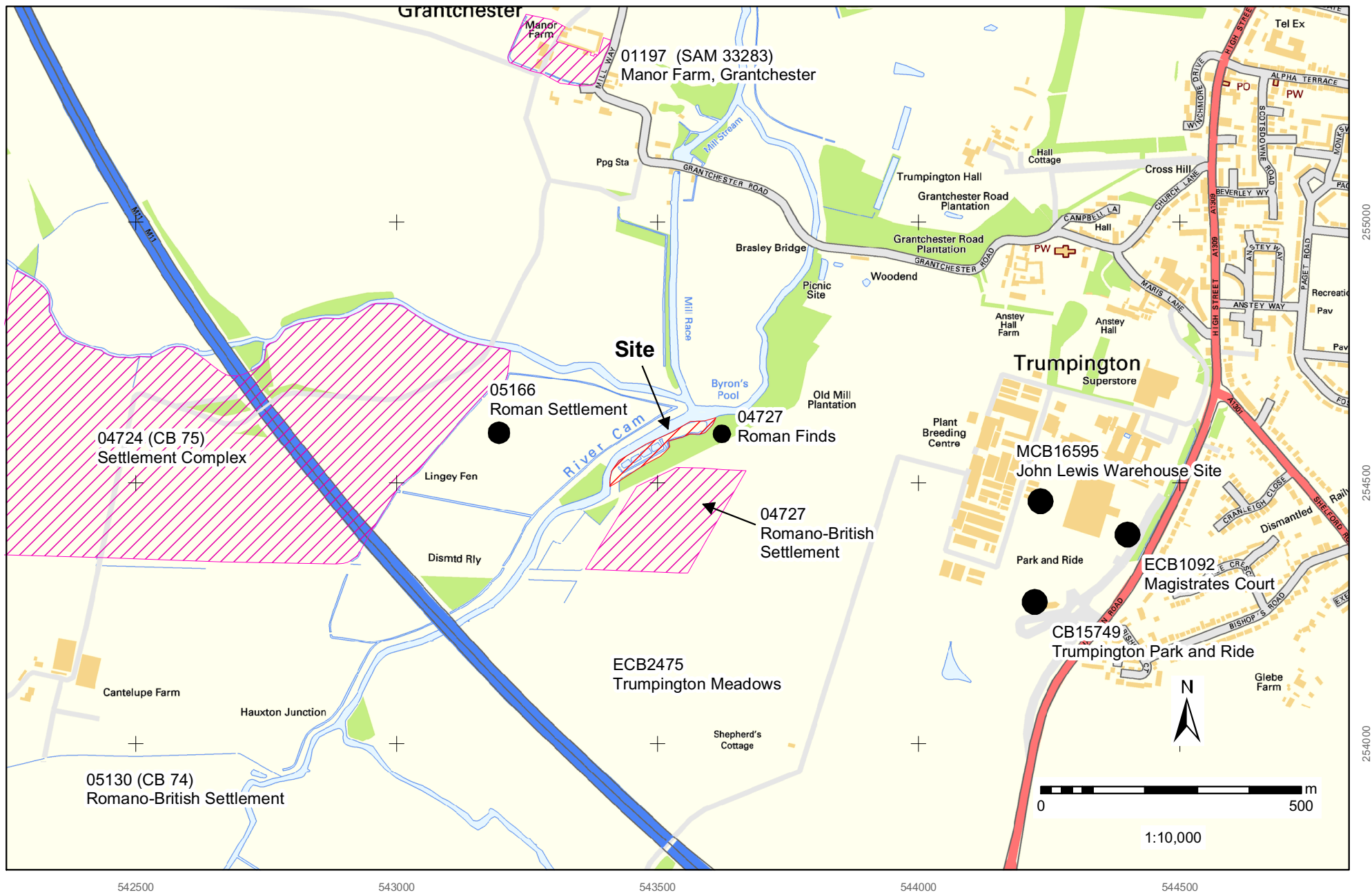
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Fig.1. Location



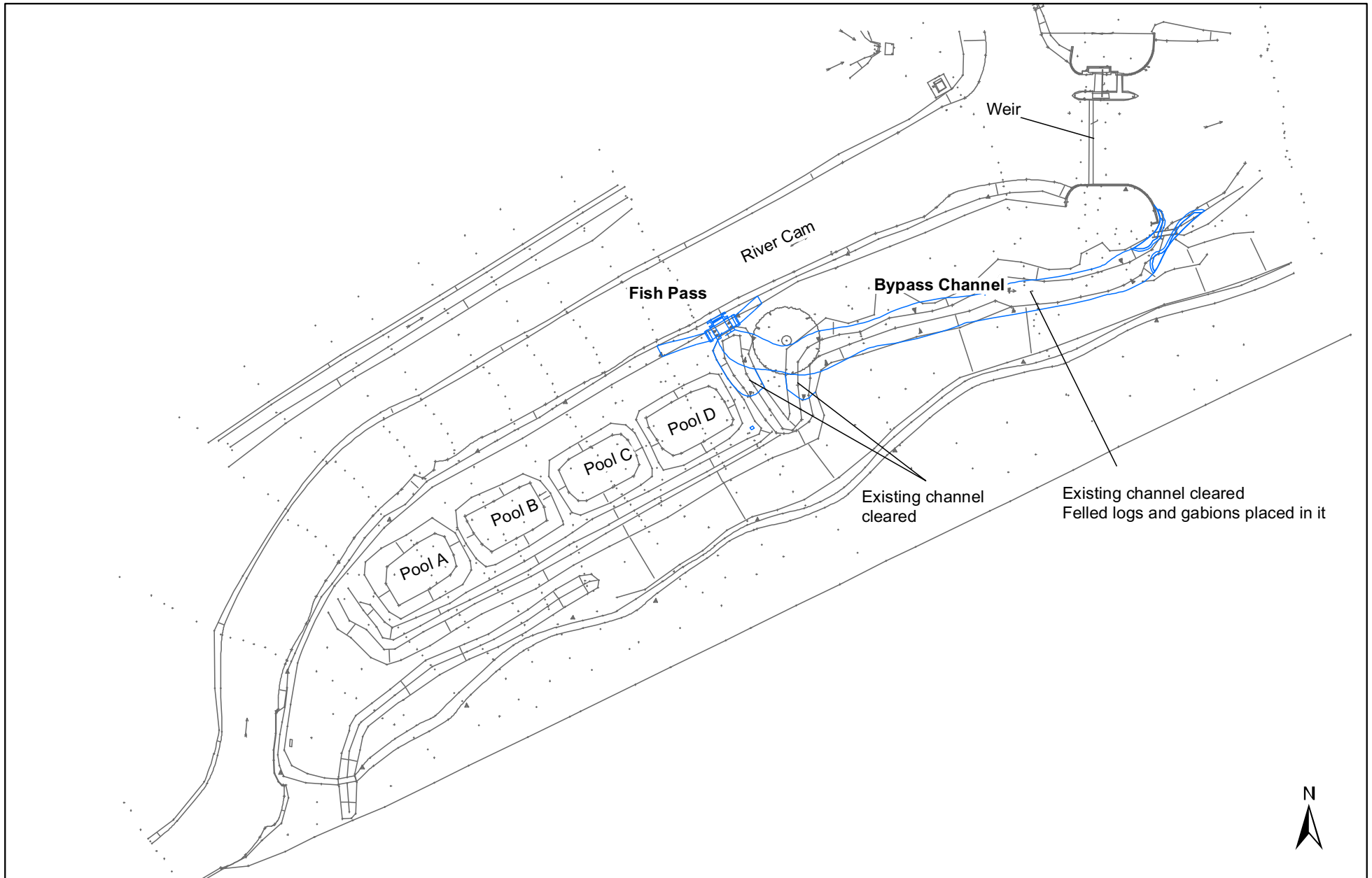
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Fig.2. Site layout



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Fig.3. Scheduled Monuments (purple) and locations of selected CHER References



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Fig. 4. Areas of works