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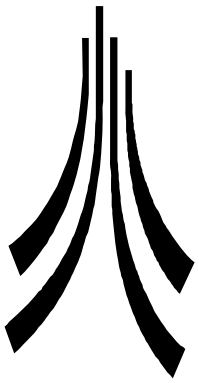

December 1998

STEWART SHIELS
NORTHUMBERLAND

Archaeological Evaluation Report

Commissioned by: Turner Facilities Management

Stewart Shiels Farm, Otterburn
Northumberland

Archaeological Evaluation Report

Report no 1998-99/031/AUA7853

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Thanks are due to John Spark of Turner Facilities Management for his help and support during the course of the project, and also to Mr Walton, the farmer. Thanks also go to Alan Dodd, who provided and operated the mechanical excavator.

The survey was undertaken by Andrea Scott and Chris Scurfield, the evaluation fieldwork was effected by Andrea Scott and Julian Cotton, and the finds were analysed by Chris Howard-Davis. Anthony Padgett draughted the final drawings.

This report was written by Julian Cotton, and the project was edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

SUMMARY

In December 1998, an archaeological field evaluation was undertaken by Lancaster University Archaeological Unit to investigate an enclosure to the south-east of Stewart Shiels Farm, Otterburn, Northumberland, in advance of a proposed cow house development.

The evaluation was commissioned by Turner Facilities Management, acting on behalf of the MOD. The work was requested by Northumberland National Park Authority, and was to accord with a brief prepared by *The Archaeological Practice*.

The evaluation consisted of two elements: a preliminary landscape survey to record the extant earthworks of a small sub-circular banked enclosure identified by aerial photographs to the south-east of Stewart Shiels Farm, and mechanical trial trenching of this enclosure to establish the general nature of the remains present.

The results of the landscape survey provided a detailed archive of the earthworks within their topographic context. The trial trenching suggested that the enclosure was eighteenth century in origin, and was potentially a 'lazy bed' enclosure.

It is recommended that the site be subject to a watching brief during ground works in the course of the construction of the proposed cow-house construction. The south-western part of the enclosure will not be directly affected by the development and it is recommended that the area be protected from extraneous damage in the course of the development.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 A sub-circular enclosure was identified at NY 8673 9891 during aerial photography of the Otterburn military camp by Tim Gates in 1995 and 1996 (Gates 1997). It was described by Gates as 'a sod-cast enclosure or pen', and may be related to other features to the north of Stewart Shiels Farm (Charlton 1996, no. 342 i and ii). The feature could not be reliably dated by form alone but it was tentatively suggested that it could be of medieval or post-medieval date. A desk-top assessment of the adjacent Stewartshiel Plantation was undertaken by Lancaster University Archaeological Unit (LUAU 1996) which examined the area of the modern plantation and the adjacent farms, including Stewart Shiels.

1.1.2 A project brief (*Appendix 1*) was prepared by The Archaeological Practice, on behalf of Northumberland National Park Authority, outlining the requirements for an archaeological evaluation in advance of the proposed construction of a new cattle building on the site of the enclosure. The evaluation was required to enable an informed decision about the future of the site to be made. Lancaster University Archaeological Unit (LUAU) was invited by Turner Facilities Management, acting on behalf of the MOD, to tender for the archaeological works, and they provided a project design (*Appendix 2*) defining the detailed methodology.

1.2 SITE DESCRIPTION

1.2.1 Stewart Shiels is located some 6km to the north of Otterburn, in the Redesdale district of Western Northumberland. It is at an approximate altitude of 230m AOD, in a general area of moderate relief and poor land quality principally used for sheep-farming, forestry, and military training. The underlying solid geological deposits are composed of Lower Carboniferous sandstones and shales of the Scremerston Coal and Lower Limestone Groups, although widespread and more acid quaternary drift deposits mantle the landscape. The soils are generally stagnogleys, or poorly drained stagnopodzols, and the general environment is noticeably boggy and wet.

1.2.2 The Stewart Shiels enclosure consists of a sub-circular ring-bank some 20m in diameter and directly to the south and south-west of it is a slightly lower lying, particularly marshy depression, that eventually forms a spring-head feeding Stewartshiels Burn to the north-east. Directly to the north-east of the enclosure is a very steep slope formed by the eroded and unstable river bank of Stewartshiels Burn. The environs of the enclosure are covered by reeds and other marsh vegetation, and currently form part of the rough pasturage surrounding Stewart Shiels Farm.

1.3 HISTORICAL BACKGROUND

1.3.1 The landscape of the Northumberland moors around Otterburn contains numerous sites and features relating to past agricultural land use, particularly those from late medieval times up to the nineteenth century. Owing to the poor quality of the land and the difficult winters, a form of transhumance was practised, characterised by the movement of people (and stock) from winter settlements to summer pastures. This

shifting pattern of agriculture and settlement left characteristic remains, including those of temporary summer huts ('shielings'), sheep folds, stack stands, and high level farms (Ramm *et al* 1970).

1.3.2 Stewart Shiels is clearly to be regarded on linguistic grounds as being the site of a former shieling, although the existing farm structures are too large and well built to be considered as having directly related to the original shieling structures. It is possible that climatic change coupled with expansion of agricultural settlement may have led to a change in function of the shieling, it becoming more of a permanent settlement.

1.3.3 Little is known of the early history of Redesdale, which in medieval times was under the control of the Umfreville family (Charlton 1996, 9). In the late sixteenth / early seventeenth centuries, a number of references to Stewart Shiels are documented, indicating that by this period some sort of settlement was in existence on the site. The documentary evidence consists of complaints to the March Warden from 'Michaell Waules of Stewardsheilles' and 'William Hall of Gersomffeld' (Bain 1894-6, 350), and of references in the 1604 survey of the Debateable and Border Lands (Sanderson 1891). Interestingly, Sterwartshiels was regarded as being part of 'Ellsden Wintersteeds', indicating that, by this stage at least, the buildings were used for over-wintering.

1.3.4 During the seventeenth and eighteenth centuries Stewart Shiels was held by the Hedley and Hall families (NRO 542/20), although there is limited evidence to indicate the nature and extent of occupation. In the nineteenth century, Stewart Shiels was purchased by the Redesdale Estate, and by 1841 Lord Redesdale is listed as landowner in Elsdon Tithe Apportionment (NRO 486/4/1). The site of Stewart Shiels farm is shown on large scale county maps by Fryer (1820) and Greenwood (1828), and the Ordnance Survey 1st edition 6" map (1863) shows the area in more detail.

1.3.5 In this century, Stewart Shiels, although still a working farm, was sold to the MOD, and much of the surrounding land was (and still is) utilised for military training purposes.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design (*Appendix 2*) was submitted by LUAU in response to a request from Turner Facilities Management for an archaeological evaluation of the enclosure at Stewart Shiels. It was designed in accordance with a project brief (*Appendix 1*) by the Archaeological Practice, Newcastle University, which was prepared on behalf of the Northumberland National Park Authority.

2.1.2 The project design provided for an archaeological evaluation and survey of the enclosure. Where practicable this project design was adhered to in full, and the work was otherwise consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice. However, in the event no material of environmental potential was established in the course of the evaluation and, although samples were taken, they did not warrant further investigation by environmental analysis.

2.1.3 The results of the evaluation and topographic survey are presented within the present report.

2.2 TOPOGRAPHIC SURVEY

2.2.1 An LUAU level 2 earthwork survey was undertaken of the Stewart Shiels enclosure and its environs. This level of survey defines the extent and character of all surface archaeological features on site in relation to topographic elements (eg field walls) and accurately defines the extent of the overall archaeological site. It defines an archaeological context for any trial excavations and shows the location of the trenches in relation to the surface features. This level is used to assess the archaeological significance of the site and serves as the basis, along with other evaluation techniques, for the submission of site recommendations.

2.2.2 Survey control was established over the site by closed traverse with an internal accuracy of +- 15mm; the control network was located with respect to field boundaries, and was positioned on the Ordnance Survey National Grid by the use of Global Positioning Survey (GPS), accurate to +- 1m.

2.2.3 Ground features were located by EDM tacheometry using a Zeiss ELTA4 total station linked to a data logger. Data were transferred to digital and hard media via a portable computer, and film plots were output using a plotting device.

2.2.4 Details of the natural and man-made landscape were drawn up on the plots as dimensioned drawings related to survey markers, and final drawings were generated within a CAD system using the appropriate RCHM(E) conventions. The drawing accuracy was appropriate for a 1:50 output.

2.3 TRIAL TRENCHING

2.3.1 Owing to the extremely wet conditions, the layout of the trenching was slightly different to that envisaged in the project design. Two trenches were dug, one measuring 23m by 2.3m in the northern part of the enclosure (Trench 1), and one measuring 2.5m by 0.6m across the south-western part of the bank (Trench 2) (Fig 3). The purpose of Trench 2 was to provide a section across a well-preserved part of the bank yet was sufficiently small to allow it to be recorded before it filled with water.

2.3.2 The trenches were dug using a tracked mechanical excavator, employing a toothless ditching bucket, working under constant archaeological supervision. Topsoil and deposits of clearly modern derivation were removed by this means, all other deposits being investigated by hand sufficient to understand their broad nature and chronology.

2.3.3 The trenches were excavated in proper stratigraphic order, and were accurately located and planned using a combination of total station and manual techniques, as specified in the project design. All typologically significant and closely dateable artefacts were contextually recorded.

2.3.4 On-site recording was by means of *pro-forma* context records, with supporting registers and trench descriptions. An archive of measured plan and section drawings was produced, and the trenches were photographed in monochrome, colour transparency and digital formats.

2.3.5 On completion of the site investigations, the trenches were backfilled, stratigraphically as far as possible, but were not otherwise reinstated.

2.4 ARCHIVE

2.4.1 A full archive of the evaluation has been compiled in accordance with the project design. The archive includes full digital details of the topographic survey, digital and hand-drawn plans and sections, a photographic archive, field recording sheets, and the small number of artefacts that were recovered during the course of works.

2.4.2 The paper and digital archive will be deposited with the Northumberland Record Office, and the material archive, if retained, with the Northumberland National Park Authority. A copy of this report, and an index to the archive, will be supplied to Northumberland National Park Authority, and also to the Northumberland County Council in Morpeth for inclusion in the County SMR.

3. SURVEY RESULTS

3.1 TOPOGRAPHIC SURVEY

3.1.1 ***Sub-circular Enclosure (Site 1):*** the enclosure consists of a sub-circular ring-bank some 20m in diameter and up to 0.4m high. Its eastern side is straight rather than curved reflecting the adjacent linear form of the river scarp edge, which was formed by the eroded and unstable river action of Stewartshiels Burn. By contrast there is a pronounced curve around the southern and western sides of the enclosure. There is some evidence for an external ditch around the southern side of the enclosure, and in the northern part, the bank is particularly ill-defined, and has the appearance of an internal division rather than an external boundary. Extending east from this narrow bank is the stub of another bank which clearly has been truncated by the erosion of the river scarp. A further, but better surviving, stub extends east from the southern bank of the enclosure; this too has been truncated by the erosion of the river scarp. There is a possibility of a northerly extension of the western bank of the enclosure, into the area of the modern farmyard; there is no sign of a continuation on the northern side of the modern wall, but this may have been truncated as a result of localised disturbance in the farmyard. It is possible that there was a further northern element to the enclosure, but confirmatory evidence for this may have been lost by a combination of riverine erosion on the eastern side of the enclosure and landscaping in the farmyard.

3.1.2 Within the enclosure were three parallel ridges which crossed the interior in a south-east/north-west alignment. These three ridges were only *c*0.2m in height and 1m wide, and were separated by corresponding linear depressions. This sort of minor corrugation of the land surface is consistent with former 'lazy beds', the raised ridges for the growing of vegetables in wet environments, and is produced by digging a succession of spade-depth furrows and heaping soil between the furrows (Ramm *et al* 1970).

3.1.3 ***General Landscape Features:*** the landscape survey identified a number of features of interest around and within the enclosure at Stewart Shiels. Some 50m to the south-east of the enclosure, an ill-defined linear depression (Site 2) links the raised part of the river bank with a very low-lying area of former river course characterised by silted-in meanders and relict terraces. This linear depression was aligned east/west, and in all likelihood was a former cattle droveway which has subsequently been expanded by drainage action. To the north of the point at which the hollow way meets the river bank, was a narrow sunken boundary feature (Site 3) which extended north-east/south-west and linked with the garden boundaries around the Stewart Shiels farmhouse. Examination of aerial photographs (Plate 1) shows that this was a part of an early enclosing boundary around the farm, which is also fossilised within the north-western boundary of the farm complex.

3.1.4 To the south-east of the enclosure, at a distance of approximately 25m from its mid-point, was a series of irregular elongated mounds/ridges (*c*5m in overall extent) (Site 4). There were occasional medium-sized slabs of limestone and sandstone protruding from the faces of these mounds, which surrounded a central hollow. An obvious opening from the south-western side was observed and a smaller gap in the reciprocal north-eastern side. A narrow hollow way links the south-western aperture with the

Stewart Shiels farmhouse. It is probable that this feature represents the remains of a small kiln or corn-dryer.

3.1.5 To the west of the enclosure, and overlain by the drystone farm wall, was a sub-rectangular platform (Site 5) measuring *c*10m by 3m in extent. This platform was only *c*0.15m in height. A slight mound to the east of the platform is almost certainly indicative of partial levelling of the enclosure bank in comparatively recent times; evidence from Trench 1 (*Section 4.2*) would appear to support this view. The feature may be the remains of a small building platform.

3.1.6 Other features pinpointed by the landscape survey could be seen on closer inspection to be essentially natural in formation, resulting primarily from the periodic occurrence of small subsidiary watercourses draining into Stewartshiels Burn, and from erosion and slumpage resulting from the incision of the burn into the unstable drift deposits to the south-west.

4. TRENCHING RESULTS

4.1 INTRODUCTION

4.1 A 25m long trench was excavated across the western boundary of the enclosure, within the area that will be affected by the construction of the proposed cow house. The excavation did not provide an adequate cross-section of the external bank and so a further 3m long trench (Trench 2) was excavated across the enclosure bank at a distance of 8m to the south of Trench 1 (Fig 3 and 4).

4.2 TRENCH 1

4.2.1 Trench 1 was positioned to encompass the slight platform to the west of the enclosure, the barely surviving western portion of the enclosure bank, and the putative 'lazy beds' in the interior. It was aligned west-south-west/east-north-east (Fig 3). The only deposit removed by machine in Trench 1 was [1], a mid-dark brown slightly silty humic clay containing occasional sand. This deposit formed a thin, very wet layer of topsoil varying from 0.10m to 0.20m in thickness, and contained occasional nineteenth and twentieth century artefacts.

4.2.2 Following the removal of deposit [1] by mechanical means, the sides and base of the trench were cleaned by hand in order to clarify what other deposits were present, and establish how they related to each other in stratigraphic terms. The latest deposit recognised was a yellow-brown clay with occasional blue-grey mottles and patches of brown sand [2]. This formed a disturbed spread of mixed appearance, extending from the south-western corner of the trench to a point approximately 7.7m from the western end; it extended from the internal edge of the enclosure bank and c 5m to the south-west of the enclosure. A small section was dug through it, establishing that it was a redeposited dump of material up to 0.35m thick, and was almost certainly the levelled remains of the enclosure bank.

4.2.3 To the north-west of, and underlying layer [2], was a dark brown silty clay/ clay loam [3], containing very few inclusions and some late nineteenth century artefacts. Deposit [3] formed a roughly triangular area as exposed in plan, the opposite and adjacent sides measuring 2m and 5.3m respectively. Deposit [3] was up to 0.40m in thickness along the western edge of the trench but lessened in thickness to the east, being in the region of 0.10m thick along its boundary with layer [2]. Deposit [3] was not encountered in a small sondage dug down to natural 6m from the western end of the trench.

4.2.4 At the junction between deposits [2] and [3], in the far south-western corner of the trench, was an accumulation of stones, occupying an area 1m by 0.5m. This accumulation [4] was aligned west-south-west/east-north-east and consisted of eight rounded boulders, typically 0.20m in diameter, the largest boulder being 0.30m in diameter. They did not display any clear structural arrangement and were not necessarily the *in situ* remains of a structure; it is also possible that they represent the unused/unaltered stones from an episode of boundary walling.

4.2.5 In the eastern half of the trench, three parallel south-east/north-west linear features were identified [6, 7 and 8], which appear to have formed a regular arrangement of

broad furrows every 3m or so, just beneath the topsoil. These features were approximately 0.9 m wide, and consisted of shallow depressions (only *c*0.08m deep) filled with grey-brown clay loams containing occasional slate fragments and nineteenth-century pottery. The features occurred between the previously identified ridges within the enclosure, and were entirely consistent with the kind of parallel furrows that would be dug to form lazy-beds.

4.2.6 To the west of the most westerly furrow, a comparatively extensive deposit of mid-brown clay loam [5] was encountered. This clearly pre-dated and occurred underneath the levelled bank material, and possibly represented a thin (although disturbed) 'buried soil'. Deposit [5] measured 2.6m by 2.3m (as exposed) and was only 0.05m in depth. Late eighteenth - early nineteenth century artefacts were recovered from this deposit.

4.2.7 Underneath deposit [5], and extending over much of the base of the eastern half of the trench, was deposit [9], a greyish yellow-brown gleyed subsoil horizon consisting of fine silty clay loam with moderate brown mottling. Deposit [9] appeared to be essentially natural in formation, and the digging of a small sondage at the eastern end of the trench demonstrated that it was only 0.25m thick, merging gradually into deposit [10], a clean yellow coarse clay containing occasional pebbles and sand. Deposit [10] is interpretable as Pleistocene drift.

4.3 TRENCH 2

3.3.1 Trench 2 (Figs 4 and 5) was a short trench excavated by mechanical means in order to provide a section across a well-preserved bank segment. It demonstrated that the bank (in the location of the trench at least) was a superficial soil feature that did not penetrate into the ground to any depth. The bank was composed of a very thin turf [11], overlying a deposit of mid yellowish brown slightly silty clay, up to 0.41m in depth. Underneath the bank was a half-metre deep, gleyed, essentially natural soil profile [13], consisting of a light grey brown (grading to light yellow-brown with depth) silty clay with sparse brown and purplish brown mottles. At the base of deposit [13] yellow natural clay was encountered. No associated ditch could be discerned and no finds were recovered from Trench 2.

4.4 FINDS

4.4.1 Seventeen artefact fragments were recovered from six contexts. Twelve fragments are parts of ceramic vessels, although none were of any great antiquity. The earliest derives from deposit [5] and is possibly as early as the mid eighteenth century (red iron-rich fabric and white-marbled underglaze slip), but may be later, especially as it was recovered in association with material more likely to be late eighteenth- to early nineteenth-century in date (creamwares etc).

4.4.2 The material from furrow [6] and deposit [3] is more likely to be of nineteenth century date or later, but cannot be dated with precision. A single pipe stem was recovered from top-soil [1], and a large, probably hand-forged, nail came from deposit [3]. Fragments of blueish-grey roofing slates were recovered from deposits [3] and furrow [7], and purple (Welsh?) slate from top-soil [1].

4.4.3 The finds recovered from the evaluation are summarised in *Appendix 3* by object number, context number, by number of fragments, and by their salient characteristics.

4.5 ENVIRONMENTAL SAMPLING

5.5.1 The generally poorly drained character of the landscape reflected the shallow, underlying, impervious clay subsoils, rather than waterlogged deposits. No organic soils were identified, and although soil samples were taken of the principal deposits from Trench 1, and following discussions with the LUAU in-house palaeoecologist, it was considered that they had no environmental potential. As a consequence environmental analysis was not undertaken. Subject to agreement with the Northumberland National Park Archaeologist and the client, the samples will be discarded.

5. DISCUSSION

5.1 ASSOCIATED FEATURES

5.1.1 The topographic survey at Stewart Shiels provided new information in respect of the topographic setting and surface configuration of the enclosure. Some interesting features were noted near to the enclosure, in particular a series of sub-circular banks which would appear to be the remains of a kiln, which is comparable to a corn-drying kiln found at the Hill, Bewcastle (Ramm *et al* 1970, 52). Old hollow ways, boundaries, and a possible building platform were also identified. The survey was not able, in itself, to assign indisputable dates to the features described above, although it is considered possible that the farmstead boundary around Stewart Shiels Farm may be of late medieval date, relating to an earlier phase of the settlement.

5.2 SUB-CIRCULAR ENCLOSURE

5.2.1 The external bank of the enclosure was shown to be low in height and disturbed towards its northern end, and the interior surface was recorded as being corrugated by lazy-beds, which was an agricultural cultivation process that could possibly have post-dated the enclosure. The earliest artefactual evidence is from the mid-eighteenth century and comes from a deposit underlying the enclosure bank material, which would suggest that the enclosure was potentially of eighteenth century date. Subsequent to its use as an area of lazy-beds the northern end has been partially levelled, and much of the topographic detail, that might formerly have been apparent, has been lost in the very wet and marshy area to the south-west of the enclosure. The latest element on the site was the construction of the farmyard wall, which overlies platform Site 5 and the north-westernmost extension of the enclosure. This wall is shown on the OS 2nd edition map of 1898, and therefore the observed development of the site would appear to have occurred within the period of the eighteenth and nineteenth centuries. The lack of *in situ* structural evidence (ie clear evidence of buried walls etc) makes it unlikely that the enclosure formed a 'building' in its own right.

5.2.2 ***Function:*** one possible interpretations of the observed feature is that it was originally constructed as a stack stand or yard, which is an embanked, roughly circular platform for the storage of winter fodder. The bank and associated ditch would have served to protect the winter fodder from animals, and may have had stakes to provide a further barrier. The remains of stack stands are recorded in other areas of Northumberland, and there are some similarities between the Stewart Shiels enclosure and stack stands, eg at Paddaburn Hill, near Bewcastle (Ramm *et al*, 1970, 56). It is located at a similar altitude in a typical topographic setting, it has a similar bank form, although not displaying as much evidence of the exterior ditch recorded at sites such as Noble Shields in Tynedale (*ibid*). However, it is markedly larger than the typical stack stand; the majority of stack stands are between 9m and 14m in diameter, whereas the Stewart Shields enclosure is *c* 20m across. Also stack stands usually have a uniform circular shape, whereas the Stewart Shiels enclosure has an irregular sub-circular shape and there is a further possibility that there was an extension to the enclosure on the north-western side.

5.2.3 It has been established that at least in its latest phase of use the enclosure accommodated lazy-bed cultivation ridges, and there is a possibility that it was originally constructed as a lazy-bed enclosure. The bank and ditch would have served a similar function as that for the stack stand, and would have kept stock away from growing vegetable crops. The best example is from Noble Shields in Tynedale, which comprised a pair of adjacent, sub-circular / sub-rectangular enclosures containing parallel lazy-beds (*op cit*, 49), which was associated with a farmstead. Each enclosure was *c*18m or 19m across, which is very comparable to the size to the Stewart Shiel example. The slightly irregular shape, the size, the association with a farmstead and the presence of lazy-bed ridges would suggest that this was the most probable original function of the enclosure.

6. IMPACT AND RECOMMENDATIONS

6.1 IMPACT

6.1.1 The survey and evaluation has established that the enclosure is probably of post-medieval origin. Trenching across the enclosure bank revealed a shallow earthwork, and it was demonstrated that the internal features were probably lazy beds. The enclosure served either as a lazy bed enclosure or may have earlier served as a stack stand.

6.1.2 The footprint of the proposed barn overlaps the north-western side of the enclosure (Site 1), and also the putative building platform (Site 4), there will be considerable, but very localised disturbance to these structures.

6.2 RECOMMENDATIONS

6.2.1 LUAU conducts evaluations in accordance with the Institute of Archaeologists' *Code of Conduct* and best practices, and also in the light of *Management of Archaeological Projects* (English Heritage 2nd edition 1991). Our concern must be to protect and preserve archaeological sites wherever possible, and only where this is not feasible are destructive techniques of record advocated. Our aim is to recommend the appropriate action which will achieve recording objectively, without the waste of resources.

6.2.2 The enclosure is of a relatively late date, and is not of a high archaeological significance, but nevertheless is of local importance. A mitigation survey has now been undertaken of the structure which provides a documented record of the surface features. It is, however, recommended that a watching brief be undertaken during any ground works for the cow shed development. The earthworks of the enclosure are particularly fragile and it is recommended that the ground disturbance to the remaining part of the enclosure be minimised if at all possible. Vehicle movement over the features should be minimised or the earthworks should be covered by a protective medium to ensure their survival in the course of the development.

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APPENDIX 1
PROJECT BRIEF

APPENDIX 2
PROJECT DESIGN

Lancaster
University
Archaeological
Unit

November 1998

STEWARTSHIELS FARM - OTTERBURN ATFC
NORTHUMBERLAND

ARCHAEOLOGICAL EVALUATION

Proposals: *The following design is offered in response to a request from Turner Facilities Management for an archaeological evaluation to inform a planning application for a new cattle building at Stewartshiels Farm, Otterburn, Northumberland.*

1. INTRODUCTION

1.1 BACKGROUND

1.1.1 Mr Spark of Turner Facilities Management has requested that LUAU submit a proposal for the evaluation of a sub-rectangular enclosure, in advance of the construction of a cattle building at Stewartshiels Farm, Otterburn, Northumberland (NY 8673 9891). The present proposal is submitted in accordance with a brief prepared by The Archaeological Practice on behalf of the Northumberland National Park Authority.

1.1.2 The sub-rectangular enclosure was identified during a programme of aerial photography of the Otterburn ATFC by Tim Gates in 1995 and 1996. It is shown as a sub-rectangular enclosure and is described by Gates as a 'sod cast enclosure or pen' and is of unknown date. Two other enclosures of similar shape and dimensions are known on the north side of the farm (Charlton 1996, no. 342 i and ii).

1.2 LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

1.2.1 LUAU has considerable experience of the evaluation and excavation of sites of all periods, having undertaken a great number of small- and large-scale projects during the past 17 years. Evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. LUAU has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. LUAU and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct). LUAU has undertaken an archaeological assessment of the adjacent Stewartshiels Plantation in 1996 (LUAU 1996) amongst other survey and evaluation work undertaken at Otterburn.

2. OBJECTIVES

2.1 The following programme has been designed, in accordance with a brief prepared by the Archaeological Practice on behalf of the Northumberland National Park Authority, to provide an accurate archaeological evaluation of the designated area, within its broader context. The required stages to achieve these ends are as follows:

2.2 FIELD SURVEY

2.2.1 A landscape survey to record the character of the extant earthworks of the enclosure and to set it within an appropriate topographic context. The mapping will be superimposed onto an OS 1;10,000 base.

2.3 EVALUATION

2.3.1 A single 30m x 2m trench will be excavated through the enclosure. It will be undertaken to establish the nature, extent, chronology, and preservation of any archaeological deposits encountered and will be located in accordance with discussions with the Northumberland National Park Archaeologist. These will be excavated to a maximum depth of 1.25m, the maximum depth for unshored trenches.

2.3.2 The excavation will be subject to machine excavation to remove the topsoil and overburden and archaeological features and horizons will be excavated manually. Sufficient sampling will be undertaken to inform the date, nature and extent of the features.

2.4 EVALUATION REPORT

2.4.1 A written evaluation report will assess the significance of the data generated by this programme within a local and regional context. It will assess the impact of the development on the archaeological resource.

3. METHOD STATEMENT

3.1 FIELD SURVEY

3.1.1 It is proposed that an earthwork level 2 survey (Appendix 1) of the study area be undertaken. The survey will involve the detailed mapping of all surface features within the extent of the enclosure and will depict it in relation to the adjacent topography. The survey of the remains will be intended to provide an appropriate context for the evaluation trenching that will follow. Although the survey data will include altitude information this will not be used for the production of the survey.

3.1.2 Survey control will be established over the site by closed traverse and internally will be accurate to +- 15mm; the control network will be located with respect to field boundaries. It will be located onto the Ordnance Survey National Grid by the use of Global Positioning Survey (GPS), which will locate to an accuracy of +- 1m.

3.1.3 The surface features will be surveyed by EDM tacheometry using a total station linked to a data logger, the accuracy of detail generation will be appropriate for a 1:250 output. The digital data is transferred onto a portable computer for manipulation and transfer to other digital or hard mediums. Film plots will be output via a plotter. The archaeological detail is drawn up in the field as a dimensioned drawing on the plots with respect to survey markers. Most topographic detail is also surveyed, particularly if it is archaeologically significant or is in the vicinity of archaeological features. The survey drawings will be generated within a CAD system and can be output at any scale. The survey would be plotted using RCHM(E) draughting conventions and line thicknesses would be appropriate for reproduction and reduction.

3.1.4 In conjunction with the archaeological survey a photographic archive will be generated, which will record significant features and general landscapes.

3.2 TRIAL TRENCHING

3.2.1 This programme of trenching will establish the presence or absence of any archaeological deposits. One trench, 30m long and 2m wide, will be excavated to investigate the possible presence of archaeological features within and beyond the extent of the sub-rectangular enclosure. The trench will be located in accordance with the requirements of the National Park Archaeologist and will be excavated by a combination of mechanised and manual techniques; the topsoil and overburden will be removed by machine and those deposits below will be excavated by hand, although clearly disturbed material will also be excavated by machine.

3.2.2 To maximise the speed and efficiency of the operation the removal of overburden will be undertaken by a small JCB-type excavator fitted with a 1.8m wide toothless bucket. The mechanical excavator will be used to remove topsoil, but will not excavate into any potential archaeological stratigraphy. All machine excavation will be undertaken under careful archaeological supervision. Manual excavation techniques will be used to evaluate any sensitive deposits, and will enable an assessment of the nature, date and survival of deposits. The excavation will be undertaken for the most part to the top of archaeological deposits although sufficient excavation of archaeological features will be undertaken to establish their date, nature and extent. The excavation will establish the depth of natural horizons.

3.2.3 All trenches will be excavated in a stratigraphical manner, whether by machine or by hand. Pits and post-holes will be excavated by half sectioning. Trenches will be accurately located by use of total station equipment with respect to the survey plan. All typologically significant and closely datable finds will be contextually recorded. All archaeological features within the trenches will be planned by manual techniques.

3.2.4 ***Finds and Sampling Strategy:*** Finds recovery and sampling programmes will be in accordance with best practice (current IFA guidelines) and subject to expert advice. Samples will be collected for technological, pedological, palaeoenvironmental and chronological analysis as appropriate. Bulk soil samples will be dry-sieved on site if possible or wet-sieved off site as required. If environmental potential is established a sampling strategy will be undertaken to recover representative material for future analysis and will be undertaken subject to advice from specialists. The Unit has close contact with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition,

employs in-house finds and palaeoecology specialists, who are readily available for consultation. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC).

3.2.5 ***Recording:*** All information identified in the course of the site works will be recorded stratigraphically, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.

3.2.6 Results of the field investigation will be recorded using a paper system, adapted from that used by Central Archaeology Service of English Heritage. The archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20, and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.3 EVALUATION REPORT

3.3.1 ***Archive:*** the results of the fieldwork will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects,* 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's Code of Conduct. This archive can be provided in the English Heritage Central Archaeology Service format, both as a printed document and on computer disks as ASCii files, and a synthesis (in the form of the index to the archive and the report) will be included in the Northumberland Sites and Monuments Record. A copy of the archive can also be made available for deposition with the National Archaeological Record. LUAU practice is to deposit the original record archive of projects (paper, magnetic and plastic media) with the appropriate County Record Office, and a full copy of the record archive (microform or microfiche) together with the material archive (artefacts, ecofacts, and samples) with an appropriate museum, in consultation with the County Museums Service.

3.3.2 ***Evaluation Report:*** one bound and one unbound copy of a written synthetic report will be submitted to the Client, and further copies submitted to the National Park Authority and to the County Sites and Monuments Record. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, with an assessment of the overall stratigraphy, together with appropriate illustrations, including detailed plans and sections indicating the locations of archaeological features. Any finds recovered from the excavations will be assessed with reference to other local material, any particular or unusual features of the assemblage will be highlighted, and the potential of the site for palaeoenvironmental analysis will be considered. The report will also include a complete bibliography of sources from which data has been derived, and a list of further sources identified during the programme of work, but not examined in detail.

3.3.3 This report will identify areas of defined archaeology, the location of the trench, and whether the results of the sampling were positive or negative. An assessment and statement of the actual and potential archaeological significance of the site within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, and section drawings and plans if appropriate; it can be tailored to the specific requests of the client (eg particular scales etc), subject to discussion. The report will be in the same basic format as this project design; a copy of the report can be provided on 3.5" disk (IBM compatible format).

3.4 OTHER MATTERS

3.4.1 ***Access:*** liaison for basic site access will be undertaken through Turner Facilities Management.

3.4.2 ***Health and Safety:*** LUAU conforms to all health and safety guidelines as contained in the Lancaster University Manual of Health and Safety and the safety manual compiled by the Standing Conference of Archaeological Unit Managers. The work will be in accordance with Health and Safety at Work Act (1974), the Council for British Archaeology Handbook No. 6, *Safety in Archaeological Fieldwork* (1989).

3.4.3 Full regard will, of course, be given to all constraints (services etc) during the excavation of the trenches, as well as to all Health and Safety considerations. LUAU provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. A risk assessment will be completed in advance of the project's commencement. The precise location of any services within the study area will be established in consultation with the client and as a matter of course the Unit uses a U-Scan device prior to any excavation to test for services.

3.5 CONFIDENTIALITY

3.5.1 The evaluation report is designed as a document for the specific use of the Client, for the particular purpose as defined in the project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.

3.6 PROJECT MONITORING

3.6.1 LUAU will consult with Turner Facilities Management regarding access to land within the study area. Whilst the work is undertaken for Turner Facilities Management, Northumberland National Park Archaeologist (NNPA) will be kept fully informed of the work and its results. Any proposed changes to the project design will be agreed with NNPA in consultation with the Client. LUAU will arrange a preliminary meeting, if requested, and NNPA will be informed at the commencement of the project.

4. WORK TIMETABLE

4.1 The following programme is proposed:

4.2 SURVEY

4.2.1 A one day period will be necessary to undertake the survey programme.

4.3 EVALUATION

4.3.1 A two day period is required to undertake the trenching programme, depending on the results.

4.4 PREPARE EVALUATION REPORT

4.4.1 A five day period will be required to complete this element.

4.4.2 LUAU can execute projects at short notice once an agreement has been signed with the client. LUAU would be able to submit the report to the client within three weeks from the commencement of the project.

5. OUTLINE RESOURCES

5.1 The following resource base will be necessary to achieve the proposals detailed above.

5.2 FIELD SURVEY

1 man-day Project Supervisor
1 man-day Project Assistant

5.2 EVALUATION

2 man-days Project Supervisor
2 man-days Project Assistant

5.3 **EVALUATION REPORT**
3 man-days Project Officer
1.5 man-days Draughtsman
0.5 man-day Finds Specialist

5.4 The project will be directed by **Julian Cotton BA** who has considerable excavation experience. The project will be managed by **Jamie Quartermaine BA Surv Dip MIFA** (Unit Project Manager) to whom all correspondence should be addressed. LUAU adheres by the IFA's Code of Conduct and the Code of Approved Practice for the regulation of Contractual Arrangements in Field Archaeology.

APPENDIX 3
EVALUATION FINDS RECORDS

Trench 1

Context No/ Finds No	***Description***
1 / 1006	1 fragment of clay pipe stem. Post-medieval
1 / 1007	1 fragment of (Welsh ?) slate.
3 / 1001	2 fragments of willow pattern whitewares. Eighteenth/nineteenth centuries
	1 fragment of brown glazed teapot lid. Late nineteenth century.
5 / 1002	2 fragments (?) creamware. Late eighteenth century or early nineteenth century.
	1 fragment of brown glazed redware. Nineteenth century.
	1 fragment of redware with white internal slip. Nineteenth century.
	1 fragment of redware with red and white marbled internal slip.
	1 fragment of very fine redware fabric (teapot?). Late eighteenth century.
	1 fragment of black-glazed redware. Nineteenth century.
6 / 1003	1 fragment of (?) cream ware. Late eighteenth century or early nineteenth century.
	1 fragment of redware in white internal slip. Nineteenth century.
7 / 1004	1 fragment of grey-blue slate.
8 / 1005	1 fragment of grey-blue slate.

ILLUSTRATIONS

based upon the Ordnance Survey 1:250000
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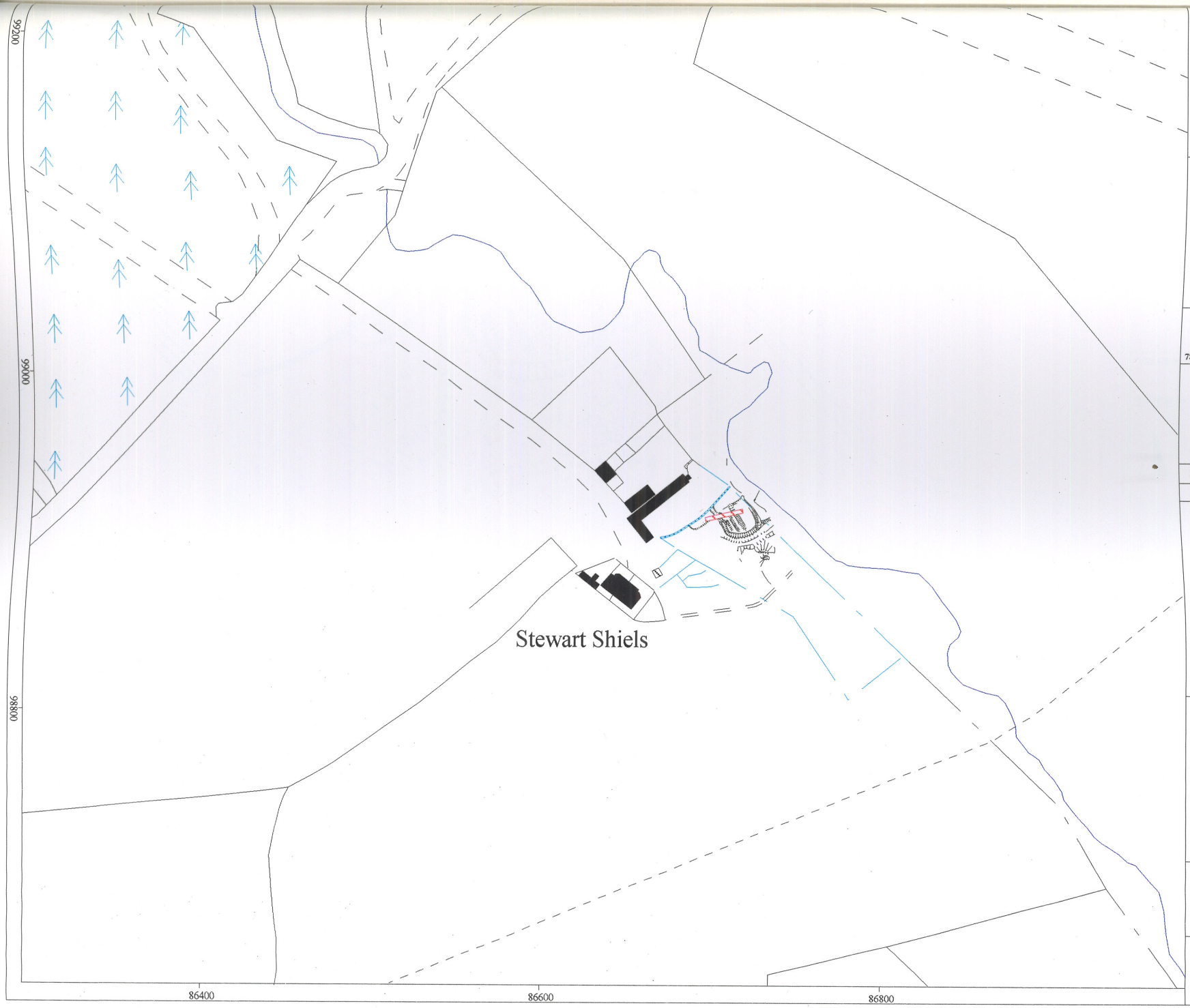
Fig 1 : Stewart Shiels, Otterburn Location Map



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MEETING HOUSE LANE
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LA1 1TF

TEL: 01524 848666

PROJECT:

STEWART SHIELS

Otterburn

DRAWING

General Location

7853/stfig2.fcw

0 50 100m

metres

SCALE 1:2250 at A3

DRAWN BY: AP, AS and JQ

DATE: December 1998

LOCATION:

KEY

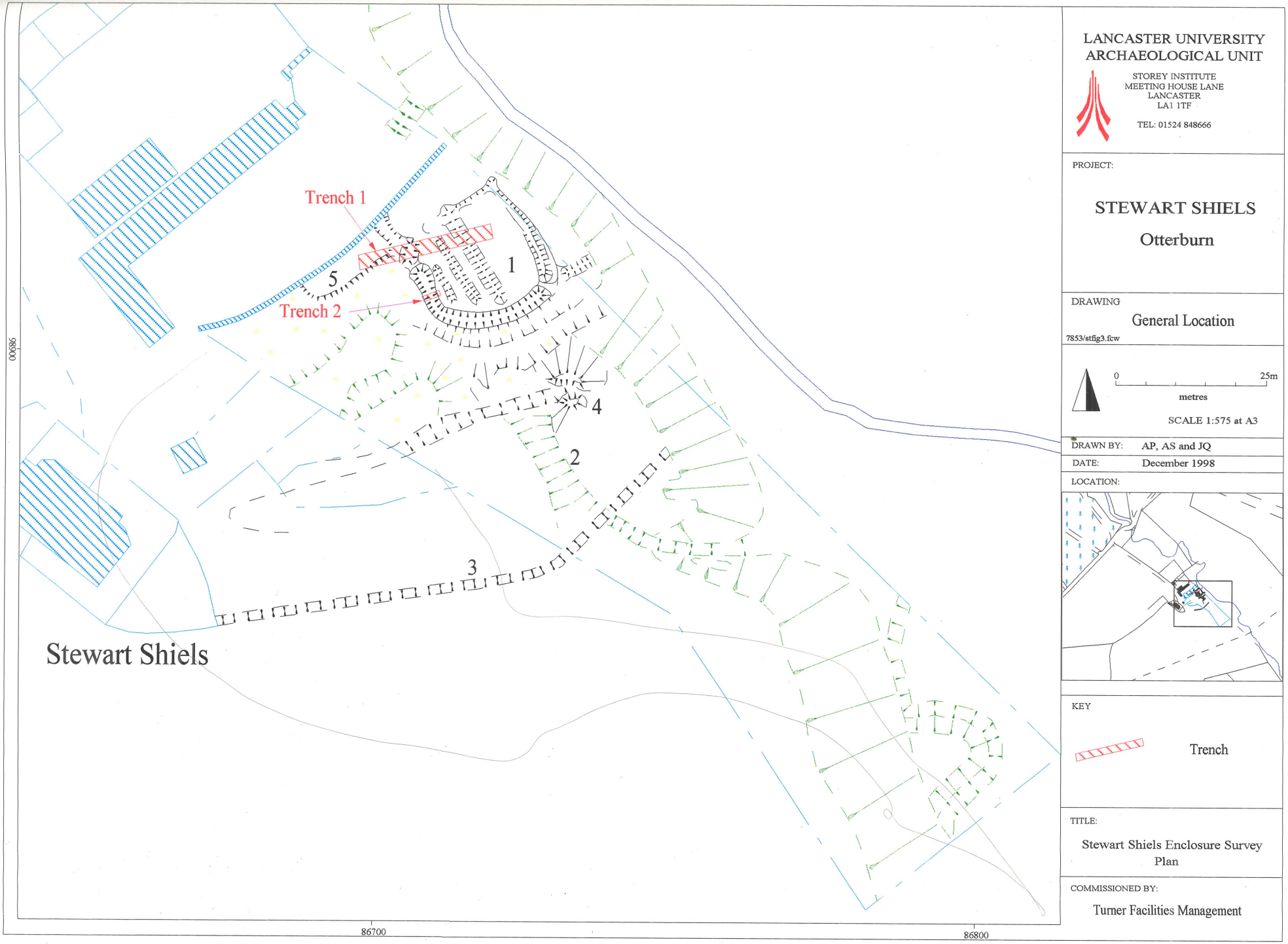
TITLE:

Stewart Shiels General Location Plan

COMMISSIONED BY:

Turner Facilities Management

Fig 2 Stewart Shiels - General Location



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PROJECT:

STEWART SHIELS

Otterburn

DRAWING

General Location

7853/stfig3.fcw

0 25m

metres

SCALE 1:575 at A3

DRAWN BY: AP, AS and JQ

DATE: December 1998

LOCATION:

KEY

Trench

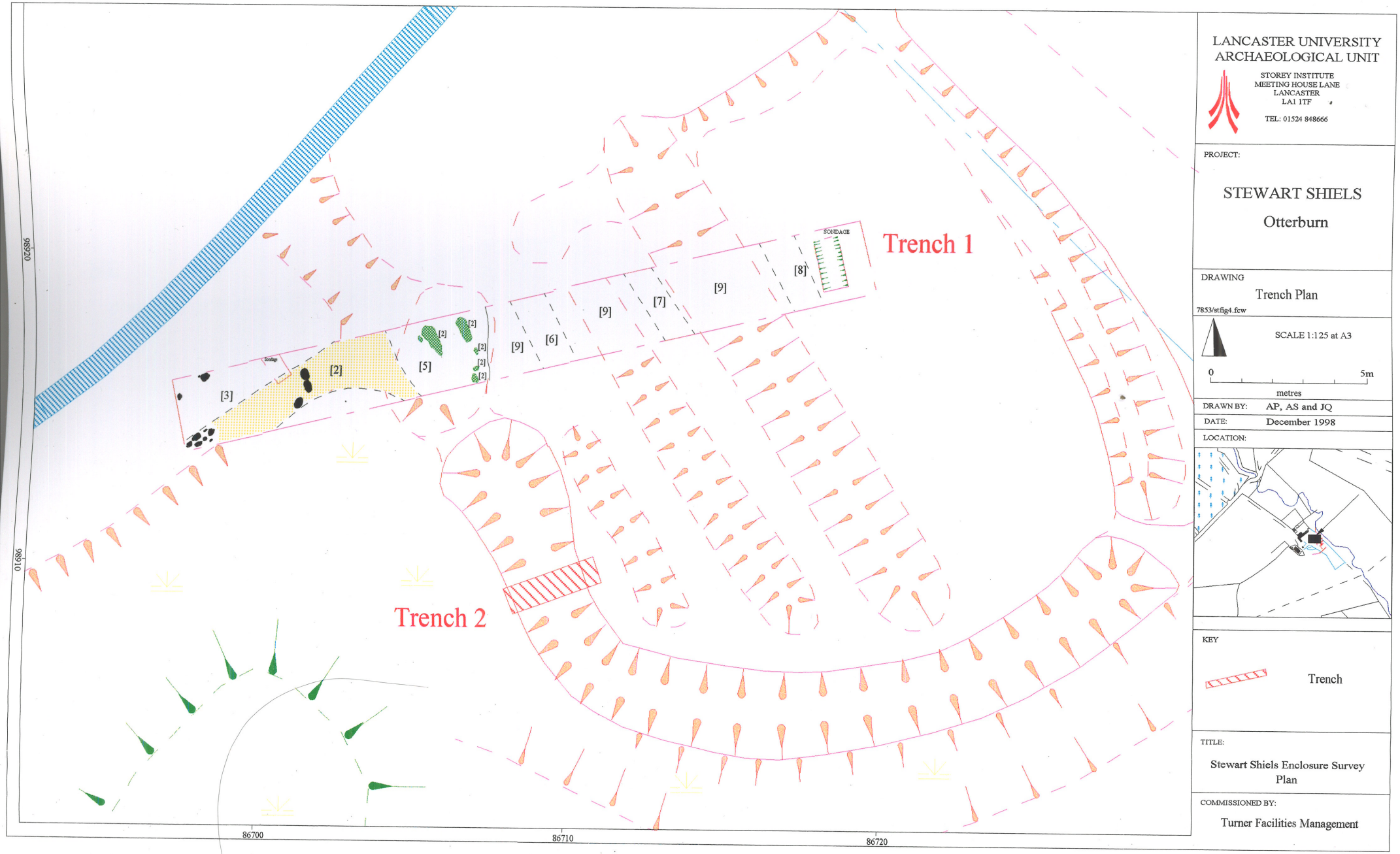
TITLE:

Stewart Shiels Enclosure Survey Plan

COMMISSIONED BY:

Turner Facilities Management

Fig 3 Stewart Shiels Enclosure Survey Plan



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PROJECT:

STEWART SHIELS

Otterburn

DRAWING

Trench Plan

7853/stfig4.fcw

SCALE 1:125 at A3

0 5m

metres

DRAWN BY: AP, AS and JQ

DATE: December 1998

LOCATION:

KEY

Trench

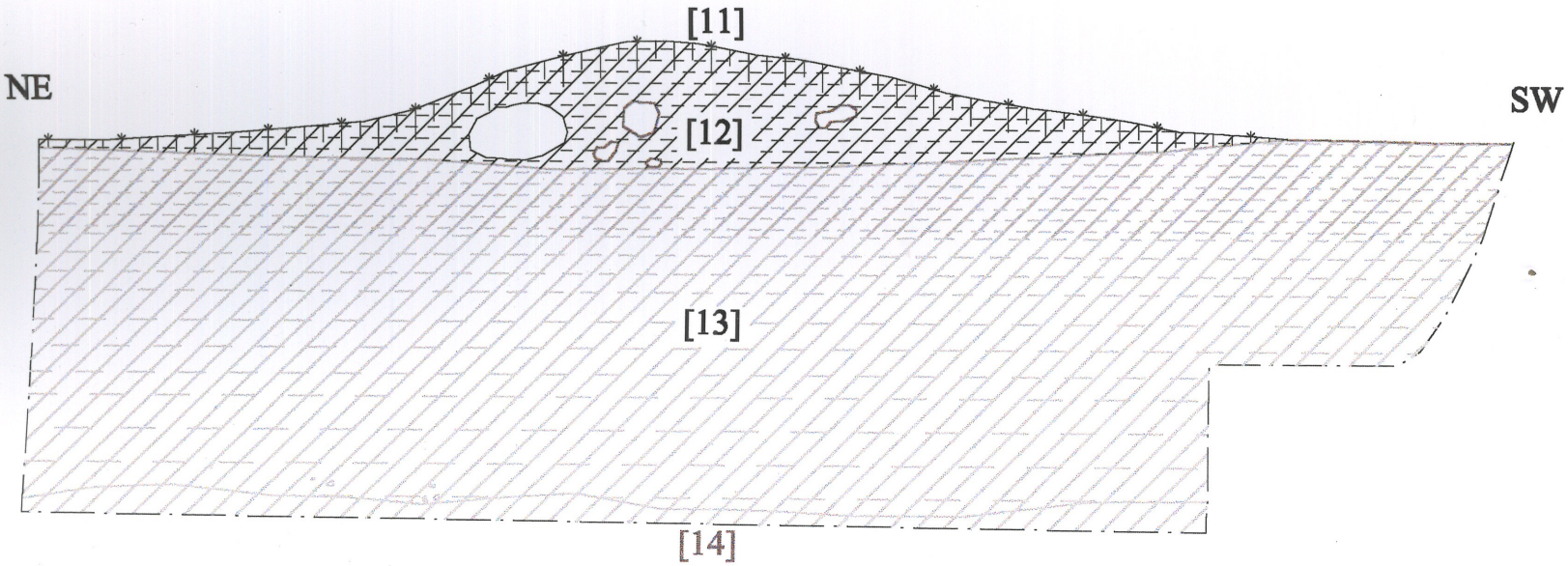
TITLE:

Stewart Shiels Enclosure Survey Plan

COMMISSIONED BY:

Turner Facilities Management

Fig 4 Trench Plan



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PROJECT:

STEWART SHIELS

Otterburn

DRAWING

Section Across Trench 2

7853/Sect2A.DWG

0 0.5

metres

SCALE 1:10 at A3

DRAWN BY: AP, AS and JQ

DATE: December 1998

LOCATION:

KEY

Topsoil

Clay

Silt

Limit of Excavated Area

TITLE:

Stewart Shiels Section Across Trench 2

COMMISSIONED BY:

Turner Facilities Management

Fig 5. Section Across Trench 2

PLATES

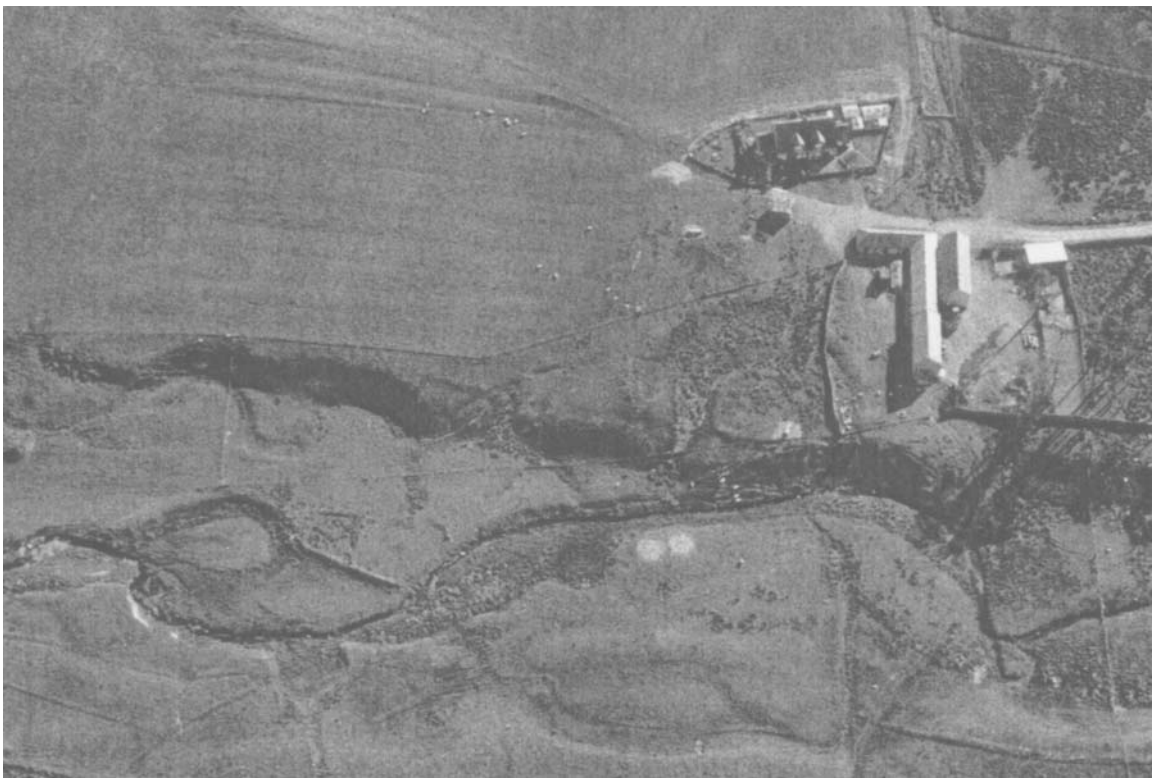

Plate 1 Aerial Photograph of Stewart Shiels (Gates 1996)

Plate 2 Stewart Shiels Enclosure (Site 1) from the south-east

Plate 3 Trench 1 from the east