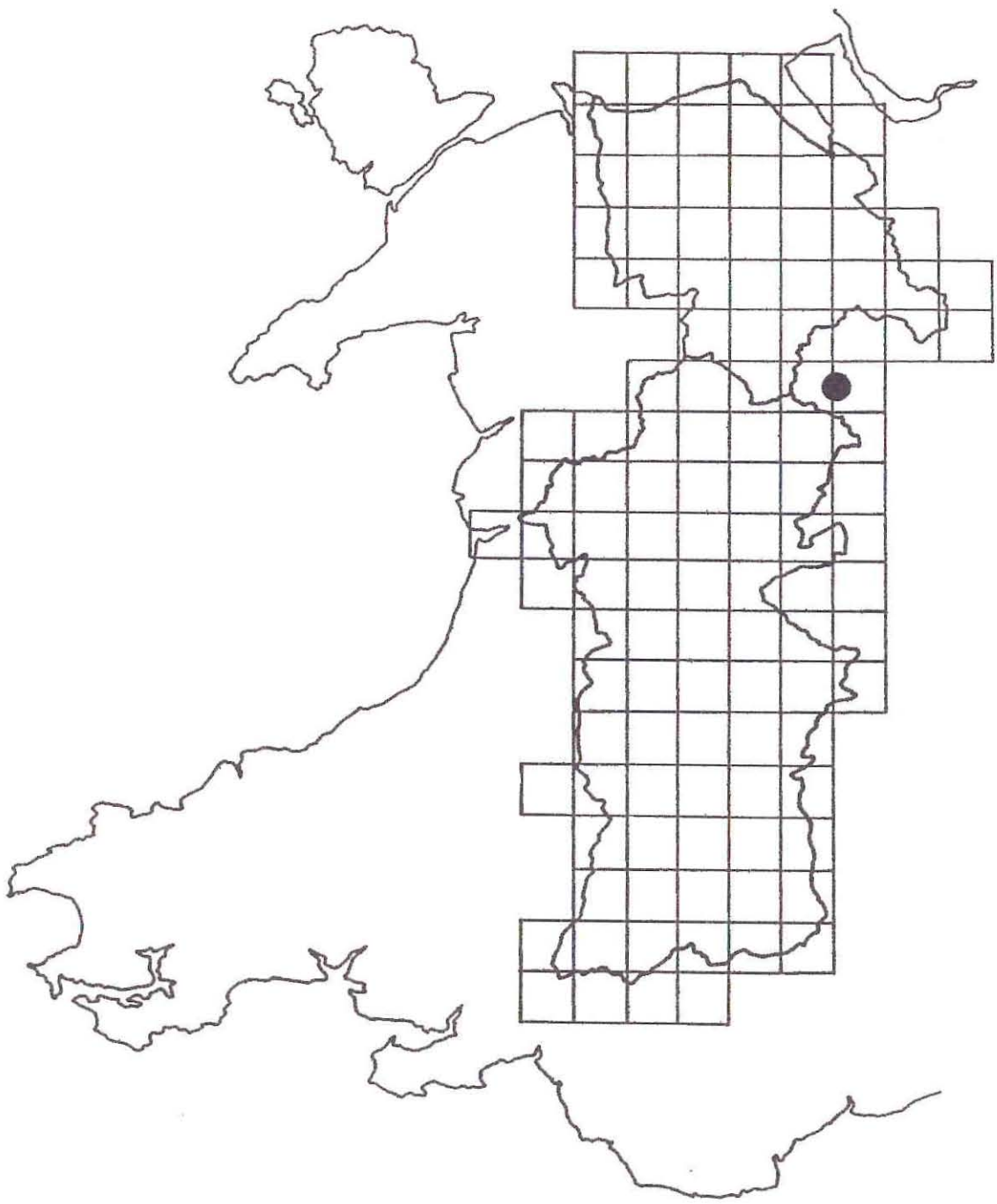
THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Montgomery Canal Restoration: Phase 3

Redwith, Shropshire

ARCHAEOLOGICAL EVALUATION



CPAT Report No 168.1

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Montgomery Canal Restoration: Phase 3
Redwith, Shropshire
ARCHAEOLOGICAL EVALUATION

by W.G.Owen
April 1996

Report prepared for Shropshire County Council Environment Department

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1 INTRODUCTION

1.1 In December 1995 the Contracts Section of the Clwyd-Powys Archaeological Trust (hereafter CPAT Contracts), was invited by the Environment Department of Shropshire County Council to prepare a specification and tender for an archaeological evaluation to determine the archaeological implications of the proposed Phase 3 of the restoration of the Montgomery Canal at Redwith, Shropshire.

1.2 The evaluation was deemed to be necessary in view of the conclusions reached following a desk-based assessment (Reid 1995) of the corridor within which the restoration work would be carried out. Four archaeological features located within or close to the corridor were identified which might be affected by the proposed restoration work. These included:

(a) A section of Wat's Dyke extending *c*. 400m northwards from approximately SJ 3040 2445 (SA 1001).

(b) A cropmark field system adjoining the canal centred at SJ 3030 2450 (SA 2425).

(c) A large cropmark ring-ditch at SJ 3035 2396 which could extend into the proposed works area (SA 1416).

(d) Two conjoined cropmark enclosures immediately outside the proposed works area at SJ 3038 2410 (SA 1306).

1.3 In January 1996, CPAT Contracts was commissioned to undertake the evaluation which was carried out between 30th January and 23rd February 1996.

2 LOCATION, SOILS AND LAND-USE

2.1 The study area, centred at SJ 3045 2430 at an approximate altitude of 76mOD, is located between the hamlet of Redwith to the south-west and the River Morda, a tributary of the River Vyrnwy, to the north-east (Fig. 1).

2.2 Locally, the topography is slightly undulating and land-use is agricultural, both pastoral and arable. Soils in the area are generally well-drained brown earths of the Keswick 1 Association derived from glaciofluvial drift material and underlain by gravel. In contrast, soils in an area to the east of the Montgomery Canal (centred at SJ 3045 2465), are either poorly-drained peats, peaty loams or stagnogleys over gravels (Rudeforth *et al* 1984, 141). Vegetation in parts of this area of marsh and wet pasture covering nearly 3.0ha is more diverse than elsewhere in the vicinity and has been designated an SSSI known as Crofts Mill Pasture.

3 ARCHAEOLOGICAL BACKGROUND

3.1 The location of the archaeological features which formed the basis of the evaluation (Para. 1.2 above), are largely based on aerial photographic evidence. These sources are summarised in Para. 7.

3.2 With regard to Field system SA 2425, a plan of Sir Henry Bridgeman's estates at Morton and Crickheath, Oswestry (1766) appears to show some of the field boundaries which are visible on several aerial photographs such as that shown in Plate 1. Other boundaries, however, are not shown on this plan or on later maps and may, therefore predate them. A part of this plan is included in Fig. 5.

3.3 The conjoining enclosures SA 1306 are clearly shown on several aerial photographs such as CPAT 86-MB-792 (Plate 2), but the enclosure (or possible large ring-ditch SA 1416) is neither clearly or consistently visible on photographs examined.

3.4 The course of the ditch associated with Wat's Dyke (SA 1001) is visible on several aerial photographs, perhaps the clearest and most useful of which are CPAT 84-C-109 (Watson and Musson 1993, 52) and CPAT 79-14-29, the latter which is shown on Plate 3.

4 THE EVALUATION

4.1 In accordance with the evaluation brief, four trenches, (Trenches A, B, C and D; Fig 5) were excavated to record any archaeological remains at the specified locations. In the cases of Trenches A, B and C, excavation was carried out mechanically to remove the overlying ploughsoil. Thereafter, trench bases and exposed sections were cleaned manually and, where possible features of archaeological significance were found, these were further excavated manually in order that these features could be satisfactorily assessed as specified in the evaluation brief. In the case of Trench D, however, which was located in an area of deep peat, mechanical excavation was carried out beyond the depth of the topsoil. Numbers in brackets refer to site context numbers.

4.2 Trench A (SJ 3040 2453; 24.0m x 1.50m; Figs 6-7)

4.2.1 Ploughsoil (8) was removed mechanically to a depth of 0.40m. At this depth, for a length of approximately 16.50m from the western end of the trench, an orange-brown coarse gravel (9) was exposed which was undisturbed apart from a series of plough-lines (17) of unknown date which extended diagonally across the trench.

4.2.2 Towards the eastern end of the trench, the depth of topsoil increased to a maximum of 0.64m. At this point the topsoil overlay two layers, context 10, a grey, clayey gravel, and context 11, a very dark brown granular silty loam. Beneath context 10 was a grey clay layer (12) characterised by orange mottling and which became more gravelly towards the east. These layers were further investigated by excavating half of the trench manually, exposing the lower levels of contexts 11 and 12, as well as context 13 which partly underlay them both. The latter was a layer of greyish-ginger pebbly clay which extended beyond the limits of excavation at the eastern end of the trench. A 25 x 25cm sondage excavated at the eastern end of the trench demonstrated

that this layer was 0.38m deep at this point and overlay a layer of light grey, clean, stiff clay (15), which would appear to be the natural subsoil. Contexts 13 and 16, the latter a grey, clayey gravel, overlay a layer of light grey, compact clay (14). The edges of this layer were followed into the hitherto unexcavated half of the trench at this point and were shown to continue diagonally across the trench. It is possible that this layer may represent the severely truncated basal silts of a ditch, which survives to barely a metre wide at this depth, c. 0.95m below the ground surface.

4.2.3 It was established following discussions with the farmer (pers. comm. Mr Peter Franks) that the former eastern boundary of the field in this area had been extended towards the canal in recent times, which explained the build-up of ploughsoil towards the eastern end of Trench A above context 11 which is itself interpreted as a recently buried turf/topsoil layer.

4.2.4 An examination of the 1st Edition Ordnance Survey Sheet of 1875 of the area (Fig.2) shows that Trench A was located on a formerly marshy area which may have represented a silted-up canal basin. This persisted as a cartographic feature at least until 1900 (Fig. 3) as is shown in the Ordnance Survey 2nd Edition Sheet, but had disappeared by 1925, the date of publication of the 3rd Edition Sheet (Fig. 4). Soils at the eastern end of Trench A (contexts 10, 12, 13 and 16) may, therefore, to some extent represent either silt layers associated with this marshy area or an infilling phase predating 1925.

4.2.5 The tangential line across the trench which is followed by context 14 coincides with a linear cropmark to the north of the trench (Fig 5). It has been suggested that this might represent the ditch associated with Wat's Dyke (Reid 1995, Fig. 2), although it could equally be associated with the field boundary shown on the 1766 map. It is also possible that this boundary may have fossilised the course of the dyke.

4.2.6 No evidence was revealed to suggest the existence of a bank associated with the ditch, although any possible bank may well have been destroyed by the construction of the canal or as a result of ploughing.

4.2.7 No features were exposed which may have related to the field system SA2425.

4.2.8 Finds were limited to a sherd of post-medieval pottery and two fragments of fuel-ash slag both of which were recovered from context 8 at the eastern end of the trench.

4.3 Trench B (SJ 3035 2408; 76.60mOD; 30.0m x 1.50m)

4.3.1 Removal of the ploughsoil exposed the natural subsoil at a maximum depth of 0.42m. This consisted of a light buff-brown coloured clayey silt which appeared to be undisturbed apart from a trench containing an underground telephone cable. When this was discovered the alignment of the eastern half of the

trench was moved slightly to the north to avoid possible damage to the cable. No features of archaeological significance were exposed and no finds were recovered.

4.4 Trench C (SJ 3035 2406; 76.65mOD; 30m x 1.50m)

4.41 Removal of the ploughsoil exposed undisturbed natural subsoil similar to that in Trench B at a maximum depth of 0.30m. No features of archaeological interest were recorded and no finds recovered.

4.5 Trench D SJ 3045 2448; 30.0m x 1.50m)

4.5.1 Removal of turf exposed a very dark brown-black peat which extended to a depth of 1.20m at which further excavation was not carried out as the trench rapidly became flooded. The upper, featureless layer of peat, merged at an average depth of 1.00m with peat containing vegetation remains. This contained abundant fragments of woody species of which White Birch (*Betula alba*) and lesser quantities of Common Alder (*Alnus glutinosa*) could be identified. There was also an abundance of semi-aquatic plant remains such as sedges (*Carex* ssp.). This succession appears to represent a build-up of peat over a former carr type of plant association.

4.5.2 Field drains crossed the trench at two points and these sections of the trench were not excavated in order to avoid causing damage to these.

4.5.3 The site was further investigated by augering at points close to each end of the trench in order to assess the nature and extent of the peat deposits. It was not possible to undertake a detailed sampling programme due to flooding of the trench. Details of the soil succession revealed are given in Appendix 2.

4.5.4 The results of the augering established that the peat deposits extend from the base of the topsoil to a depth of *c.* 1.5 - 1.77m, beneath which lie a series of clays and gravels.

5 CONCLUSIONS

5.1 Context 14 in Trench A appears to represent the lower silts of a ditch, the alignment and position of which corresponds to a linear cropmark visible of aerial photographs. It is possible that this represents the ditch associated with Wat's Dyke, although the existence of a field boundary shown on the map of 1766 gives an alternative interpretation. It is also possible that the field boundary respected the line of the Dyke which may still have been visible at that time. Accordingly, the projected course of Wat's Dyke (Fig. 5 and Reid 1995, Fig. 2) remains a possibility.

5.2 Trenches B and C failed to yield any evidence of features which might have been associated with SA 1306 and SA 1416.

5.3 Trench D, which was located on the line of a possible alternative route of Wat's Dyke,

failed to reveal evidence for its presence on that line.

6 Recommendations

6.1 Based on the results of the evaluation it is recommended that a watching brief be maintained if significant ground disturbance takes place in the vicinity of the putative course of Wat's Dyke. It is also recommended that if there is ground disturbance to the east of the positions of Trenches B and C that a watching brief be maintained; if features are revealed, then a programme of excavation should be considered.

6.2 The existence of deep peat deposits in the vicinity of Trench D might require further investigation should any significant ground disturbance be planned. The peat may contain significant environmental remains and a programme of sampling might be appropriate.

7 ACKNOWLEDGEMENTS

7.1 CPAT Contracts wishes to acknowledge the assistance given during the course of the project by the staff of the Shropshire Records and Research Centre, Shrewsbury, the Shropshire County Museums Service, and the County Sites and Monuments Record, Shire Hall, Shrewsbury. Thanks are also due to Mr W. P. Frank of Morton Farm and Mrs Barratt of Morton Hall Farm, Knockin.

8 REFERENCES

Fox, C., 1955, *Offa's Dyke*, London

Reid, M.L., 1995, *Archaeological Assessment of the Montgomery Canal Restoration: Phase 3, Crofts Mill Bridge to Crickheath Wharf,* Shropshire County Council.

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

Watson, M., & Musson, C., 1993 *Shropshire from the air*, Shropshire County Council, Telford.

Cartographic Sources

1766 - A Plan of Sir Henry Bridgeman's Estates at Morton and Crickheath, Oswestry. SRO Ref. No. 3657/2/9

1875 - Ordnance Survey 1:2500 First Edition Map (Shropshire Sheets 19.14, 19.15)

1900 - Ordnance Survey 1:2500 Second Edition Map (Shropshire Sheets 19.14, 19.15)

1925 - Ordnance Survey 1:2500 Third Edition Map (Shropshire Sheets 19.14, 19.15)

Aerial Photography Sources

CPAT 90/MB/1017
CPAT 92/MB/744
CPAT 76/3/25
CPAT 83/4/36
CPAT 79/CA/0-7
CPAT 83/C/116-117
CPAT 92/C/1052-4
CPAT 79/CO/4
CPAT 79/14/29
CPAT 86/MB/792
CPAT 84/C/109

APPENDIX 1

Summary of Site Records

17 context record forms
1 film colour slides
2 films black and white negatives and contacts
photographic catalogue
2 A1 Site drawings, nos 1 & 2

Summary of Finds

Trench A

Context 8 - 1 sherd (4g)
2 fragments fuel ash slag (45g)

Survey

EDM Survey - Penmap and DXF files

APPENDIX 2

Trench D Auger Samples

Eastern Auger sample

Depth (m)	Soil Type
0.00 - 0.22	Brown peaty loam
0.22 - 1.00	Dark brown peat; some vegetation fragments present
1.00 - 1.37	Very dark brown peat; abundant vegetation fragments
1.37 - 1.38	Grey clay
1.38 - 1.77	Very dark brown peat; abundant vegetation fragments
1.77 - 2.00	Grey clay
2.00 - 2.55	Light grey gravelly clay
2.55 - 2.58	Darker grey gravelly clay
2.58 - 3.22	Light yellowish-grey sandy silt; contains small shell fragments
3.22 - 4.00	Slightly buff-coloured stiff grey clay with small pebbles

Western Auger sample

0.00 - 0.20	Brown loam
0.20 - 0.50	Brown peaty loam
0.50 - 1.00	Dark brown peaty loam with higher clay content; wood fragments
1.00 - 1.32	Dark brown peat; abundant vegetation fragments
1.32 - 1.50	Slightly greyish-brown clayey peat
1.50 - 2.13	Gritty grey clay
2.13 - 2.23	Grey gravel
2.23 - 2.40	Orange-grey gravel
2.40 - 2.57	Greyish-brown finer gravel

2.57 - 2.68 Dark grey silt

2.68 - 2.87 Coarse orange-grey gravel

2.87 - 3.00 Darker, less coarse silty gravel

APPENDIX 3

MONTGOMERY CANAL RESTORATION PHASE 3: CROFTS MILL BRIDGE TO CRICKHEATH WHARF.

SPECIFICATION FOR AN ARCHAEOLOGICAL FIELD EVALUATION BY CLWYD-POWYS ARCHAEOLOGICAL TRUST

1.1 Introduction

1.1 The proposed restoration work at the Montgomery Canal involves the construction of a new channel suitable for navigation,

1.2 A desk-based assessment of the corridor has identified a number of sites of potential archaeological importance which may be affected by the works.

1.3 Accordingly, Shropshire County Council Archaeology Service in their capacity the archaeological curators for the county have determined that a field evaluation is necessary to assess the implications of the proposed development on the archaeological resource and have prepared a brief (unnumbered and undated) which describes the scheme of archaeological works required.

2 Objectives

2.1 The objectives of the evaluation are;

2.1.1 to reveal by means of four evaluation trenches, the nature, condition, significance and, where possible, the chronology of the archaeology within three evaluation trenches

2.1.2 to record any archaeology revealed in the evaluation trenches,

2.1.3 to prepare a report outlining the results of the field evaluation and incorporating sufficient information on the archaeological resource for a reasonable planning decision to be taken regarding the archaeological provision for the area affected by the proposed development,

2.1.4 to identify and recommend options for the management of the archaeological resource, including any further provision for that resource where it is considered necessary.

3 Methods

3.1 The evaluation will take the form of three trenches at locations specified within the Brief, A, 20m long by 1.5m wide, B & C 30m long by 1.5m wide. Where required these will be taken to a maximum depth of 1.2m below the existing ground surface. Consultation with the client and the curator will be necessary before this depth is exceeded.

3.2 The evaluation will be undertaken using standard evaluation procedures:

3.2.1 removal of modem overburden by machine,

3.2.2 evaluation of the archaeological deposits by hand trowelling to establish their importance and integrity, but avoiding any unnecessary disturbance of the deposits. All features encountered will be examined as fully as appropriate to fulfil the requirements of the evaluation and within the constraints imposed by time and safety considerations.

3.2.3 all archaeological contexts recorded using the standard numbered context system employed by CPAT. All significant contexts to be planned and/or drawn in section at appropriate scales (as defined in the Evaluation Brief), and photographed in monochrome and colour. All drawn records will be related to control points depicted on modern maps.

3.2.4 all archaeological artefacts and environmental samples recorded and processed in a manner appropriate to the material involved, Those requiring conservation or other specialist treatment will be stored in a stable environment until such times as they can examined by a specialist. All finds, except those deemed to be Treasure Trove, are the property of the landowner. It is anticipated that they will be donated to the appropriate local or regional museum, subject to agreement being reached with the landowner and the museum curator,

3.3 following the on-site work an illustrated and bound report will be prepared according to the principles laid out in the Evaluation Brief (section 3.8). This will be in A4 format and contain conventional sections on: Site location, Topography and Geology, Historic Background, Excavation Results, Conclusions/Recommendations, and References, together with appropriate appendices on archives and finds.

3.4 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991).

4 Resources and Programming

4.1 The evaluation will be undertaken by a small team of skilled archaeologists under the direct supervision of an experienced field archaeologist, who will also be responsible for undertaking the desk-based assessment. Overall supervision will be by Dr A Gibson, 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 the same field archaeologist who conducted the evaluation.

4.3 It is anticipated that the evaluation will take no more than 10 days in all and that the subsequent report would be prepared immediately thereafter, dependent on the client's instructions and the arrangement of a suitable timetable. The date of commencement, at the time of writing, has yet to be agreed with the client, and will be dependent

on the state of the site. 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.

A.M.Gibson
16th January 1996

Fig. 1: Location, scale 1:25,000

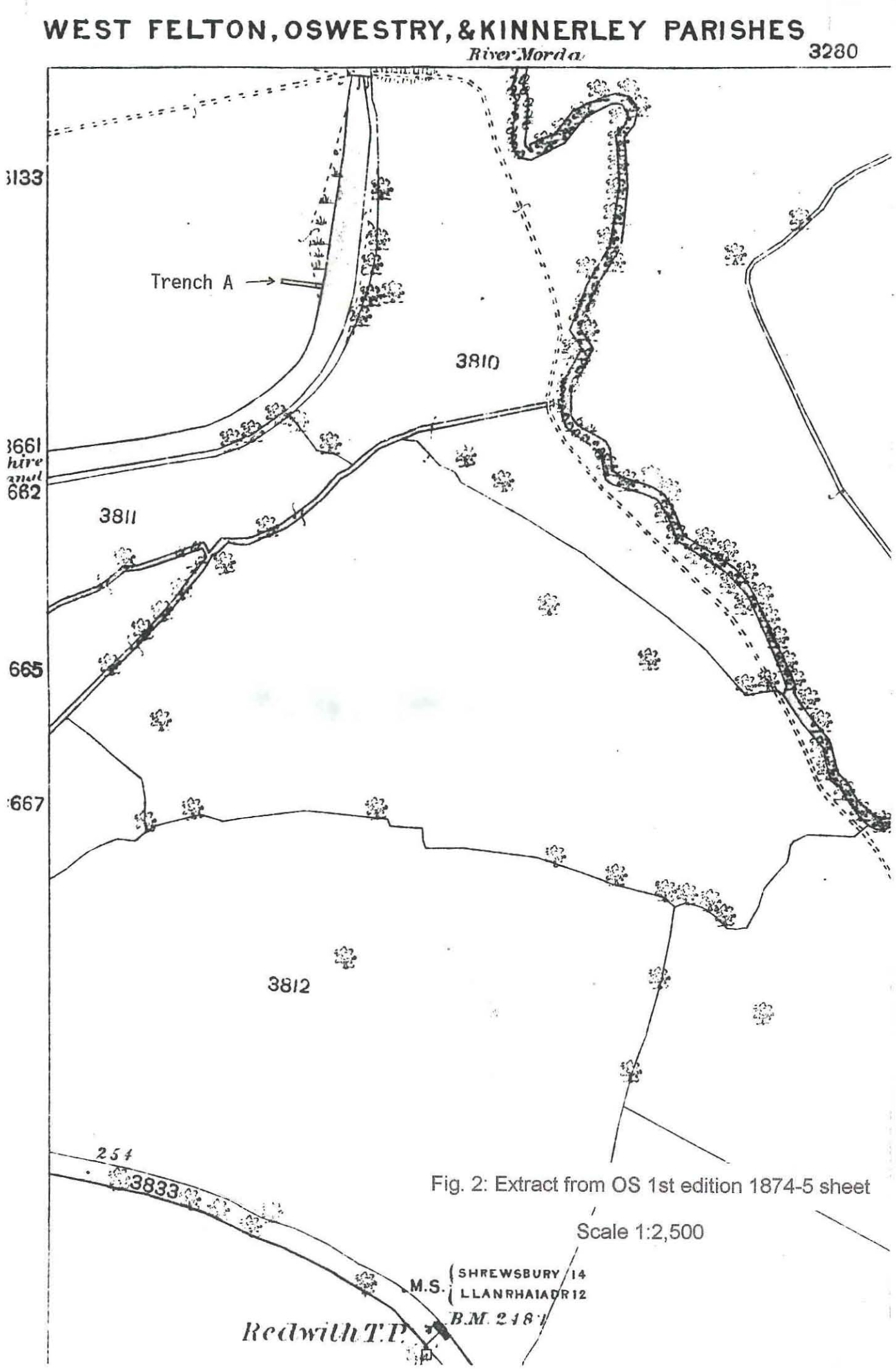

Fig. 2: Extract from OS 1st edition 1874-5 sheet

Scale 1:2,500

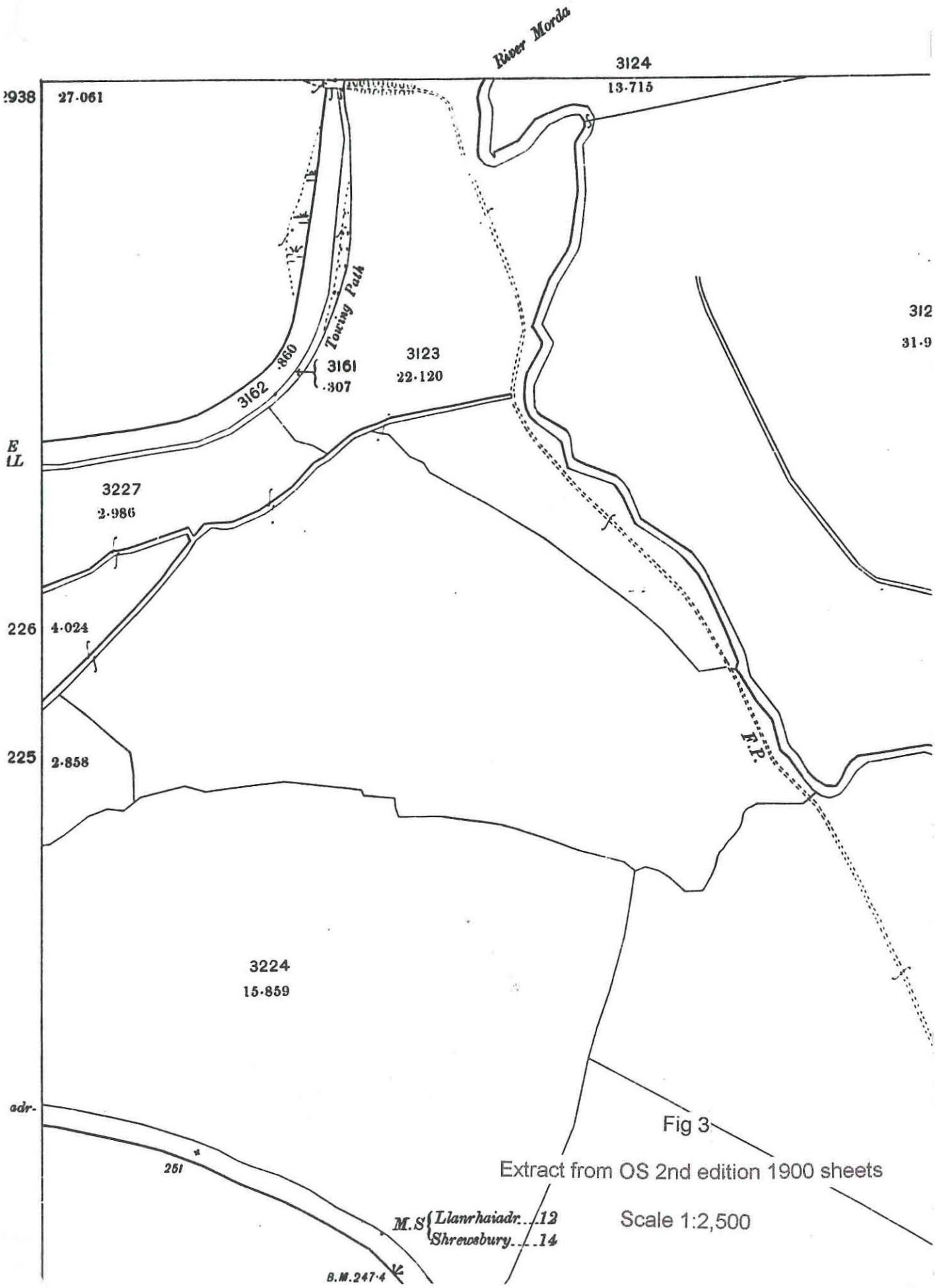

Fig 3

Extract from OS 2nd edition 1900 sheets

Scale 1:2,500

Parish of Oswestry Rural . 3130. 3197.

Parish of West Felton..... 963. 985. 986. 1000. 1011.

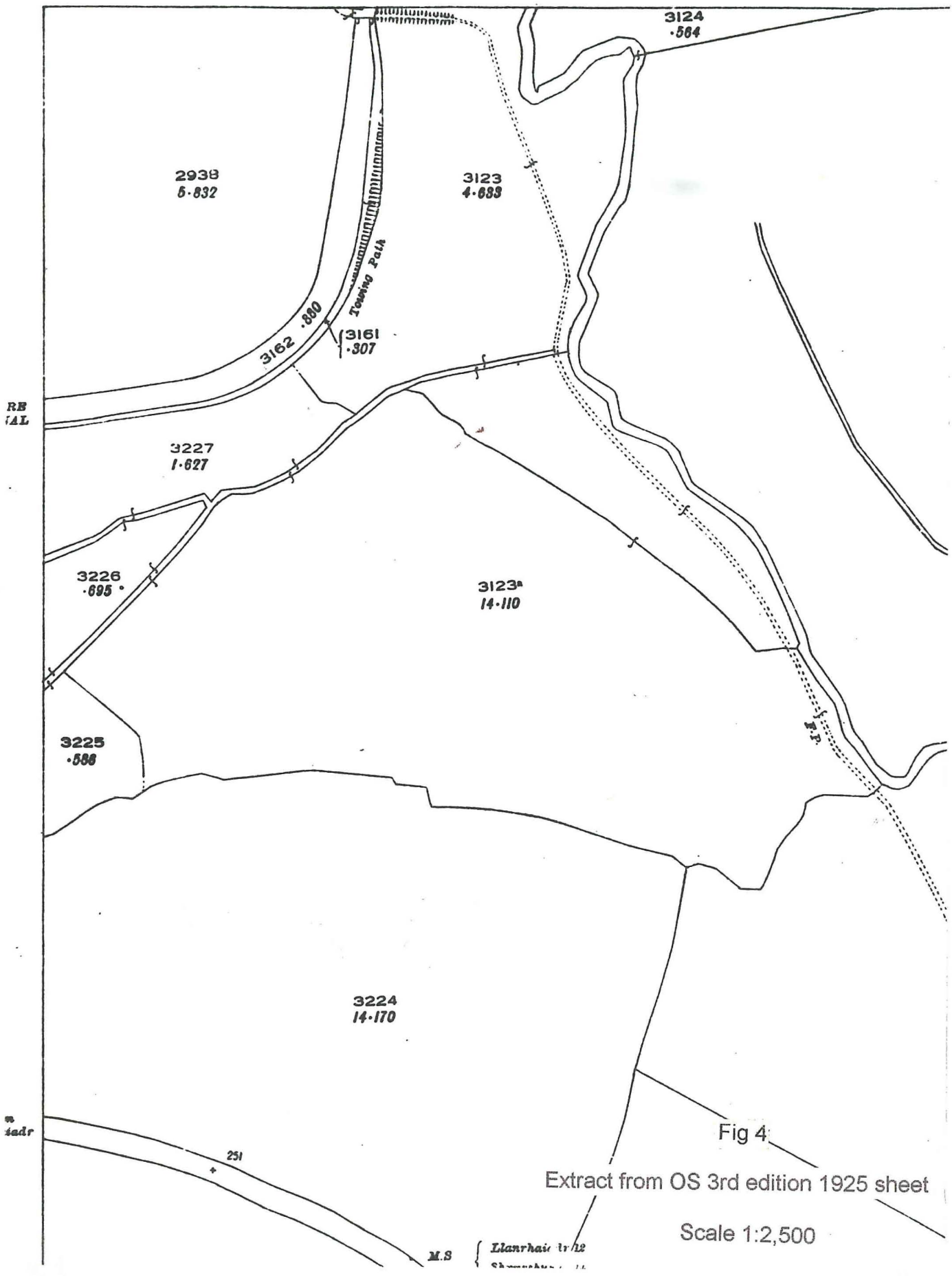

Fig 4

Extract from OS 3rd edition 1925 sheet

Scale 1:2,500

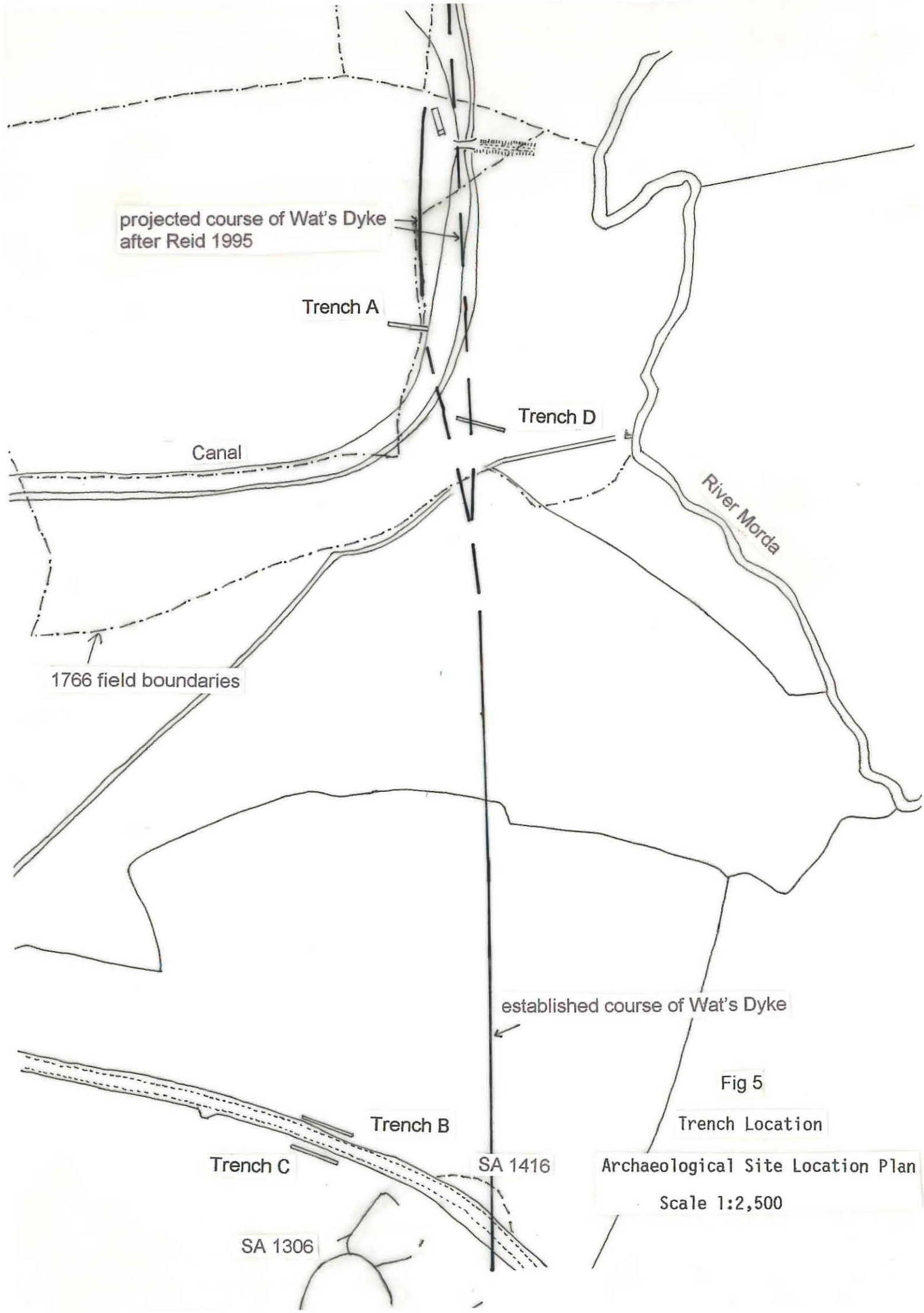

Fig 5

Trench Location

Archaeological Site Location Plan

Scale 1:2,500

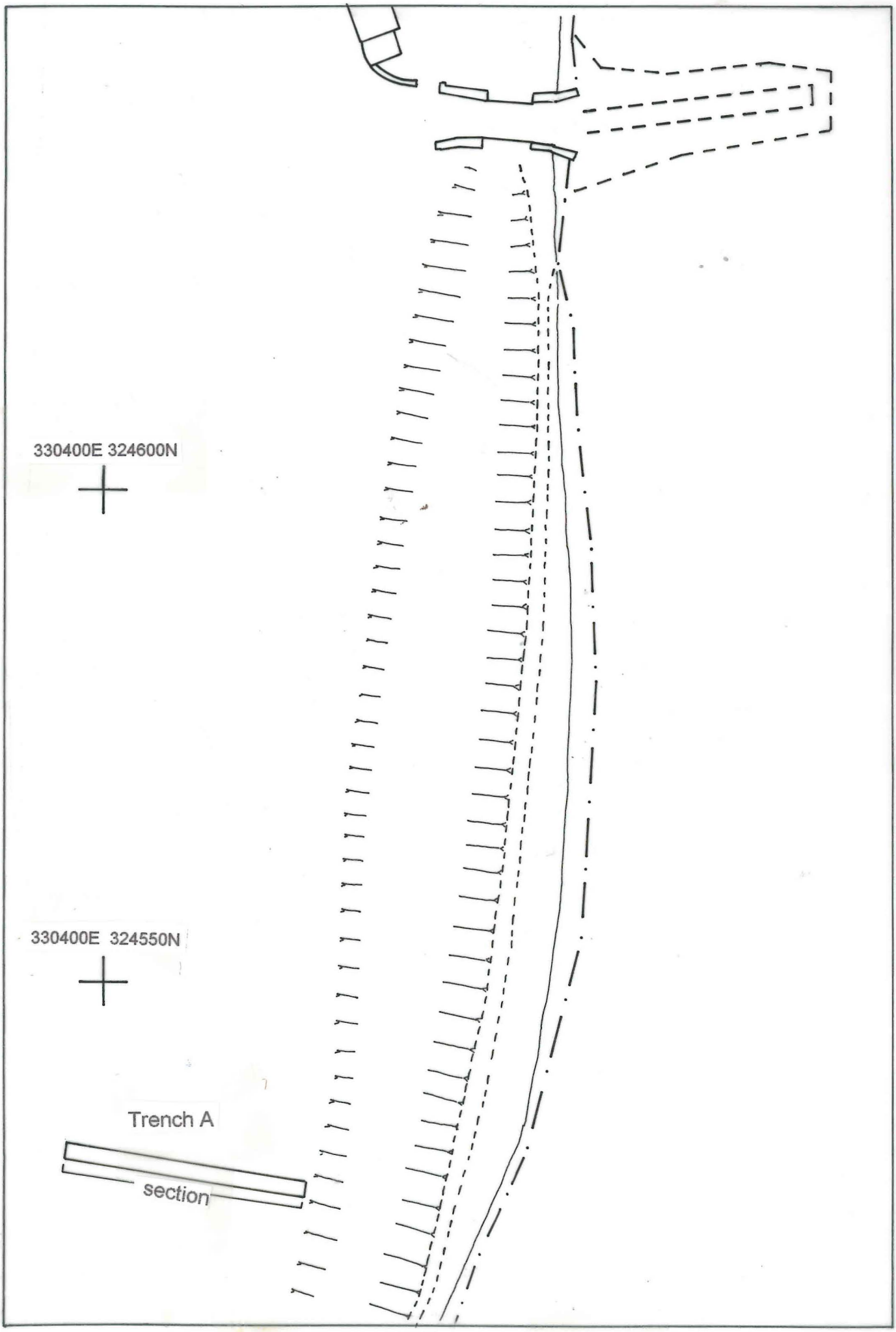

Fig. 6: Trench A location. Scale 1:500

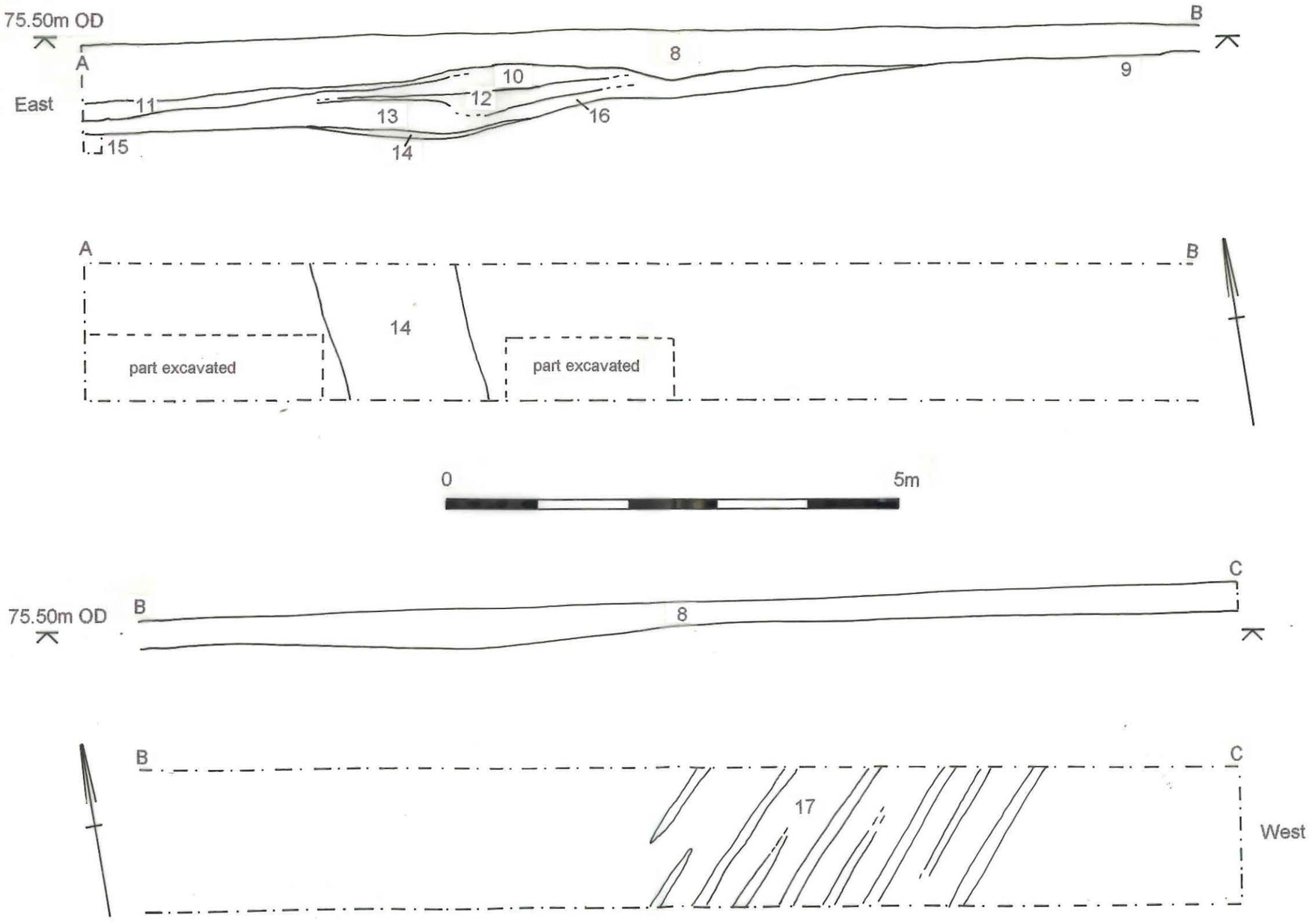

Fig. 7: Trench A Plan and Section. Scale 1:50. For context descriptions see section 4.2

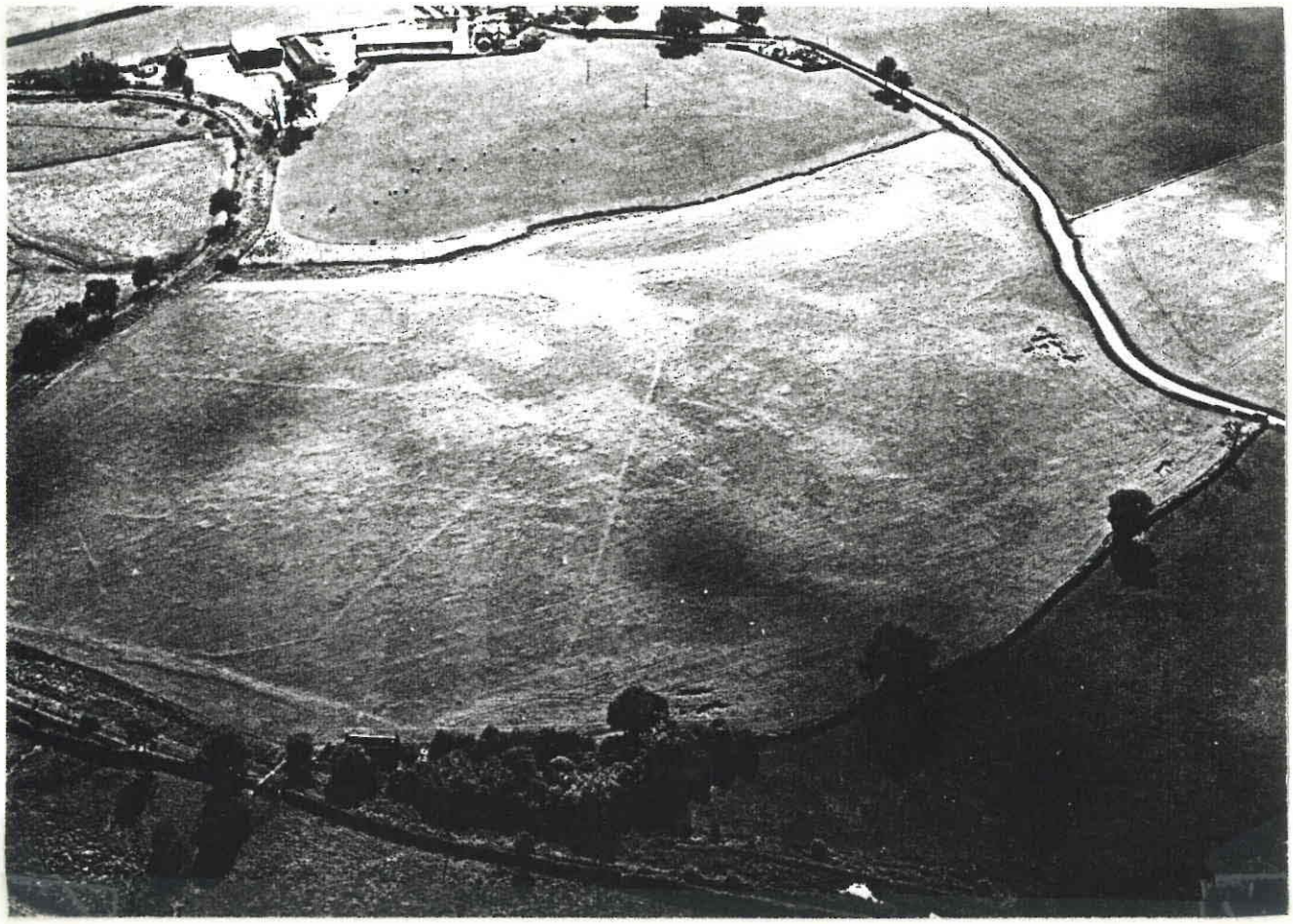

Plate 1: Field System SA 2425 from the east. Photo Shrops County Council

Plate 2: Enclosures SA 1306 from the north. Photo CPAT 86-MB-792

Plate 3: Wat's Dyke crop mark from the south-east. Photo CPAT 79-14-29