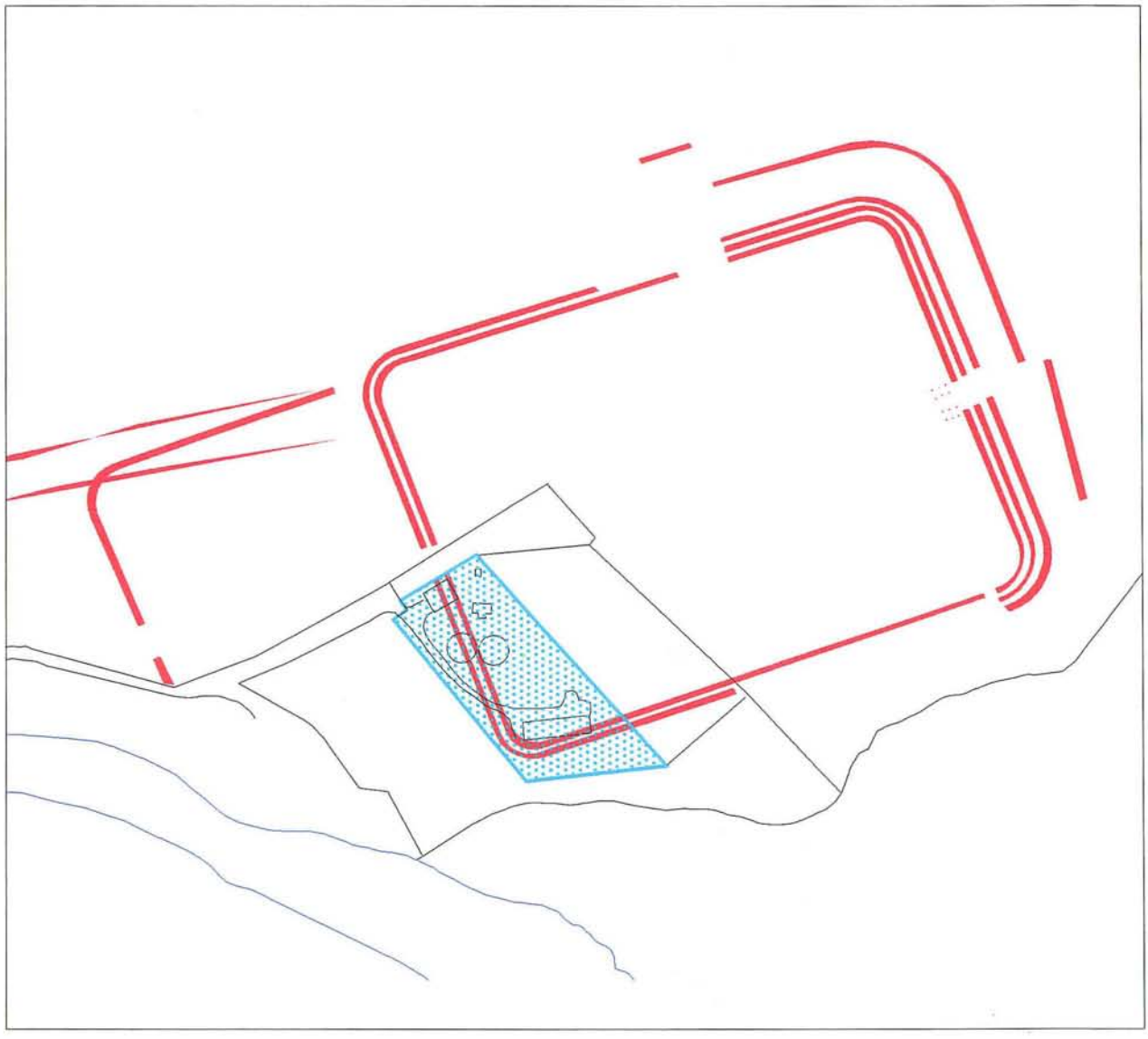
THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Former Sewage Treatment Works, Caersws, Powys

ARCHAEOLOGICAL WATCHING BRIEF



CPAT Report No 473

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ARCHAEOLOGICAL WATCHING BRIEF

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April 2002

Report for Severn Trent Water Ltd.

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CPAT Report Record

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1 INTRODUCTION

1.1 In February 2002 the Contracting Section of the Clwyd-Powys Archaeological Trust (CPAT) was invited by Severn Trent Water to submit a costed proposal for undertaking an archaeological watching brief durings works to decommission the disused Sewage Treatment Works at Llwyn y Brain, Caersws, Powys. The site lies in the south-west corner of the Roman fort known as Caersws I, which is protected as a Scheduled Ancient Monument, although the area of the Treatment Works itself lies outside the Scheduled Area (fig. 2). The watching brief had been requested by Cadw: Welsh Historic Monuments to record any features of archaeological significance which might be revealed during the works.

1.2 An archaeological evaluation had been conducted by CPAT in 1996 to determine the likely state of preservation of archaeological deposits within the area of the treatment works, prior to its closure. The results indicated that although substantial areas of the within the Treatment Works were likely to have been extensively disturbed, certain areas had the potential for surviving in situ deposits (Jones 1996).

2 LOCATION, TOPOGRAPHY AND SOILS

2.1 The disused Treatment Works lies *c.* 1 km east-north-east of Caersws, overlooking the River Severn at approximately 144m OD (SO 03709248; fig. 1).

2.2 The solid geology and soils of the two areas varies considerably. The disused Sewage Treatment Works lies in an area of slowly permeable fine silty and clayey drift over Palaeozic slaty mudstones and siltstones (Rudeforth *et al.* 1984).

3 BACKGROUND

3.1 Caersws has two of the largest auxiliary forts in Wales, the earlier of which was discovered through aerial photographic reconnaissance by Dr JSK St Joseph in the 1950s. The fort remains unexcavated although it has been attributed to the pre-Flavian campaigns to control central and northern Wales (Jarrett 1969, 66). It has been assumed that the fort had a relatively short lifespan, being superseded by a slightly smaller fort, Caersws II, which was constructed on the flood plain 1km to the south-west sometime around AD 75. Caersws I is partly protected as a Scheduled Ancient Monument (SAM Mg 161).

3.2 The Roman archaeology within the Caersws area has been the subject of a review which details the archaeological evidence, mostly in association with Caersws II and its civilian settlement, or *vicus* (Jones 1993). The majority of archaeological interest has centred on the later fort and *vicus*, with little examination of the earlier fort and its environs.

3.3 Caersws I, which lies in a good strategic position overlooking the River Severn, has no surviving earthworks but is clearly visible as a series of cropmarks on a range of aerial photographs. This evidence has demonstrated that the fort was defended by three ditches covering an area of *c.* 250 x 195m externally and enclosing 3.5ha (fig. 2). An annex extends for 100m at the western end, defended by a single ditch. Cropmarks in the eastern gateway show three pairs of post pits on either side of the entrance indicating a timber gate tower. The fort itself is additionally defended by an outworks visible on the north and east side, consisting of a single ditch. The eastern entrance is protected by a slight splaying of the southern section of the outer ditch, while the northern entrance is defended by a short ditch, known as a *titulum*. Whilst the latter feature is commonly associated with temporary camps, the ditches echo the plan of the fort so accurately that they must be contemporary with it and not part of an earlier temporary fort (Wilson 1984, 51).

3.4 A contour plan (Jones 1996, fig. 3) showing the topography of the site before the construction of the now disused Sewage Treatment Works, suggests that some slight upstanding earthworks relating to the defences may have been visible at that time. Subsequent levelling of the area has removed any visible trace of the fort defences.

3.5 Trial excavations undertaken by CPAT in 1996 included the excavation of three test pits within the area of the now disused Treatment Works (fig. 3). The results revealed possible evidence for surviving rampart material in Pit A, together with a deposit of slag in Pit B, which may have been associated with smithing activity within the fort. The archaeological deposits were identified at between 0.15 and 0.20m below present ground level and it was therefore concluded that any ground disturbance in excess of that depth would be likely to disturb those deposits (Jones 1996)

4 WATCHING BRIEF

4.1 The watching brief was undertaken between 27 March and 8 April 2002 during the course of the decommissioning works. A written record was maintained throughout, together with a photographic record in 35mm black and white, colour slide and colour print formats.

4.2 The works included the demolition of all standing structures and the materials from this phase removed to 0.6m below final ground level. These structures included the reinforced concrete balancing tank, inlet works, primary tank, humus tank, sludge holding tanks, brick-lined filter beds, wooden pumping station and the garage (fig. 3). The concrete bases of the garage and pumping station, and the concrete turning area adjacent to the sludge holding tanks were retained.

4.3 The general method adopted by the contractors was designed to avoid disturbance of areas outside the construction trench that surrounded each structure, beyond which any surviving archaeological levels might have survived *in situ*. To achieve this, all structures were demolished inwards, avoiding external ground disturbance, before breaking up the material. Demolition rubble from structures such as the filter beds and balancing tank, inlet and primary tank complex was removed to infill the sludge holding tanks and the humus tank. On completion of the demolition and infilling, the affected areas were subsequently levelled and surfaced with gravel from the filter beds.

4.4 Examination of the soil surfaces surrounding the demolished sub-surface structural walls appeared to confirm that these were redeposited soils associated with the construction trenches. The demolition works proceeded as planned, with no ground disturbance extending beyond the construction trenches and consequently no archaeological deposits were revealed or disturbed.

5 CONCLUSIONS

5.1 The demolition and decommissioning works were undertaken in a manner designed to prevent any ground disturbance to potential archaeological deposits. The watching brief has confirmed that the works were successfully completed and that no archaeological deposits were disturbed.

6 ACKNOWLEDGEMENTS

6.1 CPAT would like to thank the representatives of Severn Trent Water and the plant operators of Dorricott Construction who were involved in this project.

7 REFERENCES

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APPENDIX 1

CAERSWS SEWAGE TREATMENT WORKS
SPECIFICATION FOR A CONTRACTED ARCHAEOLOGICAL WATCHING BRIEF
BY THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

1.1 The proposed development involves the demolition of the Caersws Sewage Treatment Works, Powys. The Inspectorate of Cadw: Welsh Historic Monuments, acting in their role as archaeological advisors to the National Assembly, have recommended that although the proposed works lie just outside the scheduled area of Caersws I Roman Fort, a watching brief should be carried out during the demolition.

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 during all appropriate groundworks. Cadw: Welsh Historic Monuments (dated 21 February 2000) have recommended that the archaeologist undertaking the watching brief 'shall be empowered to halt work in order to record any archaeological features or layers uncovered'.

3.2 Limited excavation of all significant contexts will be undertaken where possible following negotiations with Severn Trent Water. 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 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 contractors programme of work. At present the demolition work appears likely to take two weeks, although an archaeologist may not need to be present for the duration. 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 late March 2002. CPAT would require two week's written notice prior to commencement.

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
Senior Project Archaeologist
4th March 2002

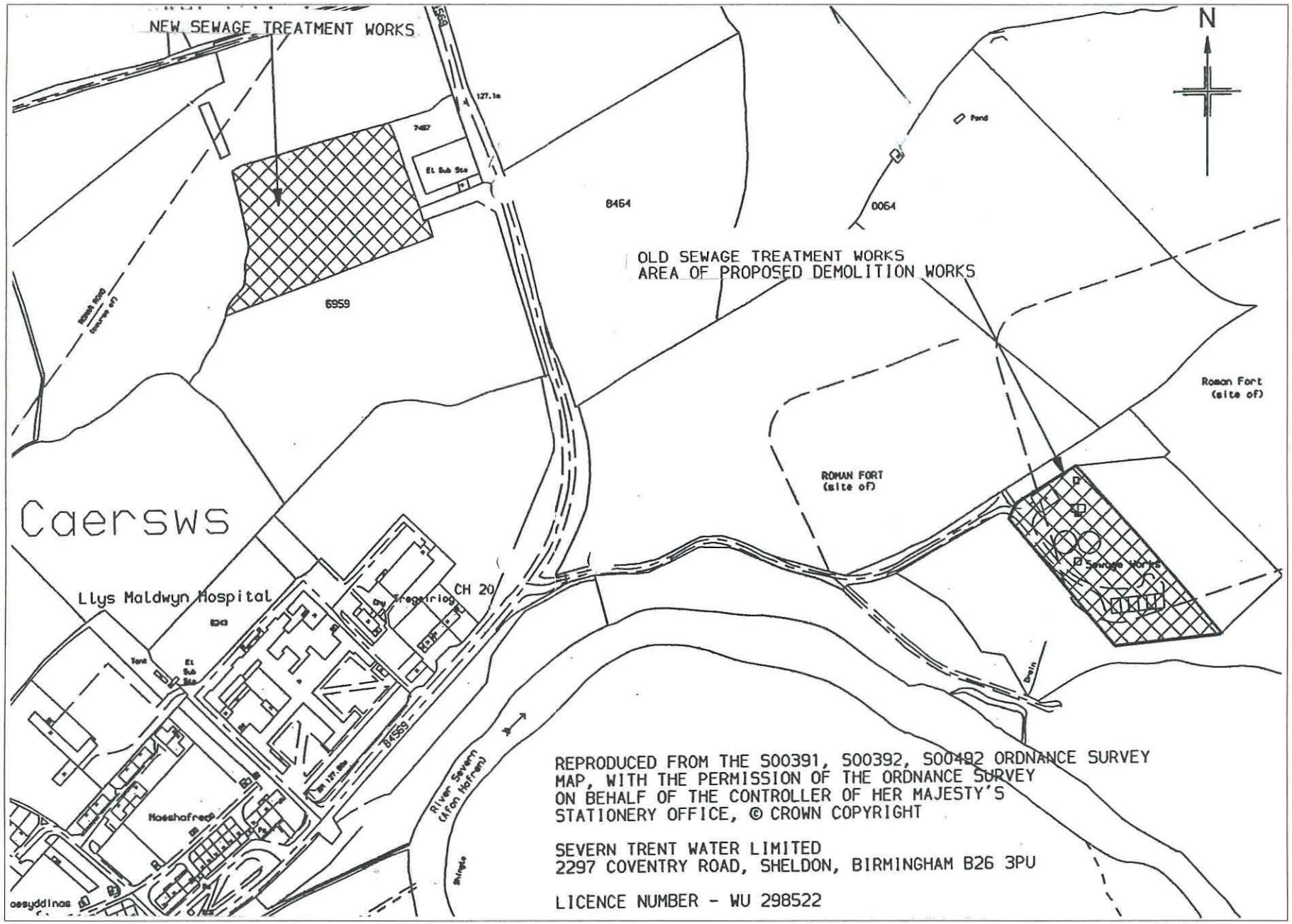

Fig. 1 Site location

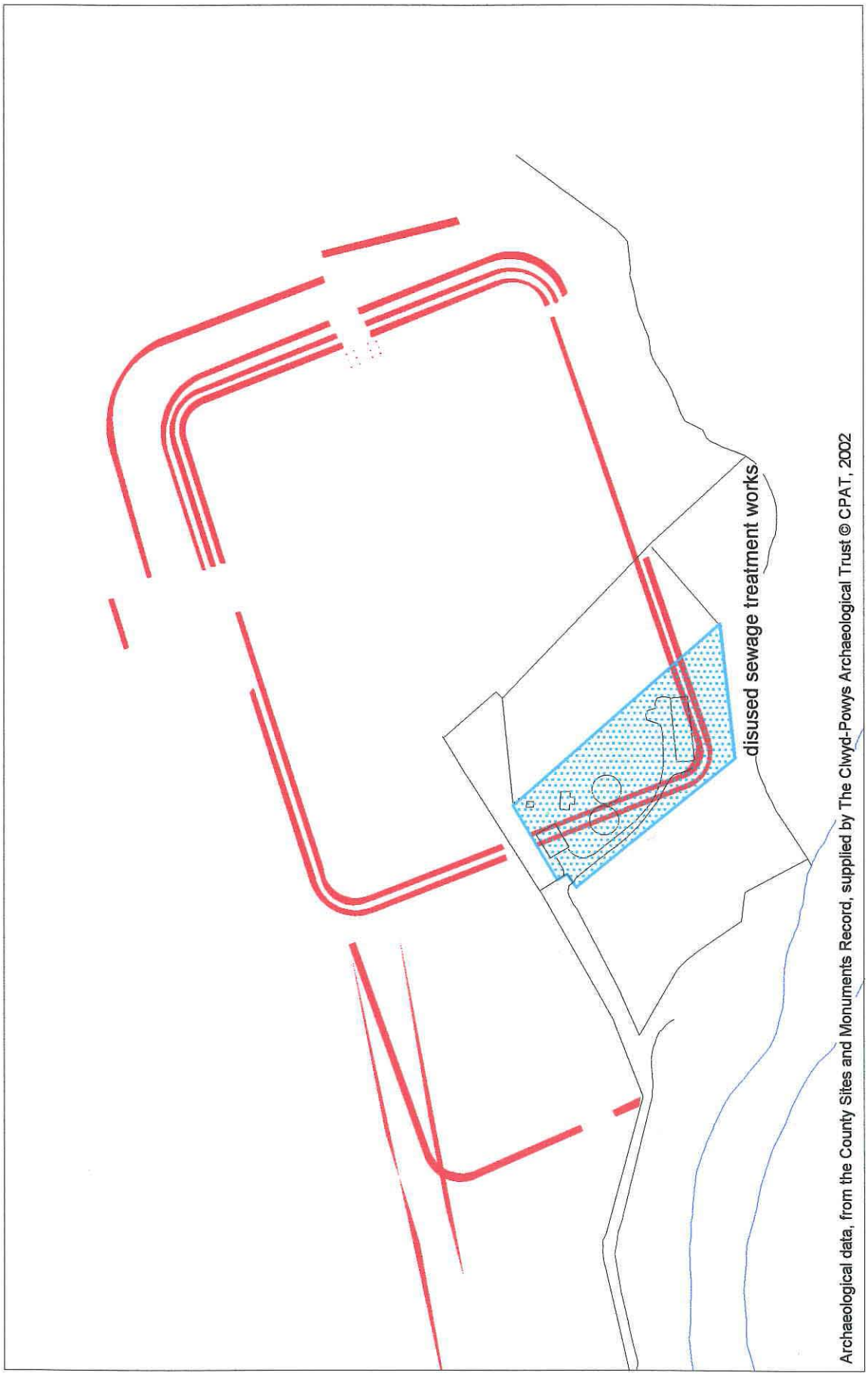

Fig. 2 Aerial photographic plot of Caersws I Roman Fort, scale 1:2,500

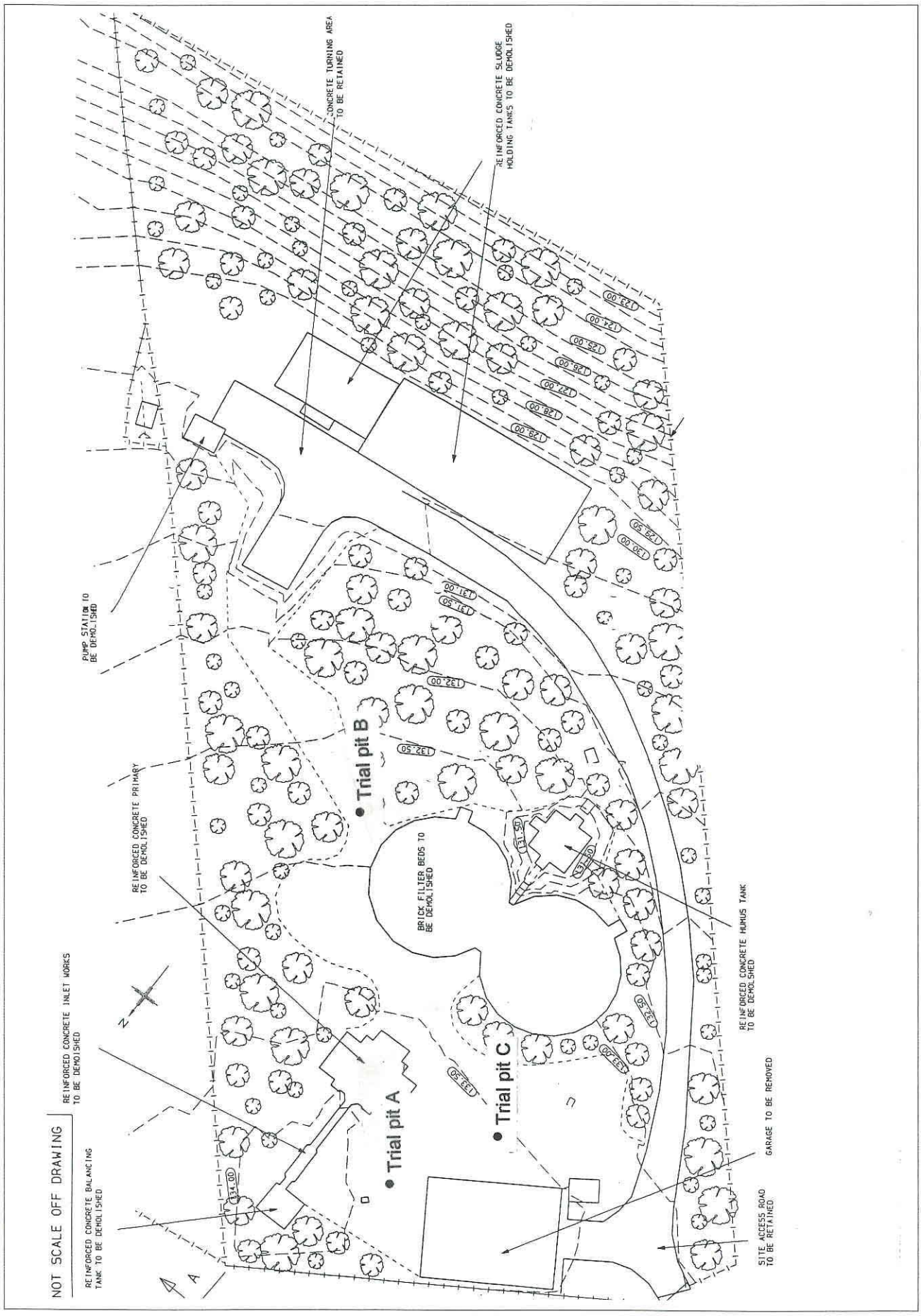

Fig. 3 Site plan