THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Meifod Sewage Treatment Works and New Rising Main ARCHAEOLOGICAL WATCHING BRIEF



CPAT Report No 461

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Report for Severn Trent Water

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1 INTRODUCTION

- 1.1 In June 2001 the Contracts Section of the Clwyd-Powys Archaeological Trust were invited by Severn Trent Water to undertake an archaeological watching brief during construction of a new rising main associated with the Meifod Sewage Treatment Works.
- 1.2 The Curatorial Section of the Clwyd-Powys Archaeological Trust, acting in their role as archaeological advisors to Severn Trent Water, had determined that a watching brief should be carried out during the initial stages of topsoiling, construction and service trench excavation. Accordingly, a Brief (CWAT 381, dated 01/06/00) was prepared detailing the scheme of works required.
- 1.2 Information held on the County Sites and Monuments Record indicated that the development may impact upon deposits related to the historic core of Meifod village, as well as the flood defence embankment to the south of the village.

2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The pipeline (Fig. 1) runs for a total of 1.4km, commencing at SJ 15962 12925 on the northern bank of the River Vyrnwy, to the sewage treatment works north-west of Meifod at SJ 14860 13422.
- 2.2 Soils in the area vary from fine silty soils over silts and gravels derived from river alluvium in the valley floodplain, to fine silty and clayey soils derived from drift from Palaeozoic mudstones and siltstones elsewhere (Rudeforth *et al.* 1984).

3 WATCHING BRIEF

- 3.1 The watching brief was undertaken between 16 October 2001 and 22 February 2002 during the excavation of the pipe trench. A written record was maintained throughout, together with a photographic record in 35mm black and white and colour print and colour slide formats.
- 3.2 The general working method adopted by the contractors varied according to the location. Where the pipeline corridor, which was approximately 11m wide, passed through fields, turf and topsoil was stripped mechanically before the pipe trench (c. 0.6m wide and up to 1.1m deep) was excavated. Where the pipeline route followed the course of a road, the trench was cut through the tarmac. The working methods dictated that there was only a limited opportunity to identify any features of archaeological potential.
- 3.3 The section between the proposed new outfall structure close to the northern bank of the river Vymwy (Fig. 1, A; SJ 15962 12925) and the junction of the flood protection embankment and the unclassified road (Fig. 1, B; SJ 15542 13004), yielded no features of archaeological importance. Soils exposed were generally silts and clays above occasional patches of gravel. Apart from brick and field drain fragments, no other artefacts were identified and no deposits indicative of human activity were noted.
- 3.4 To the north-west of the junction of the embankment and the road, the excavated trench proceeded along the south-western side of the road, the level of which had evidently been raised in association with the flood defences. A section examined at the south-eastern end revealed a former tarmac road surface (pl 1) overlying a clean, grey gravel, which appeared to be a natural deposit. This former road surface re-appeared 60m to the north-west at a point where the modern road levels off. Further to the north-west, the latter and its stone sub-base, overlay undisturbed silty gravels.
- 3.5 At the south-east edge of Meifod village (Fig. 1, C; SJ 15384 13112) a stone-built, arched bridge was identified below the road surface and reported to CPAT by the contractors. Arrangements were made for this to be recorded and photographed but, unfortunately, for safety reasons the trench at that point had to be backfilled before any record could be made. The bridge and its parapets were reported to be entirely of lime-mortared stone and the section exposed was up to 4.5m wide. It would appear that the bridge had been constructed to carry the road over a drain, visible in the fields to the east, and depicted on the Tithe Survey of 1842 (Fig. 2).

- 3.6 Due to the unforeseen engineering problems posed by the presence of the bridge, the contractors postponed further trench-cutting between the bridge and the A495, some 20m to the north-west. Subsequently, it was decided to employ a boring technique to pass the pipe below the bridge foundations and beyond to the road junction. As no trench was excavated along this section no watching brief was undertaken
- 3.7 The wayleave corridor and pipe trench ran north-westwards for some 280m along the south-eastern and north-eastern edge of a pasture field (OS no 2626) and parallel to a minor road from SJ 15365 13145 to SJ 15260 13390. Soils excavated below the stripped turf and topsoil consisted of clays and clayey silts above a silty gravel which was generally at a depth close to the base of the trench at 1.1m. A single feature (Fig. 1, D; SJ 15320 13282) was identified along this section, consisting of a layer of burnt clay and charcoal fragments (pl 2), 1.20m long and up to 0.04m thick, which was visible in the clayey silts of the exposed east-facing section of the pipe trench at a depth of 0.35m below the surface. The layer did not extend through to the opposite section of the trench. An existing iron water mains pipe lay adjacent to the layer on its southern side and it appears that the pipe trench for this had cut through the layer. The exposed soils in the wayleave corridor adjacent to this feature were examined but with negative results. This layer appeared to be an *in situ* deposit, although its dating and function are uncertain. No artefacts were recovered from the area.
- 3.8 An area of stone (pl 3) was identified within the pipe trench further to the north-west (Fig. 1, E; SJ 15280 13320), extending for *c*. 1.5m and containing a quantity of stone up to 0.26m in diameter, at a depth of up to 0.4m below the surface. The stones appeared to be uncoursed and could not be identified with any certainty as being part of a structure. No artefacts were found that could have been associated with this feature and examination of the wayleave corridor to the west yielded nothing apart from a few randomly scattered flat shale stones.
- 3.9 Examination of the stockpiled topsoil stripped from the wayleave and the exposed surface of the wayleave corridor itself in this field, yielded pottery sherds, iron, glass and clay pipe fragments all dating from the late 18th to 20th centuries (see Appendix 2). These finds were concentrated mainly in the southern half of the corridor closest to the historic core of the village.

4 CONCLUSIONS

- 4.1 Approximately 470m of topsoil-stripped pipeline corridor, excavated pipe trench and stockpiled topsoil were examined where the corridor passed through pasture fields and a further 70m of pipe trench located along roads.
- 4.2 The watching brief revealed four features of archaeological interest, the most significant of which was a stone-built arched bridge, 20m south-east of the A495, which had been constructed to carry the road over a drain. Unfortunately, there was no opportunity to record the bridge in detail. An earlier tarmac road surface was identified to the south-east of Meifod which was apparently buried in 1966 when the level of the present road was raised as part of the flood defence programme (J. Pickstock *pers. comm.).* Other features included an undated burnt layer and an area of stones of unknown significance.
- 4.3 Significantly, no medieval material was recognised in the vicinity of the centre of the village, where it might have been anticipated.

5 ACKNOWLEDGEMENTS

5.1 The writer would like to thank the representatives of Severn Trent Water and Edmund Nutall Ltd, the Principal Contractor who were involved in this project.

6 REFERENCES

Rudeforth, C C, Hartnup, R, Lea, J W, Thompson, T R E, & Wright, P C, 1984. Soils and their use in Wales, Bulletin No. 11. Harpenden: Soil Association of England and Wales.

APPENDIX 1

MEIFOD SEWAGE TREATMENT WORKS AND NEW RISING MAIN SPECIFICATION FOR A CONTRACTED ARCHAEOLOGICAL WATCHING BRIEF BY THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

- 1.1 The proposed development involves the construction of a new rising main for the Meifod Sewage Treatment Works, Powys. The Curatorial section of the Clwyd-Powys Archaeological Trust, acting in their role as archaeological advisors to Severn Trent Water, have determined that a watching brief should be carried out during the initial stages of topsoiling, construction and service trench excavation. Accordingly, a Brief (CWAT 381, dated 01/06/00) has been prepared detailing the scheme of works required.
- 1.2 Information held on the County Sites and Monuments Record indicates that the development may impact upon deposits related to the historic core of Meifod village, as well as the flood defence embankment to the south of the village.

2 Objectives

- 2.1 The objectives of the archaeological works are:
- 2.1.1 to record the nature, condition, significance and, where possible, the chronology of any archaeological deposits and/or features revealed within the area of the proposed development during the development works in so far as these aims are possible;
- 2.1.2 to prepare a report outlining the results of the watching brief.

3 Methods

- 3.1 The watching brief will be undertaken to include the initial topsoil stripping, construction and service trench excavation.
- 3.2 Limited excavation of all significant contexts will be undertaken where possible following negotiations with the developer. All significant archaeological deposits and/or features noted during the watching brief will be recorded by drawn plan/section and photography in 35mm black and white and colour print, and colour slide. All features will be tied in locationally to the Ordnance Survey as accurately as possible.
- 3.3 Following the on-site work an illustrated and bound report will be prepared according to the principles detailed in Section 8 of the Brief. This will be in A4 format and contain conventional sections on: Site location, Topography and Geology; Historic Background; Catalogue of sites identified with notes on their condition and significance, Conclusions and Recommendations and References, together with appropriate appendices on archives and finds. Further publication of the results in an appropriate regional or national journal will be undertaken at a later date and as considered appropriate depending on the nature of the findings.
- 3.5 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991). Following agreement with the landowner, arrangements will be made for the long term conservation and storage of all artefacts in an appropriate repository.

4 Resources and Programming

- 4.1 The watching brief will be undertaken by a skilled and experienced archaeologist. Overall supervision will be by Mr R.J.Silvester, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists.
- 4.2 All report preparation will be completed by or with the assistance of the same field archaeologist who conducted the watching brief.
- 4.3 The duration of the watching brief will depend entirely on the developers programme of work. The subsequent report will be prepared immediately following completion of on-site recording, dependent on the client's instructions and the arrangement of a suitable timetable. The date of commencement, has yet to be formalised, but is likely to be during August or September 2000. The archaeological curator will be informed of the detailed timetable and staffing levels when agreement has been reached with the client.
- 4.4 Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.5 CPAT is covered by appropriate Public and Employer's Liability insurance.

N.W.Jones Projects Officer 9th June 2000

APPENDIX 2 PROJECT ARCHIVE

Site records

12 watching brief daily visit forms 7 black and white negatives 7 colour prints 7 colour slides

Finds

1 sherd medieval jug rim, unglazed (12g)

1 sherd medieval jug body, unglazed (3g)

1 sherd medieval cooking pot body (3g)

2 sherds ?Mottled Ware, 18th-19th century (11g) 1 sherd Developed Yellow Ware, 18th-19th century (14g) 7 sherds coarse unglazed earthenware, 18th-19th century (90g) 3 sherds Coal Measures Redware, 18th-19th century (100g) 7 sherds transfer printed ware, 18th-20th century (23g) 10 sherds Developed Whiteware, 18th-20th century (60g) 1 sherd stoneware jar rim (10g) 2 sherds Industrial Slipware, 19th-20th century (7g) 5 claypipe stem frags (8g) 2 sherds green bottle glass (17g)

Miscellaneous Pipeline plans Correspondence



Fig. 1 Pipeline corridor and site location.



Fig. 2 Extract from the Tithe Survey of Meifod parish 1842



Plate 1 Former tarmac road surface (B). Photo CPAT 1151.0



Plate 2 Layer of burnt material (D). Photo CPAT 1151.9



Plate 3 Area of stone visible within pipe trench at (E). Photo CPAT 1151.11



Plate 4 Pipe laying operations near (E). Photo CPAT 1151.10