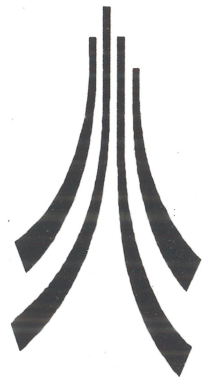


LANCASTER
UNIVERSITY
ARCHAEOLOGICAL
UNIT



August 1998

**NEW SERVICE RESERVOIR
PIPELINE
GUIDE
Lancashire**

Archaeological Watching Brief Report

Commissioned by:

North West Water Ltd

New Service Reservoir Pipeline
Guide
Blackburn
Lancashire

Archaeological Watching Brief

Report no 1997-98/005/AUA7826

Checked by Project Manager.

..... Date

Passed for submission to client.

..... Date

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SUMMARY

Lancaster University Archaeological Unit (LUAU) undertook a watching brief on behalf of North West Water Ltd on land south of Belthorn Road in Guide, Lower Darwen, Lancashire, (from NGR SD7088 2530 to SD 3750 2510) during the stripping of topsoil along part of the course of a new pipeline. The work was undertaken in accordance with a project design prepared by LUAU, which was based on a verbal brief by the Lancashire County Archaeological Service (LCAS). The watching brief followed on from an assessment and survey of the reservoir and pipeline at Guide undertaken by LUAU (1998a and b).

The watching brief examined an area which was important for sandstone quarrying in the late eighteenth and nineteenth centuries. There were also several relict field boundaries within the area, representing the post-medieval landscape.

No significant archaeological deposits were recorded during the watching brief, the only intrusive features identified related to drainage near Aspinall Fold.

ACKNOWLEDGEMENTS

LUAU would like to thank Roy Rhodes for his assistance with the project and also to Steve Taylor and other staff of Cheetham Construction, for their cooperation and assistance during the watching brief. We would also like to thank the tenant farmers for allowing access onto the land.

The watching brief was undertaken by Peter Redmayne. The report was compiled by Peter Redmayne and edited by Jamie Quartermaine and Richard Newman. The project was managed by Jamie Quartermaine.

1. INTRODUCTION

1.1 Contract background

- 1.1.1 A watching brief was undertaken by Lancaster University Archaeological Unit (LUAU) on behalf of North West Water Ltd during topsoil stripping along a section of new pipeline to the south of Belthorn Road, Guide, Lower Darwen, Lancashire (NGR SD 7088 2530 to SD 3750 2510) on the 6th, 7th and 10th of August 1998.
- 1.1.2 The watching brief was carried out according to a project design prepared by LUAU (*Appendix 1*), which was produced in accordance with a verbal brief by the Lancashire County Archaeological Service (LCAS). The project design set out a series of measures to provide a suitable level of archaeological observation, and recording of all archaeological features or deposits encountered during the watching brief.
- 1.1.3 The work followed on from an assessment and survey carried out by LUAU (1998a and b). These works comprised a desk-based study, followed by an identification survey of selected sites along the line of the pipe route and within the area of the new reservoir. The survey identified a series of sandstone quarrying landscape and a predominantly post-medieval agricultural landscape, although there was also evidence for a preenclosure intake.
- 1.1.4 A full archive of the watching brief has been produced to a professional standard in accordance with current IFA and English Heritage guidelines (*The management of Archaeological Projects*, 2nd edition 1991)

1.2 Geological and Topographical Background

- 1.2.1 **Geology:** the pipeline corridor is situated on the flank of the Hercynian Rossendale Anticline with a solid geology of Upper Carboniferous (Lower Westphalian) Coal Measures (OS 1979). The glacial drift consists of boulder clay and mixed sand and gravel deposits. The soils in the area of the watching brief are Brickfield 3 earths of the Cambic Stagnogley series (Lawes Agricultural Trust 1983).
- 1.2.2 **Topography:** the section of pipeline examined by the watching brief (Fig 2) starts on gently sloping ground at a height of 230m above sea level, adjacent to Benson House, the ground slopes steeply from 220 to 195m to the concrete access track to the south of Aspinall Fold. To the west of the track, up to the motorway embankment the ground is relatively level and is between 185 and 190m above sea level, but is quite waterlogged.

1.3 Historical and Archaeological Background

1.3.1 **Historical Background:** other than the market town of Blackburn there are few recorded settlements of any size in region during the medieval and early post-medieval periods. The township of Lower Darwen seems to have comprised large tracts of uncultivated moor and moss lands, and for the most part was not reclaimed by draining and cultivating until the nineteenth century. Yates' 1786 map shows few nucleated settlements, although there were some scattered farms along the roads. The documentary evidence indicates that there was much 'assarting', ie the clearance of land, mainly for pasture or grazing (Freeman *et al* 1996). This is also indicated by the common use of name 'fold' in this area. There was little arable farming; the land was

used for cattle rearing and it is probable that much of the grazing land was open and rough pasture. It is likely that the population was very sparse (Baines 1825).

1.3.2 During the later post-medieval period the land was more intensively utilised and populated. Blackburn became a cotton town drawing a large population. The outlying areas were also settled and many of the outlying villages were established at this time. The earliest reference to Blackamoor is in Baines' *Directory* of 1825 and the first reference to Guide is in connection with the reservoir constructed there in 1845 (Farrer and Brownbill 1911). In Guide there were cottages with ground floor loom shops (Site 03), that were outliers of the larger loom shops of Blackburn. The study area lies adjacent to coal measures, and there is documentary evidence for an old coal mine there (Site 12).

1.3.3 There is little evidence as to the individual land holdings and land use in the later postmedieval period, either on Yates' 1786 map or the Ordnance Survey (OS) 1st edition map. Blackamoor is not on Yates' map, but is in Baines' *Directory* of 1825, when a Laurence Whittaker is recorded as living in the township of Lower Darwen and owning a house or piece of land known as Black'a'moor. Later sources record that in 1875 the Vicar of Blackburn, Dr. Whittaker, appealed for money for building a school on a piece of Glebe land at Blackamoor, which is an indication of the increasing population of this locality.

1.3.4 Much of the study corridor is now built over by modern developments including, most recently, the M65 and the Walker Industrial Park.

1.3.5 **Archaeological Background:** the assessment identified evidence of preenclosure fields, mainly to the north of Aspinall Fold farm (LUAU 1998a, Sites 07, 08 and 15), which is a post-medieval structure, probably of eighteenth century date. These fields were possibly part of an earlier intake which was incorporated and regularised during the larger and later Post-medieval enclosure. Also identified was a series of stone quarries along the line of the route (LUAU 1998a, Site 14).

2. METHODOLOGY

2.1 Watching Brief

- 2.1.1 Topsoil stripping was carried out using a tracked Case 320 mechanical excavator with a 3m wide toothless blade, the spoil being piled up to the northern side of the stripped area. The stripped area within the fenced off pipeline corridor was generally 9-10 metres in width. The stripping was carried out with the excavator working backwards down the corridor, which produced a very clean surface, creating ideal conditions for the identification of archaeological features
- 2.1.2 The subsoil surface was examined both for potential features, and artefacts immediately after stripping. The stripped topsoil was also examined for artefacts.
- 2.1.3 The stratigraphy and archaeological features were recorded using methods in accordance with those recommended by English Heritage's Central Archaeology Service (CAS). Recording was in the form of context sheets. Scale drawings (plans at 1:50) were made where appropriate, and photographs (black and white prints and colour transparencies) were taken as necessary. On-site assessment of the deposits suggested it was not necessary to take environmental samples. Any finds were handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

2.2 Archive

- 2.2.1 A full archive of the work has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited with the County Record Office (Preston) and a copy of the report will be given to the SMR. A copy of the archive will also be available for deposition with the National Monuments Record in Swindon.

3. WATCHING BRIEF RESULTS

3.1 Introduction

- 3.1.1 The description of the watching brief starts from Benson House (SD 7092 2532) and finishes adjacent to the motorway verge to the south-west of Aspinall Fold (Fig 2) (SD 7047 2515).

3.2 Benson House to Aspinall Fold

- 3.2.1 The stratigraphy between Benson House, and the top of the bank above Aspinall Fold, comprised a layer of very dark brown sandy loam topsoil, above a thin layer of yellow ochre friable silty boulder clay, overlying sandstone bedrock. The topsoil had an average depth of 0.3m with frequent angular sandstone fragments towards the base.
- 3.2.2 To the south-west of Benson House the pipeline cut a decayed section of drystone wall field boundary (A), the wall (standing to full height) continues along the south-eastern edge of the small quarry (Site 14) and appears to have originally been part of the southwestern boundary of the enclosure round Benson House. There was a shallow ditch

to the north of the wall which was 0.26m deep and 0.42m wide and was partially filled with a deposit of very dark brown silty loam. Large revetment stones (0.73 x 0.54 x 0.22m maximum) had been set against the western edge of the ditch which consequently gave it a vertical rather than a rounded profile.

3.3 Aspinall Fold to the Motorway

3.3.1 To the south-west of the metalled road to Aspinall Fold (Fig 2) the topsoil was a very dark brown sandy loam averaging 0.27m in depth, overlying a layer of friable yellowy brown sandy clay loam, with patches of sticky silty grey/yellow clay.

3.3.2 A number of relatively modern cut features were visible, and comprised a series of north-west/south-east aligned mole type field drains. There were also two narrow stone lined drains (B), which are shown on the site map (Fig 2). The mole drains were 0.14m in width, and were clearly visible as lines of pure clay within the slightly mixed clay layers of the exposed ground surface. These drains cut through the two stone lined drains. The two stone lined drains were 0.34m wide, and 0.21m in depth, with the base sides and top constructed with smallish flat pieces of local sandstone. One drain contained fragments of a large black glazed, orange fabric ceramic bowl which is of late postmedieval date (nineteenth century).

4. DISCUSSION

- 4.1 No evidence of any significant features or deposits were recorded during the watching brief. The cut for the wall at Benson house appears to have been made for the insertion of a substantial foundation, to compensate for the sloping ground, other field boundaries cut by the pipeline were built directly on top of the ground surface.
- 4.2 The stone drains to the south-west of Aspinall Fold probably date from the nineteenth century. The potsherds are from a common type of domestic vessel, which was glazed on the interior only, and were used principally for separating cream. The mole drains are obviously later in date as they cut the stone drains.

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APPENDIX 1 PROJECT DESIGN

**Lancaster
University
Archaeological June 1998**

Unit

**NEW SERVICE RESERVOIR PIPELINE, GUIDE
BLACKBURN, LANCASHIRE**

ARCHAEOLOGICAL WATCHING BRIEF

Proposals

The following project design is offered in response to a request from North West Water Ltd, for an archaeological watching brief along the line of a water pipe from the new service reservoir at Guide, near Blackburn.

1. INTRODUCTION

- 1.1 An archaeological assessment (LUAU 1998) has been carried out in advance of the construction of a new reservoir and pipeline on land south of Belthorn Road in Guide, Lower Darwen, Lancashire (from NGR SD 36985 42540 to SD 37080 42570). The work was carried out by the Lancaster University Archaeological Unit on behalf of the North West Water Ltd, and comprised a desk-based study, followed by an identification survey of the pipe route, and a detailed survey of a quarry site to the south of the proposed reservoir.
- 1.2 The field survey identified seven sites, all of which relate to sandstone quarrying or the post-medieval agricultural landscape. The most significant landscape feature identified was the Scar Edge Delves sandstone quarry which is on the site of the proposed reservoir and has now been subject to a detailed hachure survey, serving as mitigation for the impact of the proposed development. Although relatively few archaeological sites will be affected by the construction of the pipeline, the survey has demonstrated the relative importance of the area for sandstone extraction during the late eighteenth and nineteenth centuries.
- 1.3 As a result of this survey the Lancashire County Archaeologist recommended that an archaeological watching brief be undertaken during the top-soil strip between Benson House and the line of the M65 motorway.
- 1.4 The Lancaster University Archaeological Unit has considerable experience of the evaluation and survey of sites of all periods, having undertaken a great number of small and large scale projects during the past 15 years. Evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. LUAU have undertaken many surveys of mining landscapes notably the Kidburngill mining landscape in West Cumbria. 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.

2. OBJECTIVES

2.2 The following programme has been designed, in accordance with a verbal brief by the Lancashire County Archaeological Service to provide a suitable level of archaeological observation, recording, and response during the top-soil strip for the proposed pipeline. The required stages to achieve these ends are as follows:

2.1 Watching Brief

2.1.1 To record accurately any surviving archaeological features or deposits by means of detailed observation and recording. To record the presence of buried features by appropriate recovery techniques, where applicable.

2.3 Archive/Report

2.2.1 A full written report will assess the significance of the data generated by the entire programme of work, in a local and regional context, and will be suitable for deposition as a permanent archive of the work undertaken.

3. METHOD STATEMENT

3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work outlined above.

3.1 Watching Brief

3.2.1 **Methodology:** A programme of field observation will record the location, extent, and character of any surviving archaeological features within the excavation for the pipeline. This work will comprise the

observation of the process of excavation for these works, the systematic examination of any subsoil horizons exposed during the course of works, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

- 3.2.2 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid coordinates where appropriate). All archaeological information collected in the course of fieldwork will be recorded in standardised form, and will include accurate national grid references. Features will be planned at appropriate scales and annotated on to existing site mapping. A photographic record will be undertaken simultaneously. The recording techniques and procedures employed by LUAU for such detailed recording represent current best practice.
- 3.2.3 It is assumed that LUAU will have the authority to stop works for up to one hour to enable the recording of important deposits, and to call in additional archaeological support if a find of particular importance is identified. This would only be called into effect in agreement with the Client and the County Archaeologist and will require a variation to costing. In normal circumstances, field recording will also include a continual process of analysis, evaluation, and interpretation of the data, in order to establish the necessity for any further more detailed recording that may prove essential.
- 3.2.4 Full regard will, of course, be given to all constraints (services etc), as well as to all Health and Safety regulations. LUAU provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Unit Managers (1991) and risk assessments are now being implemented for all projects. All operatives would be fully aware of the particular needs of working in conjunction with plant.

3.3 Archive/Report

- 3.3.1 **Archive:** The results of all archaeological work carried out during fieldwork will form the basis for 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 to the appropriate level. 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 will be provided in the English Heritage Central Archaeology Service format and a synthesis will be submitted to the Lancashire Sites and Monuments Record (the index to the archive and a copy of the report). LUAU practice is to deposit appropriate elements of 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.
- 3.3.2 **Report:** One bound and one unbound copy of a written synthetic report will be submitted to the Client within five weeks of completion of fieldwork, and a further copy submitted to the Lancashire Sites and Monuments Record following any comments from the Client. The report will include a copy of the agreed 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 and 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.
- 3.3.3 This report will identify areas of defined archaeology. 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, section drawings, and plans. This 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), if required.

3.3.4 **Confidentiality:** All internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. With the agreement of the Client, reports may be circulated to the County Archaeological

Curator for discussion and approval as necessary, but are not suitable for publication as academic documents 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.

3.4 **Project Monitoring**

3.4.1 **Lancashire County Archaeological Service:** Any proposed changes to the project design will be agreed with the Lancashire County Archaeological Service in coordination with the Client. The Lancashire Sites and Monuments Record will be informed in writing at the commencement of the project. All significant developments will also be related to the County Archaeologist.

3.4.2 **North-West Water Ltd:** An initial meeting of all parties will be arranged at the commencement of the project, if the Client so desires. LUAU will consult regularly with the Client during fieldwork, and this will include the attendance of a representative of the Client, if required, at any meetings convened with the County Archaeologist, to discuss the report or any other matter. Any decision to invoke a rapid response team would be taken with the Client and Lancashire County Archaeological Service.

4. **WORK TIMETABLE**

4.1 The phases of work would comprise:

4.2 **Watching brief**

Monitoring of excavation of trenches, and observation and recording of any archaeological features and materials revealed. The timescale of this phase will be dictated by the construction programme.

4.3 **Archive/Report**

LUAU generally calculates a 1:0.5 ratio of fieldwork: post-fieldwork (archive, analysis, and report preparation).

4.4 LUAU can execute projects at very short notice once an agreement has been signed with the client. The date for completion of the works would be dictated by the site construction programme. The report will be submitted to the Client within four weeks of the completion of field work.

4.5 The project will be managed by **Jamie Quartermaine, BA** (Unit Project Manager), to whom all correspondence should be addressed. All Unit staff are experienced, qualified archaeologists, each with several years professional expertise.

ILLUSTRATIONS

Fig 1 Guide Site Location Map

Fig 2 Watching Brief Study Corridor Plan



Fig 1 Guide Site Location Map

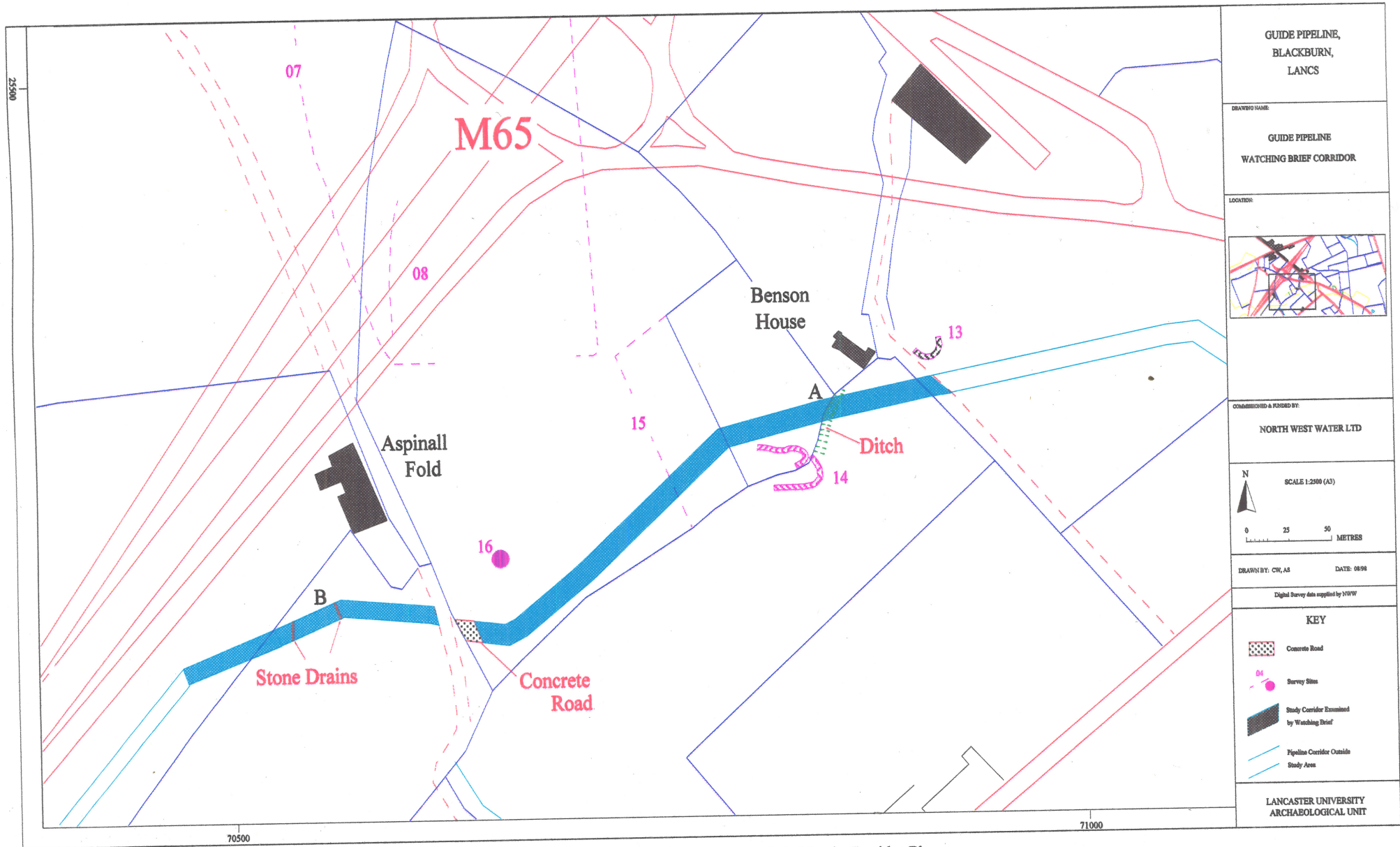


Fig 2 Guide Pipeline - Watching Brief Study Corridor Plan