# An Archaeological Watching Brief During ground-works at Foxton Inclined Plane, Leicestershire (SP 69230 89590)

Leon Hunt

for

# **British Waterways**

Checked by Project Manager
Signed:Date:
Name:

# **University of Leicester**

Archaeological Services

University Rd., Leicester, LE1 7RH

Tel: (0116) 2522848 Fax: (0116) 2522614

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### **Summary**

An archaeological watching brief was carried out at the inclined plane at Foxton Locks, Leicestershire (SP 69230 89590) during the excavation of trenches associated with a new system of badger proof fencing. Part of the trench was to be excavated close to the abutment wall of the dry upper arm of the incline plane, a scheduled ancient monument (SAM No. 30248). The trench was excavated of sufficient distance from the wall to minimise the likely disturbance of any underlying foundations or archaeology. Two small sections of iron, which may have originally formed part of the structure of the plane, were discovered close to the abutment wall. The excavations also yielded some information on the nature of the construction of the inclined plane. The archive for this work will be deposited with Leicestershire County Council, Heritage Services with accession number X.A82.2006.

#### Introduction

An archaeological watching brief was undertaken by University of Leicester Archaeological Services (ULAS) for British Waterways at Foxton Inclined Plane, Foxton Locks, Foxton, Leicestershire NGR SP 69230 89590. This work was carried out during the installation of badger resistant fencing within the Scheduled Ancient Monument (SAM No. 30248) as part of works associated with the piling of the upper arm banks and the subsequent re-watering of the upper arm of the inclined plane.

The work was carried out in accordance with Planning Policy Guidelines 16 (PPG16, Archaeology and Planning), paragraph 30, and the requirements of the Scheduled Ancient Monument Consent (DCMS HSD 9/2/7823).

The construction of the fence involved the excavation of a trench, 0.4m deep and 0.3m wide, to receive the fence posts. Sections of the trench were to be excavated close to the remaining brick structure of the monument, at the northern terminal of the upper arm and archaeological supervision was necessary in these areas as the groundworks could possibly pose a threat to the structure. The ground-works may have also yielded valuable information on the construction of the banks of the monument.

## Archaeological Background

The 19th century narrow beam locks at Foxton and Watford joined the waterways running north to the cities of the East Midlands, with those of the South Midlands and the South East. A single boat passing through the locks would take 45 minutes to pass through the 23m rise. The Inclined Plane, opened in 1900, was constructed to allow two pairs of boats to ascend and descend simultaneously in just 8 minutes.

By the early 20th century the use of waterways had declined to the extent that the Foxton Inclined Plane was redundant by 1911. It was demolished in the 1920s, with most of the metal structure of the plane broken up and sold for scrap.

The Foxton Inclined Plane is a rare example of late Victorian canal engineering and the site has never been developed.

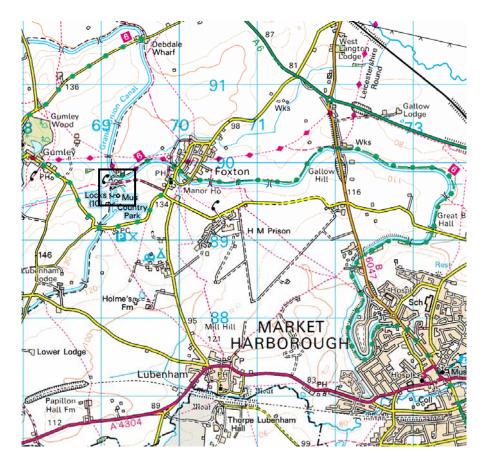


Figure 1: Site Location. Scale 1:25 000

The construction of the plane involved substantial excavations in the area of the lower docks and the monument description of the banks refers to the upper arm banks as consisting of 'burnt clay'.

## **Aims and Methods**

The purpose of the watching brief was to ascertain whether archaeological deposits were present. If so, the character, extent and date range of any deposits identified would be established, in order to assess their significance. Recording of these deposits would be carried out as appropriate, and an archive and this report produced. The work followed the Institute of Field Archaeologists (IFA) *Standard and Guidance for Archaeological Watching Briefs*, and adhered to the University's Health and Safety policy.

The project was to involve the presence on site of an experienced professional archaeologist during the excavation of the fencing trench within the area of the monument.

An archaeologist visited the site on the 3rd July 2006 and trenching associated with the erection of the badger resistant fence close to the terminal of the upper arm banks was closely monitored. Other areas of the site were also observed and spoil heaps were checked for archaeological finds.

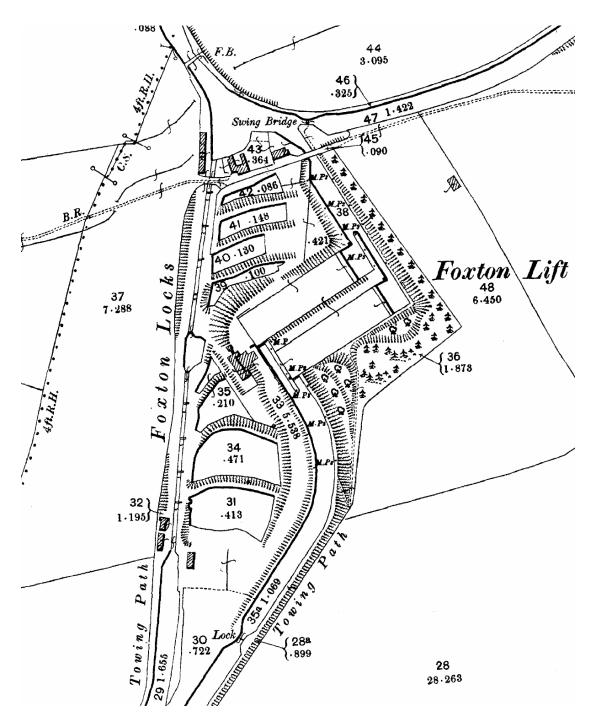


Figure 2: 1904 Ordnance Survey map showing the inclined plane

#### **Results**

The site was visited by an archaeologist on 3rd July 2006 and trenching associated with the badger resistant fencing was observed. The main area of interest was the section of trench running close to the abutment wall at the head of the upper arm of the inclined plane.

The trench was excavated with a mini-digger to a depth of 0.3m and was approximately 0.4m wide. The digger did not penetrate far below the topsoil, which

was a fairly loose mid-grey silty clay loam, containing chunks of brick and other broken ceramic building material. The bricks were red or blue and were four and a half inches deep. A more compacted clayey soil could be seen at the base of the trench. At the western end of the trench the excavation was slightly deeper and this exposed a layer of grey clay overlying a greyish yellow clay, which could be seen clearly in section.

During the excavation two pieces of iron were recovered from the trench. One was a flat section of iron plate, which measured 1.2m x 0.38m x 0.1m with two 0.1m holes drilled into its surface along one edge. The other was a section of an iron channel, which measured 0.78m x 0.08m x 0.15m and was 'c'-shaped in cross section, with a large bolt fixed through its mid-section. The flat plate lay close to the surface at the edge of the trench, the joist section was just partially embedded into the southern section of the trench. Both fragments appeared to have been cut with an acetylene torch.

The trench was excavated between 0.2m and 1m from the edge of the abutment wall and no foundations for the brick abutment were found during the watching brief.

Sections of the trenches along the dry upper arm were also investigated for evidence of bank construction techniques. These sections showed that the bank mainly consisted of compacted yellow or red clay, probably reddened by heating, covered with a layer of dark grey loamy topsoil (Fig 7).

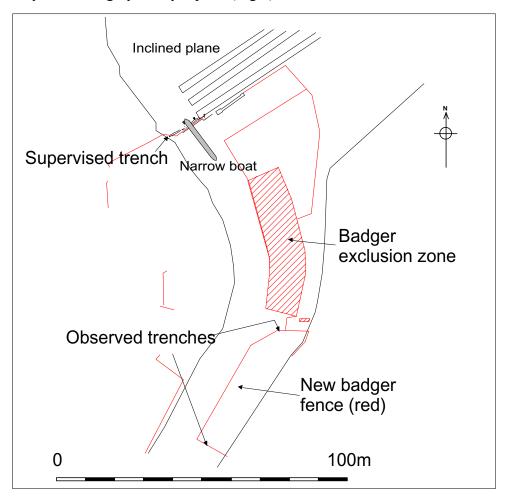


Figure 3: Plan of upper arm of plane showing areas observed during watching brief

#### Conclusion

The trench close to the abutment wall at the end of the upper arm of the Inclined Plane was situated far enough away from the wall not to expose any of the foundations of this structure. The wall has sustained some wear and erosion over the years and remnants of this decay were in evidence within the trench, including bricks and rubble and fragments of mortar.

The pieces of iron discovered within the trench were not easily identifiable. The iron plate may have been part of the iron caissons that were used to carry the boats through the incline. All large metal structures on the plane would have been cut up in the 1920s, this may have been a small segment that was left behind during the salvage work.

The iron channel fragment does not appear to have been part of the known structure and its exact function is not known.

Examination of the trenches in the areas around the dry upper arm showed that the banks were made out of burnt clay as suggested by the monument descriptions.

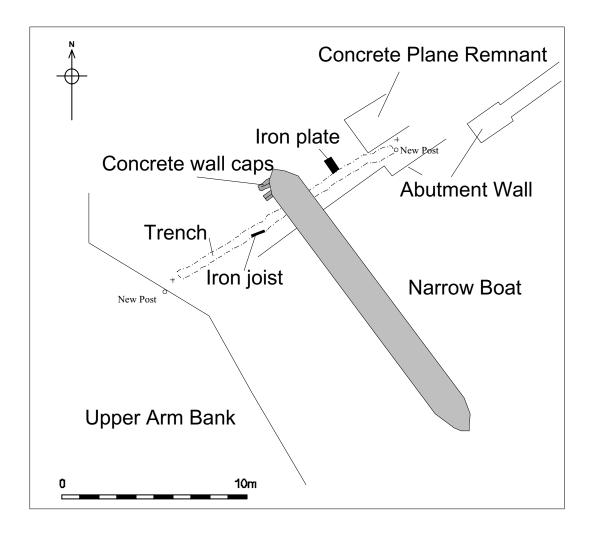


Figure 4: Detail of north western end of upper arm, showing trench plan

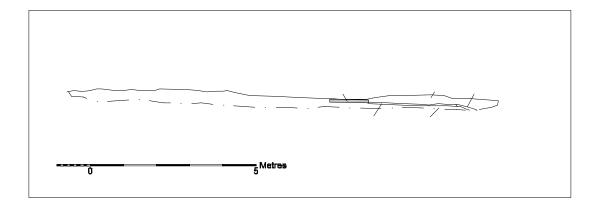


Figure 5: North west facing section of trench, showing features

## Acknowledgements

ULAS would like to thank Steve Allen and his team for their help and co-operation during the watching brief. Leon Hunt carried out the watching brief. Matthew Beamish was the project manager.

#### Archive

The archive will be deposited with Leicestershire Historic and Natural Environment Team with accession number X.A82.2006 and consists of the following:

- 1 watching brief record sheet
- 1 A2 permatrace sheet with plans and sections
- 1 CD of digital photos
- 1 Contact sheet of digital photos
- 1 Copy of this report

#### Leon Hunt

ULAS University of Leicester University Road Leicester LE1 7RH

Tel:0116 252 2848 Fax: 0116 252 2614

lh90@le.ac.uk



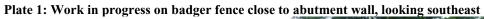




Plate 2: Completed trench on upper arm, showing top section of incline and narrow boat, looking south



Plate 3: North facing section of trench, showing iron channel fragment in situ, looking south



Plate 4: Section of iron plate found close to trench



Plate 5: Western end of north facing section of trench, showing clay layer, looking south



Plate 6: View down upper arm of canal, looking north



Plate 7: South facing section of badger fence trench on dry upper arm of canal, showing burnt clay made ground, looking north east