DYFED ARCHAEOLOGICAL TRUST LTD



22/08/9

CLARACH BAY LLANGORWEN, CARDIGANSHIRE

ARCHAEOLOGICAL WATCHING BRIEF ON THE SEWAGE PIPELINE Project Record No. 2824 4 2 6 87

MAY 1995

Commissioned by:

Dŵr Cymru / Welsh Water

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ARCHAEOLOGICAL WATCHING BRIEF ON THE SEWAGE PIPELINE AT LLANGORWEN, CARDIGANSHIRE, MAY 1995

DAT Project Record 28245

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1.0 INTRODUCTION

1.1 Summary

The laying, by Dwr Cymru, of a sewer pipeline immediately north of Llangorwen Church, Cardiganshire, affected the environs of a possible bronze age cremation cemetery whose exact limits are not known.

The pipe-laying involved the cutting of a trench 1m deep. An 80m length of the trench was examined before and after excavation, but no archaeological features were seen.

1.2 Planning History

Details of proposed foul water sewers in Clarach Bay and a proposed foul water rising main to Bow Street, Cardiganshire, were forwarded by Teifion Rees of Dwr Cymru to Dyfed Archaeological Trust on 28 August 1994.

Following the initial comments made by the Heritage Management Section of the Trust, Dwr Cymru were advised of the need for a detailed archaeological desk top assessment of the project to be prepared in order for detailed mitigatory measures to be drafted. This desk top assessment was produced by Dyfed Archaeological Trust's Field Operations Section in September 1994. The assessment report (Ludlow, 1994; DAT PRN 28245) drew attention to the possible bronze age cremation cemetery below and around Llangorwen Church, and recommended that an archaeological watching brief be caried out on trench excavation in this area.

Dwr Cymru accepted the recommendations in the report and, on 2 May 1995, commissioned a watching brief to be carried out on the area of potential archaeology affected by the scheme prior to and during the work, as part of the mitigation strategy. An archaeological report on the results of the watching brief was also commissioned.

Dyfed Archaeological Trust's Field Operations Section were accordingly advised of the proposed schedule of works in June 1995. The watching brief was undertaken on 12 and 18 July 1995.

1.3 Content and scope of the watching brief

An archaeological watching brief is defined by the Institute of Field Archaeologists as a formal programme of observation and investigation conducted during an operation carried out for non-archaeological reasons - normally a development or other construction project - within a specified area where archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report.

The watching brief will be intended to allow, subject to resources, the preservation by record of archaeological deposits in advance of their disturbance or destruction and to provide an opportunity, if necessary, for the watching archaeologist to alert all interested parties to the presence of an archaeological find for which the resources allocated to the watching brief are insufficient to support satisfactory treatment.

The watching brief is not intended as a substitute for contingent excavation.

The client will be supplied with 3 copies of an archaeological report of the results of the watching brief. The report will be fully representative of all the information recovered. Normally it will be read in conjunction with a desk-top assessment for the scheme which provides the historical framework for the watching brief. A copy of the report will also be deposited with Dyfed Sites and Monuments Record.

1.4 Purpose and methodologies of the watching brief

The purpose of the watching brief is to undertake as complete a record as possible of any archaeological features affected by the client's scheme of works. In the case of larger archaeological sites it will seldom be possible or necessary to undertake a record of the entire site; the record will be undertaken only on those areas of the site that may be affected.

The primary stage of the watching brief for any scheme normally involves consultation of the desk top assessment for the scheme and/or consultation of Dyfed Sites and Monuments Record, which is maintained by Dyfed Archaeological Trust's Heritage Management Section, for those sites affected by the scheme.

The client will normally advise Dyfed Archaeological Trust's Field Operations Section of any changes in the proposed works resulting from their consultation of the desk top assessment, and of any sites which may still be affected by the scheme. The client will also provide the Field Operations Section with a proposed schedule of works in order that a full field study may be performed on any affected site prior to the commencement of the works.

Work on or around those affected sites will be subject to the watching brief. The work will be closely observed by an archaeologist from the Field Operations Section who will also undertake a full drawn, written and photographic record of any archaeological features which may be disturbed by the scheme, and any artefact or find exposed during the works. Recording will be carried out where necessary and when convenient: it is the Field Operations Section's aim to minimise any disruption to the client's schedule. However, if archaeological features may be lost during the scheme, it may be necessary for the Field Operations Section to request a postponement of the works in order that the archaeology may be recorded. Larger areas affected may require fuller excavation and/or survey.

The primary purpose of the watching brief at Llangorwen was to determine the nature of the deposits through which the pipeline trench was cut, in order to ascertain the extent and form of the possible bronze age cremation cemetery. The site was observed both after the topsoil strip and during excavation of the pipeline trench.

2.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

2.1 Site location

The pipeline route, in entirety, runs from Clarach Bay (SN 588 838) to Bow Street (SN 842 619). It largely runs alongside the Afon Clarach, passing through the river flats of the north bank and the lower part of the valley's northern slope. The geology immediately adjacent to the river comprises alluvial silt, the higher ground to the north, running south of the unclassified Bow Street-Clarach Bay road, representing a terrace of fluvio-glacial gravels.

The section subject to the watching brief occupies 80m of the centre of the route, from NGR SN 6028 8388 to SN 6075 8388, parallel to, and 6m north of, Llangorwen churchyard wall (fig. 6.1). This section crosses level ground along the southern edge of the fluvio-glacial terrace, at 10m OD. The surrounding field is now rough pasture.

2.2 Site history and description (see Ludlow, 1994)

All Saints Church, Llangorwen (DAT PRN 5412), was constructed in the mid 19th century and completed before 1869. During the construction of the church an urn containing human bone was apparently encountered on the south side below the eastern nave gable. More were found during grave digging, in an area 'black-ened by fire' (Briggs, 1994, 198 no. 245, citing Morgan, 1869, Aberystwyth Guide, 100). The presence of these features suggests that a Bronze Age cremation cemetery was present here (DAT PRN 28236).

No archaeological work of any kind has ever been performed on the site and it is impossible to suggest what form or type the cemetery took. Many bronze age cemeteries lie within ditched enclosures, and occupy a considerable area; therefore the cutting of a trench so close to any evidence of cremations was of high archaeological sensitivity.

An enclosed cemetery at nearby Llanilar has been the subject of much recent work by Dyfed Archaeological Trust. It lies in a very similar location - a gently sloping fluvio-glacial terrace close to a riverbank. Llanilar's importance first became apparent when at least five early bronze age cremations, two accompanied by collared urns, were revealed by salvage excavation in 1980 (DAT PRN 9677; Benson et al, 1982). Controlled excavation confirmed that the cremations lay within a slight, polygonal bank and ditch enclosure, and revealed a futher cremation in an enlarged food vessel, some distance to the east and possibly within a further enclosure (Taverner et al, forthcoming). They overlay features from the neolithic period. The possibility that the early bronze age features, at least, represented part of a much more extensive

circular cropmarks possibly representing contemporary ring ditches, on aerial photographs (DAT PRN 13228). However, an archaeological evaluation east of the site in 1994 (DAT PRN 29509) revealed no bronze age features and presumably lay beyond the limits of the cemetery (Ludlow and Darke, 1994).

Llangorwen Church is a successor (though not an immediate successor - there was a break in the ecclesiastical presence at Llangorwen), of a possible medieval chapel (DAT PRN 12439) just to the north at NGR SN 604 839. The site is marked as a chapel on Rees, 1932. Nothing further is known although a building is marked to the north of the site of the present church, on National Library of Wales RM B86, of around 1800, and is absent from later maps. The building is, however, unlabelled.

The field in which the present church (DAT PRN 5412) stands displays a number of irregularities that are visible on the ground. In particular, immediately north of the churchyard is the west end of an extensive, subrectangular hollow, the west and north edges of which are well defined. At least some of these features are undoubtedly artificial and of archaeological significance, but it is unknown whether they relate to the bronze age, to some form of medieval occupation of the site, or even belong to a later period. At any rate, they render the area highly archaeologically sensitive.

2.3 Observations during the watching brief

The section subject to the watching brief occupies 80m of the centre of the route, from NGR SN 6028 8388 (the roadside of the B4572) to SN 5075 8388 (a north-south running drainage ditch and field boundary of post-medieval date, see below), the centreline of the trench lying 6m north of Llangorwen churchyard wall and running parallel to it (see fig. 6.1).

2.3.1. The turf strip

As a preliminary to trench excavation, a section of turf 5m wide was machine-stripped, by the contractors, along and either side of the line of the proposed route. The exposed soil surface along the was examined for soilmarks and features of archaeological significance.

The ground surface follows a gentle downhill slope from west to east. No recognisable slopewash was encountered.

The subsoil horizon occurred at a depth generally between 0.3 and 0.4m and was immensely variable in nature. The western third comprised silty clay loams displaying natural hollows of variable size. The smaller hollows contained angular small-medium shale gravel, and some gravel areas were seen to anastamose with the silty clay loams in a form of cross-bedding. Some of these hollows and lenses had very well-defined edges and at least one appeared to represent a definate man-made feature; however, in the trench section it was demonstrated that it represented the edge of the clay (below).

In the eastern two-thirds very compact and very fine clays, in colour yellow through to gleyed pale grey, ran up to the silty clay loam/gravel.

2.3.2 The trench section

A trench, 0.5m wide and 1m deep, was machine-dug by the contractors along the centreline of the turf-strip. This permitted observation of the cut sections of the trench.

From the western end of the trench (alongside the B4572) to a point 25m to the east, the trench was cut through the silty clay loam/gravel horizon noted above. This was seen in section to comprise largely homogenous fluvio-glacial gravels of varying degrees of sorting, with no visible banding. Coarse components were mainly shale gravels of varying sizes, both angular and rounded. Some manganese deposits were present, otherwise it was entirely sterile. The gravels descended to the bottom of the trench.

To the east of these gravels, and overlying them, was a considerable area of clay. This ran up and over a gradual easterly slope downhill in the surface of the gravels. The clays were in general clean and lacking coarse components, though some gravel lenses were present. In colour they varied from yellow through to gleyed pale grey, and descended to the bottom of the trench. They too were sterile.

At a point 40m from the west end of the trench these clays were seen to run beneath soft, plastic organic silty clays, of apparent recent (post-glacial) formation, which after a short distance came to occupy the full depth of the trench. The base of a developed soil remained above the central area of these clays. The organic nature of these clays is doubtless a result of the wet, marshy condition of the ground here.

At the east end of the trench the organic clays in turn run beneath what appears to be a recent dump of sterile orange clays, possibly upcast from the field boundary and drainage ditch which defines the east end of this section of trench. This ditch is apparently a 19th century feature and is not shown on earlier estate maps (eq. National Library of Wales, RM A120).

No archaeological features, apart from the drainage ditch which represents the eastern end of this trench, were seen anywhere within the trench sections. The only archaeological deposit not of post-medieval date was an area of charcoal fragments, including some large fragments, that occurred 10m from the east end of the trench within the organic clays. The charcoal was not seen in section, only in the upcast from the trench excavation, so the level within the trench in which it occurred is not known, and in the absence of laboratory analysis neither its date nor nature can be known.

2.4 Conclusions

The trench revealed deposits indicative of the glacial and later history of the drift geology of the Llangorwen area, and sectioned a drainage ditch of post-medieval origin.

Charcoal was obtained from post-glacial organic clays near the east end of the trench, but the confines of the watching brief do not permit for its detailed scientific study.

Otherwise, no archaeological features were present. No evidence was furnished for the presence of the possible bronze age cremation cemetery, documented as lying beneath Llangorwen Church and churchyard.

3.0 THE FINDS

No finds, apart from charcoal fragments, were encountered during the watching brief. Laboratory analysis of the charcoal lay beyond the scope of the watching brief.

4.0 THE ARCHIVE

The archive, indexed according to the National Monuments Record (NMR) material categories, is held by the Dyfed Archaeological Trust, Llandeilo, and contains the following:-

- A. Copy of the final report
- B. Field notes
- G. Correspondence on archaeological matters; references
- L. Assessment documents and general admin. notes
- M. Project correspondence

There is no material for classes C, D, E, F, H, I, K and N.

5.0 SOURCES

unpublished

Dyfed Archaeological Trust Sites and Monuments Record.

Ludlow, N., 1994, Report on the archaeological implications of the proposed foul water sewer, Clarach Bay/Foul water rising main to Bow Street, Cardiganshire (CON 94/17) (unpublished copy in Dyfed Sites and Monuments Record).

Ludlow, N., and Darke, I., 1994, Report on the Archaeological Evaluation at OS5713, Llanilar, Cardiganshire (unpublished copy in Dyfed Sites and Monuments Record).

National Library of Wales, RM A120 'A Map of Part of Rhoskellan Estate in the Parish of Llanbadarnfawr, Cardiganshire, belonging to...', by Thos. Lewis, 1769.

published

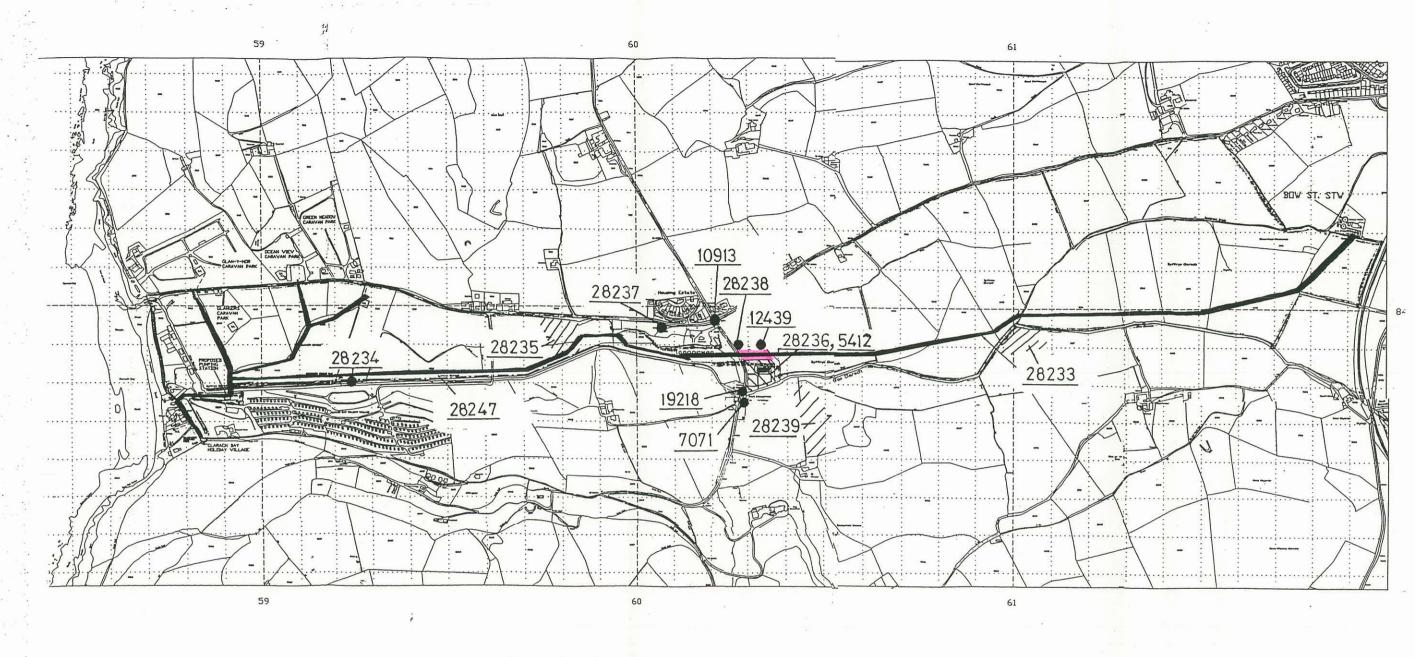
Benson, D. G., Briggs, C. S., Davies, J. L., and Williams, G. H., 1982, A Bronze Age Cemetery at Llanilar, Cardiganshire, Ceredigion Vol. 9, No. 3.

Briggs, C. S., 1994, The Bronze Age in Cardiganshire, Cardiganshire County History.

Rees, W., 1932, South Wales and the Borders in the XIV Century, NW Sheet.

Taverner, N., Marshall, E. C., Murphy, K., and Williams, G. H., forthcoming, A Neolithic and Early Bronze Age Site at Llanilar, Dyfed.

FIGURE 6.1 Location of the section of trench subject to the watching brief



PROPOSED RISING MAIN - 1:5000 ROUTE PLAN



Location of the section of trench subject to the watching brief

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CLARACH BAY SEWERAGE

PRELIMINARY ROUTE OF RISING MAIN FROM CLARACH

Scale 1:5000 Drawn T.A.J. Checked
Initiated A.J.N. Date JUNE '94 Approved