Bollinhurst Reservoir, Disley, Cheshire East



Topographic Survey and Building Assessment -Supplementary Report



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SUMMARY

United Utilities has proposed to undertake improvement works on Bollinhurst Impounding Reservoir, near Disley, Cheshire. The works will comprise the installation of a new spillway and the strengthening of the reservoir embankment.

As a result of a desk-based assessment (OA North 2008) of a reservoir-side building known as the Fisherman's Hut, and a desk-based assessment and walkover survey of the development area (OA North 2009), recommendations were made for further work. This supplementary report presents the results of this additional programme of work.

Recommendations were made for an assessment of the Fishermans Hut, and a detailed topographic survey of two earthwork features; these being a stone quarry (Site 28), and ridge and furrow (Site 30).

It is probable that the earthwork features were more extensive in the past and both have been affected by subsequent agricultural practices. The Fisherman's Hut does not appear to have been constructed earlier than the early to mid-twentieth century, possibly the 1930s. It contains no evidence to suggest that it housed apparatus relating to the reservoir, and was probably intended as a welfare facility. The English Heritage Level 1-type assessment of this building provides sufficient record of the structure and no further recording is deemed necessary.

ACKNOWLEDGEMENTS

OA North would like to thank United Utilities for commissioning the work.

The topographic survey and building assessment were undertaken by Karl Taylor. Mark Tidmarsh produced the illustrations. Karl compiled the report, which was edited by Alison Plummer, who also managed the project.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 United Utilities has proposed to undertake improvement works on Bollinhurst Impounding Reservoir, near Disley, Cheshire (Fig 1). The works will comprise the installation of a new spillway and the strengthening of the reservoir embankment. Following recommendations made by the Archaeological Planning Advisory Service of Cheshire Shared Services, United Utilities commissioned Oxford Archaeology North (OA North) to undertake a desk-based assessment (OA North 2008) of a structure known as the Fisher's Hut, and rapid archaeological desk-based research and a walkover survey of the entire area of proposed works in August 2009 (OA North 2009).
- 1.1.2 As a result of these initial phases of work, recommendations were made for a building assessment of the Fisherman's Hut, and for the detailed recording of two sites: A stone quarry (Site 28), and ridge and furrow (Site 30), both being highlighted in the OA North 2009 report. These are located in the area outlined for rock removal to the north of Bollinghurst Reservoir, and will, therefore, be impacted upon by the improvement works.

1.2 LOCATION AND GEOLOGY

1.2.1 The study area is located on the western edge of the Peak District, at the south end of the Pennines, *c* 10km to the south-east of Stockport (SJ 9732 8383). The proposed works are located on both sides of the Bollinhurst Brook, the northern side being within the township of Disley, and the southern side within the township of Lyme Handley, and within Lyme Park, a National Trust property. Two reservoirs are located on the south side of the Bollinhurst Brook, immediately north of the Lyme Park boundary: Horse Coppice Reservoir to the west, and Bollinhurst Impounded Reservoir, on which the works are proposed, to the east.

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 A full background to the study area is presented in the Fisherman's Hut at Cockhead, Bollinhurst Reservoir, Disley, Cheshire. Rapid Desk-Based Assessment (OA North 2008), and also in Bollinhurst Impounded Reservior, Disley, Cheshire. Rapid Desk-based Research and Walkover Survey (OA North 2009). What follows is a brief summary pertaining to the sites discussed in this report.
- 1.3.2 *Extractive Industries:* it has long been recognised that mineral extraction was carried out within the Lyme Park estate during the post-medieval period. This included stone quarrying on Cage Hill and coal mining at Coalpit Clough. Lyme Park lies across a geological boundary, with exposed deposits of Coal Measures to the west and Pennine Millstone Grit to the east (Sylvester and Nulty 1958, 6-7). The extraction of coal in East Cheshire was slow to develop

- as the regions of Macclesfield and Bollington were originally concerned primarily with the production of textiles (*ibid*). The coal itself was also of a poor quality with an excessive sulphurous content, and was generally only mined on a small scale for local and domestic use (Harris 1971, 92).
- 1.3.3 *Horse Coppice and Bollinhurst Reservoirs:* Horse Coppice Reservoir (also known as Stockport Reservoir, Site **24**) and Bollinhurst Reservoir, to its east, were constructed on the Bollinhurst Brook towards the end of the nineteenth century. The Bollinhurst Reservoir removed the northern part of Bollinhurst Wood (OA North 2008). Both reservoirs provided water to Stockport (Henry 1919, 207-8).
- 1.3.4 Bollinhurst Impounded Reservoir is a 'zoned earth' dam that dates to *c* 1872, and was designed by the engineer George Henry Hill (1827-1919), under the terms of the Stockport District Waterworks Act 1863. Earth Dam constructions comprise the excavation of a 'cut off' trench, running the full length of a dam, which is infilled with an impervious material to stop seepage beneath the dam (at Bollinhurst this is concrete). The innovative design of the dam meant that its valve shaft was located in the reservoir, reached by a foot bridge.

 (http://www.engineeringtimelines.com/scripts/engineeringItem.asp?id=761; OA North 2008). A building to the north of Bollinhurst Reservoir, known as the Fisherman's Hut is thought to be contemporary and associated with the reservoir, perhaps housing some of the reservoir machinery and/or serving as an office for maintenance staff (OA North 2008).

2. METHODOLOGY

2.1 TOPOGRAPHIC SURVEY

- 2.1.1 The topographic survey was carried out using a *Leica 1200* series DGPS, which enabled the survey data to be tied into the Ordnance Survey National Grid to an accuracy of +/- 15mm. The survey resulted in the production of a site plan (Fig 2) showing the nature of the visible landscape features.
- 2.1.2 The main focus of the survey was the possible remains of stone quarrying activity and extant ridge and furrow, as identified during the walkover survey (Sites 28 and 30). However, all extant and visible landscape features were surveyed, including general features, such as footpaths and fences. The survey of landscape feature,s such as banks and ditches, comprised the top and bottom break of slope. Ridge and furrow was surveyed in the furrow. Height information was also recorded in height above OS Datum.

2.2 BUILDING ASSESSMENT

- 2.2.1 The building assessment of the Fisherman's Hut was carried out to English Heritage Level 1 Guidelines (English Heritage 2006), in order to record the general appearance of the hut and it's setting. A Level 1-type assessment is a basic visual record, which aims to identify the location, age and type of building. Although this level of assessment is normally restricted to the exterior of a building, the interior of the fisherman's hut was also inspected.
- 2.2.2 A brief written description of the building was undertaken utilising OA North *pro forma*. This served to outline the nature of the construction, layout and architectural appearance of the hut.
- 2.2.3 A photographic archive was compiled using 35mm SLR cameras to produce both black and white negative and colour transparency archive images. In addition, each image was reproduced using a 14 megapixel DSLR camera. A photographic index was also produced.

2.3 ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with current IfA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be provided in the English Heritage Centre for Archaeology format and will be submitted to the Cheshire Record Office on completion of the project. Copies of the report will also be submitted to the Historic Environment Record. The Arts and Humanities Data Service (AHDS) online database *Online Access index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

3. TOPOGRAPHIC SURVEY

3.1 RESULTS

- 3.1.1 The topographic survey recorded extant earthwork features relating to former stone quarrying and ridge and furrow cultivation, the results of which are presented as Figure 2. Other general landscape features were recorded such as fence lines and walls.
- 3.1.2 The former quarry (Site **28**) is visible on a slight rise to the north of the Bollinghurst Reservoir (Fig 2; Plate 1). There are several shallow, round and semi-circular pit-like features, in which outcrops of sandstone are visible. Whilst the site is relatively small, it formerly might have been part of a larger outcrop, for which the quarry evidence has been filled in.
- 3.1.3 To the north of the rise where the quarry is located, the field flattens out, and there is an area of ridge and furrow (Site 30). This is aligned on a general north/south axis (Fig 2). The ridges are quite shallow and appear to have been extensively ploughed, although the field is now laid down to rough-grazing. On average, the distance between the furrows is approximately five metres. The earthwork remains thin out toward the west end of the field.
- 3.1.4 The northern boundary of the field within which the ridge and furrow is located, comprises a bank and ditch. This extends west into the next field. A further field boundary was surveyed at the extreme western limit of the field immediately west of Sites 28 and 30. This appears to relate to a field boundary illustrated on the 1850 Lyme Handley Tithe and the 1851 Disley Tithe (OA North 2009, Fig 3). This is illustrated as a footpath on later maps.

4. BUILDING ASSESSMENT

4.1 Introduction

4.1.1 A building assessment was undertaken of the Fisherman's Hut, which had been the subject of an earlier desk-based assessment (OA North 2008). The hut is located to the north-east of Horse Coppice Reservoir, to the north of the overflow outlet from Bollinghurst Reservoir (Plates 3 and 4).

4.2 RESULTS

- 4.2.1 The Fisherman's Hut is a small, rectangular-shaped building, measuring approximately 10.5m in length by 4.3m in width, and it is 3.1m in height. It is constructed from brick (internally) with a facing of narrow courses of worked sandstone, which is rock-faced and ribbon pointed. Each elevation has a concrete coping and the roof is of pent construction, sloping to the rear. The roof covering is of modern felt. Each of the end walls project upwards to hide the sloping roof, giving it a flat appearance. The whole structure sits on a concrete plinth, approximately 0.15m thick, although the true depth is not clear. The building platform is cut into the hillside.
- 4.2.2 The building is divided into two halves, each having its own doorway, located at opposing ends of the front elevation. There are two wide windows in the front (south) elevation, two smaller windows in the west elevation, and a single wide window, in the east elevation. All are of modern timber construction. There are no apertures in the rear of the building.
- 4.2.3 Internally, the west half of the building is divided into three areas: a main entrance lobby or corridor (Plate 5); a small toilet cubicle within the lobby; and a larger, main room, being used as an office. All the internal walls are of brick construction, being laid in stretcher bond. This includes the main walls, which are stone-faced externally. Corbels are present along the top of the south wall. The internal doors are ledged and braced, and the floor is concrete throughout. The roof is of common rafter and purlin construction, with fibre panels laid above the timbers. Internal fixtures and fittings include a ceramic sink and a high-level toilet cistern, probably of 1930s date. The eastern half of the hut comprises one room, which is of the same construction as the western half of the building, but is larger in size. All the walls are white-washed internally.
- 4.2.4 The earlier desk-based research (OA North 2008) concluded that the Fisherman's Hut is of limited value only. Cartographic sources demonstrated that it is not of great antiquity, and was only built during early to mid twentieth century. Moreover, far from being a fisherman's hut, its proximity to the reservoir and to the boundary wall would suggest that it was built at the same time or shortly after the wall and reservoir dam were erected. The building appears to have functioned at some point as an office for maintenance staff. The building assessment found no evidence to suggest otherwise.

5. CONCLUSION

5.1 SYNTHESIS

- 5.1.1 The earthworks remain are typical relics of a post-medieval agricultural landscape. It is possible that the quarrying remains may relate to extraction of stone for the construction of the two reservoirs, although its relatively small size places some doubt on this theory; the stone quarried was more likely to have been intended for small-scale commercial use, in the local landscape. The straight nature of the ridge and furrow is suggestive of a post-medieval rather than medieval date for this activity.
- 5.1.2 The Fisherman's Hut does not appear to have been constructed prior to the early to mid-twentieth century. There is no evidence present to suggest that the building housed equipment or apparatus directly related to the working of the reservoirs. It would appear to be an office and welfare facility for reservoir maintenance workers, which is also likely to have been used, as its name would suggest as a fisherman's hut.
- 5.1.3 No recommendations are made for further work for any of the sites discussed in this report.

6. BIBLIOGRAPHY

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Handley Tithe Map, 1850

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7. ILLUSTRATIONS

7.1 LIST OF FIGURES

Figure 1: Site Location

Figure 2: Topographic Survey of Sites 28 and 30

7.2 LIST OF PLATES

Plate 1: Earthwork evidence of sandstone quarrying (Site 28), facing north

Plate 2: General appearance of the Fisherman's Hut, showing the symmetrical layout of the windows and doorways. The Bollinghurst Reservoir outflow can be seen in the foreground.

Plate 3: General location of the Fisherman's Hut showing the close proximity of the Bollinghurst Reservoir outflow.

Plate 4: General View of the area around the Fisherman's Hut, with the Bollinghurst Reservoir wall in the foreground.

Plate 5: West elevation of the Fisherman's Hut, illustrating the difference in window size.

Plate 6: Detail of the doorway at the east end of the front elevation of the Fisherman's Hut

Plate 7: Window detail in the front elevation of the Fisherman's Hut.

Plate 8: General appearance of the interior of the Fisherman's Hut

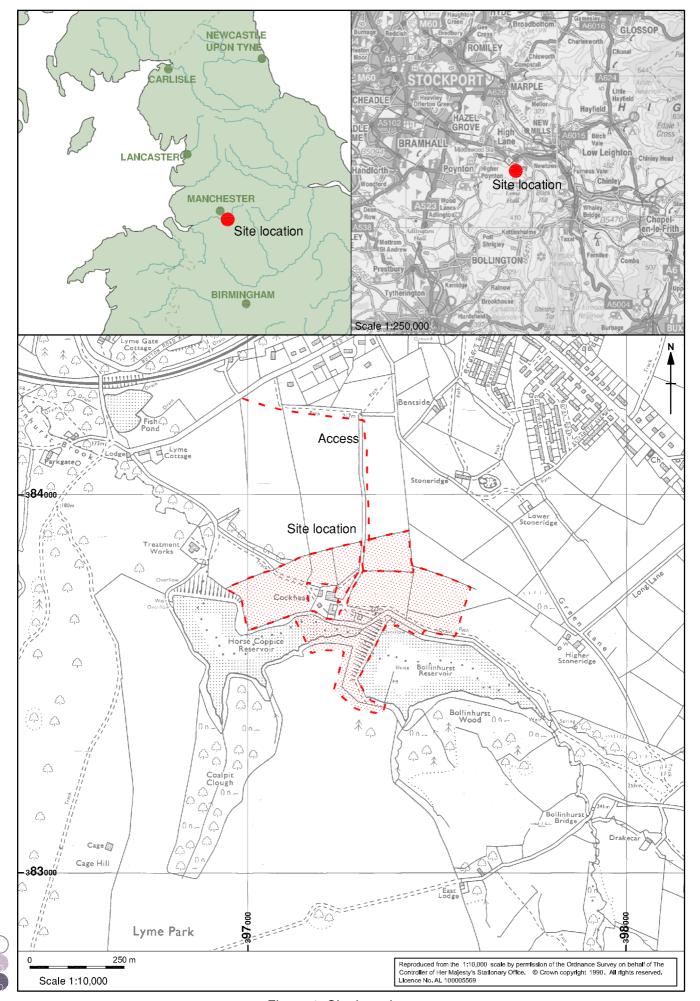


Figure 1: Site Location

Figure 2: Topographic Survey of Sites 28 and 30



Plate 1: Earthwork evidence of sandstone quarrying (Site 28), facing north



Plate 2: General appearance of the Fisherman's Hut, showing the symmetrical layout of the windows and doorways. The Bollinghurst Reservoir outflow can be seen in the foreground.



Plate 3: General location of the Fisherman's Hut, showing the close proximity of the Bollinghurst Reservoir overflow.



Plate 4: General view of the area around the Fisherman's Hut, with the Bollinghurst Reservoir wall in the foreground.



Plate 5: West elevation of the Fisherman's Hut, illustrating the difference in window size.

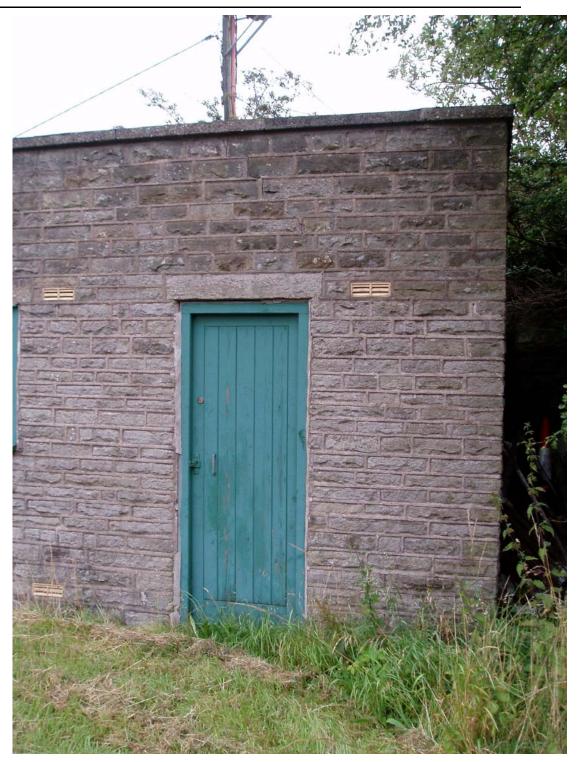


Plate 6: Detail of doorway at the east end of the front of the Fisherman's Hut.



Plate 7: Window detail in the front elevation of the Fisherman's Hut.



Plate 8: General appearance of the interior of the west end of Fisherman's Hut, with the toilet cubicle in the corner.