



SITE INVESTIGATION WORKS, ULVERSTON, CUMBRIA

Archaeological Watching Brief



Oxford Archaeology North

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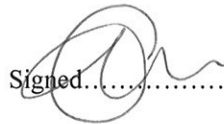
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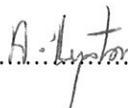
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SUMMARY

The Environment Agency commissioned Oxford Archaeology North (OA North) to undertake an archaeological watching brief of the excavation of trial pits, or hand-dug test pits (HDTP1-5), across the historic town of Ulverston, Cumbria (NGR centred SJ 285 785), for the purposes of a geotechnical investigation. The groundworks had the potential to destroy or disturb deposits of archaeological significance. Therefore, in order to mitigate the impact of the geotechnical investigation on any such deposits, and to provide data that may help to inform future decisions, the Environment Agency Archaeological Advisor and the Cumbria County Council Historic Environment Service (CCCHES) requested a watching brief be conducted. One HDTP was excavated at each of the five locations alongside three becks in the town to investigate the beck walls and the existence of any foundations: Gill Banks Beck to the north-west of the town (HDTP1); Town Beck on the east side of the town (HDTP2); and Dragley Beck to the south-east of the town (HDTP3-5). At the same time, the groundworks also included the drilling of a number of boreholes, and windowless samples. However, these did not require archaeological monitoring during any intrusive work. The watching brief was carried out in March 2011.

The results of the watching brief showed that there were no foundations to the beck wall. Only three of the five HDTPs were excavated into the natural clayey-sand deposits (HDTP2, 3 and 4) at a depth of over 1m (1.05m being the minimum and 1.4m being the deepest). No significant archaeological deposits or finds were observed, although in HDTP1 a small brick-lined culvert capped with slate was recorded running parallel to the beck.

ACKNOWLEDGEMENTS

OA North would like to express its thanks to Mark Jackson from Atkins, who commissioned the work on behalf of the Environment Agency, and to Fugro site staff who were undertaking the geotechnical investigation.

The watching brief was undertaken by Nathaniel Jepson, who also wrote the report. The project was managed by Emily Mercer, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 The Environment Agency proposed to undertake a geotechnical investigation across the historic town of Ulverston, Cumbria (NGR centred SJ 285 785), comprising hand-dug test pits (HDTP), borehole drilling and windowless samples. However, such groundworks have the potential to destroy or disturb deposits of archaeological significance. Therefore, in order to mitigate the impact of the geotechnical investigation on any such deposits, and to provide data that may help to inform future decisions, the Environment Agency Archaeological Advisor and the Cumbria County Council Historic Environment Service (CCCHES) requested that an archaeological watching brief be conducted during the excavation of the test pits, but not of the boreholes or windowless samples, nor of the small hand-dug test pits that would precede them. In accordance with this request a project design was prepared and approved by CCCHES (*Appendix 1*).

1.1.2 The purpose of the HDTPs was to investigate the existence of any foundations to the beck walls at five locations (Fig 1) alongside Gill Banks Beck to the north-west of the town (HDTP1), Town Beck on the east side of the town (HDTP2), and Dragley Beck to the south-east of the town (HDTP3-5). The work was undertaken in March 2011. This report sets out the results of the watching brief in the form of a short document.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The southern end of Cumbria, in which Ulverston is located, is largely dominated by undulating fells, from which a pastoral landscape with substantial woodlands has developed. This southern limit of the county is defined by the broad expanse of Morecambe Bay and the surrounding limestone lowlands (Hodgkinson *et al* 2000). The underlying solid geology of the area consists of Silurian Ludlow greywackes (Coniston Grits) and banded mudstones and siltstones (Countryside Commission 1998). The solid geology of Ulverston is Bannisdale sandstone, overlain by boulder drift obscuring the rocks below (bgs.ac.uk/openscience). The geological resource has been exploited with numerous small quarries dotting the landscape (Countryside Commission 1998).

1.2.2 The test pits were situated around the town of Ulverston (Fig 1) on the three becks. HDTP1 was situated at the Gill (SD 2842 7855) on Gill Banks Beck; HDTP2 was situated at Eller's Mill on Town Beck (SD 2907 4716); and HDTP3, 4, and 5 were situated approximately 10m apart on Dragley Beck (HDTP3 and 4 centred SD 2938 7772), with HDTP5 next to Fitz Bridge (SD 2947 7777). The land within the proposed development site is at a height of approximately 110m above mean sea level (Ordnance Survey 1968).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 **Prehistoric Period:** evidence for prehistoric activity in the Ulverston area comes mainly from stray finds, many of which were found during the nineteenth century. A perforated stone hammer, probably dating to the Bronze Age, was found under the floor of a stable at Oubas Cottage, Ulverston, in 1868 (Gaythorpe 1899, 167-8). A polished stone axe of dark grey diorite was also recorded as having been found in the Ulverston district, and was, in 1888, in the keeping of the Peel Park Museum in Manchester (Swainson Cooper 1888, 204). A Bronze Age spear head has also been recovered from the area (Fair 1945). More recently, the butt end of a Neolithic polished stone axe was found during excavations at Dragley Beck, in the south of Ulverston (Elsworth and Dawson 2003, 16). However, there were no prehistoric sites located within the study area, although many of the locations of the findspots dated to the prehistoric period cannot be accurately verified. They, therefore, tend to be related more generally to the town of Ulverston as a whole.
- 1.3.2 **Roman Period:** evidence of Roman activity around Ulverston is mainly in the form of isolated coin finds. Several Roman coins have been found in Ulverston: a Denarius of Augustus was found in c 1800 at Conishead Priory (Shotter 1989, 41), a coin of Antonius Pius was found in c 1830 (*op cit*, 42), and a Radiate of Probus was found before 1836 (*ibid*). It has also been recorded that part of a Roman pavement was found near the old Red Lane (Ashburner 1993), but there is no other evidence to support this (Cumbria County Council n.d.). There were no Roman sites situated within the study area but, as with the prehistoric period, many of the locations of Roman findspots cannot be accurately verified, and therefore relate generally to the town of Ulverston.
- 1.3.3 **Medieval Period:** the origin of Ulverston lies in the medieval period, although its name suggests a mix of Old English and Norse (Lee 1998). The Domesday Book records Ulverston as held by Turnulph, and shortly after the land in Furness was granted to Earl Siward. It then passed to Earls Tostig and then Ulfr, from whom the name is thought to have derived (Birkett 1949, 5-6).
- 1.3.4 Control of Ulverston during the eleventh century varied, as it was held in part or whole at different times by the Barons of Kendal and Lancaster, and Furness Abbey (*op cit*, 15-17). The close connections of Ulverston with Furness Abbey were brought to an abrupt end in 1536-9 with the Dissolution of the Monasteries. This actually had a beneficial effect on Ulverston, as it was now able to supersede Dalton, the Abbey's principal town, as the main market town in Furness (*op cit*, 24). The Gill is recorded as Ulverston's medieval market place (Cumbria County Council n.d.).
- 1.3.5 The Gill is also believed to be the focus for Ulverston's industrial activity during the medieval period. A charter issued to the town in 1196, which mentioned a dying house and fulling mill, together with a bakehouse, indicates the importance of the textile industry to the economy of Ulverston during the medieval period. It is due to the later industrial use of the area around The Gill that has led to suggestions that this may have been the original industrial focus of the town (*ibid*). Furthermore, The Gill was bound on all sides by

medieval industrial tenements, which were regular plot boundaries aligned along the main streets (*ibid*). As a result, this area has been designated as a Conservation Area of high importance by the Extensive Urban Survey (EUS) (*ibid*).

- 1.3.6 **Post-medieval Period:** over the years, the land around Ulverston was divided up between the principal houses of the area, notably Neville Hall and Swarthmoor Hall by the beginning of the seventeenth century (Birkett 1949, 24). The wealth of the town grew during the seventeenth century, in part because of the Fells of Swarthmoor Hall and their dealings with the Quakers, many of whom were prosperous businessmen (*ibid*).
- 1.3.7 Ulverston's growing prosperity continued during the eighteenth century, mainly due to the number of ships visiting with goods on a regular basis and the various local industries that had developed (Rollinson 1966, 46-7). This was the town's 'golden age', and Thomas West (West 1802, 36) famously described it as '*the London of Furness*'. This was further enhanced by the expanding iron industry, which made use of landings at Ulverston (Marshall 1958, 85) and in turn led to the development of the canal in 1796; an attempt to compete with the encroachments of Barrow's growing harbour (Fell 1968, 323-4).
- 1.3.8 By the beginning of the nineteenth century the town's fortunes had taken a turn for the worse (Rollinson 1966, 10), and it relied on its earlier prosperity to carry it through most of the century. However, the railway constructed in 1846 brought further competition from the more prominent Barrow (*op cit*, 13). Nevertheless, the construction of the iron works on the edge of the canal in 1874 brought some much-needed industry back into the town (Birkett 1949, 128), as did the construction of the Glaxo pharmaceutical plant on the same site in 1946 (Walton 1996), but Ulverston's wealthiest days had long-since passed.

2. METHODOLOGY

2.1 WATCHING BRIEF

- 2.1.1 The test pits on the site were conducted under constant archaeological supervision, in accordance with the project design (*Appendix 1*). All archaeological work was consistent with the relevant standards and procedures of the Institute for Archaeologists (2008) and English Heritage (1991), and generally accepted best practice.
- 2.1.2 The main impact of the geotechnical investigation was that the HDTPs were excavated to locate the foundations of the beck walls. As some of the locations were in the town there was a high possibility that there would be a disturbance of earlier below ground remains. The HDTPs were excavated alongside the beck walls.
- 2.1.3 A daily record of the nature, extent and depths of the groundwork was maintained throughout the duration of the fieldwork. All archaeological contexts were recorded on OA North's *pro-forma* sheets, using a system based on that of the English Heritage Centre for Archaeology. A digital photographic record was maintained throughout.

2.2 ARCHIVE

- 2.2.1 A full archive has been prepared to a professional standard in accordance with current United Kingdom Institute for Conservation (UKIC 1990) and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited with the Cumbria County Record Office (Barrow) on completion of the project. Copies of the report will be deposited with the Cumbria Historic Environment Record (HER) in Kendal.

3. WATCHING BRIEF RESULTS

3.1 INTRODUCTION

3.1.1 The test pits were excavated in dry conditions. The groundworks commenced with the hand excavation of HDTP5, along the course of Dragley Beck, next to the Watery Lane Bridge (Fig 1). Two further test pits (HDTP3 and 4) were in an area to the south-west of HDTP5. HDTP1 and 2 were excavated simultaneously. All but HDTP5, due to the foundations of the adjacent Fitz Bridge, were excavated to a depth of 1m or over, with HDTP2, 3, and 4 all excavated into the underlying natural clayey-sand deposits. *Table 1*, below, provides a brief summary of details for each test pit.

3.2 RESULTS

3.2.1 The only feature of note during the groundworks was a culvert, **102**, observed in HDTP1 at 0.43m, which was silted-up. The culvert was recorded and then removed in order for the excavation to continue. However, the infill of water inhibited any deeper excavation. HDTP5 could only be excavated to a depth of 0.8m due to the presence of concrete from the foundations of Fitz Bridge.

3.2.2 In each of the test pits the beck wall was observed but did not appear to have any foundations deeper than one course of stone. No artefacts were observed during the course of the archaeological monitoring.

HDTP No	Context No	Description	Depth (m)
1	100	Topsoil	0-0.029
	101	Gravelly levelling layer	0.29-0.43
	102	Brick-lined culvert capped with slate	0.43-0.52
	103	Gravel - bed for culvert	0.52-1.0
2	200	Tarmac	0-0.08
	201	Topsoil	0.08-0.27
	202	Grey gravel	0.27-1.1
	203	Natural (clayey-sand)	1.1-1.2<
3	300	Topsoil	0-0.2
	301	Sandy-gravel	0.2-1.4
	302	Natural (clayey-sand) - water infill	1.4-1.5<

4	400	Topsoil	0-0.3
	401	Sandy-gravel	0.3-1.05
	402	Natural (clayey-sand)	1.05-1.65<
5	500	Topsoil	0-0.1
	501	Pipe trench fill of 302 ; modern gravel	0.1-0.29
	502	Pipe trench cut	0.1-0.29
	503	Fill of construction cut, 304	0.1-0.53
	304	Construction cut	0.1-0.53
	305	Concrete	0.53-0.8<

Table 1: Summary results of the HDTPs

4. CONCLUSION

4.1 DISCUSSION

- 4.1.1 The results of the watching brief showed that the foundations to the beck wall were, at most, one course deep. The excavation for each of the test pits was contained within disturbed upper deposits, with underlying natural clayey-sand deposits being recorded in three of the HDTPs (2, 3 and 4) at a depth of over 1.05m. No significant archaeological deposits or finds were observed, although in HDTP1 a small brick-lined culvert capped with slate was recorded running parallel to the beck.

5. BIBLIOGRAPHY

- Ashburner, D, 1993 *A Story of the Growth of Ulverston*, Ulverston
- Birkett, HF, 1949 *The Story of Ulverston*, Kendal
- bgs.ac.uk/openscience
- Countryside Commission, 1998 *Countryside Character, Volume 2: North West Cheltenham*
- Cumbria County Council, n.d. *Extensive Urban Survey, Archaeological Assessment Report, Ulverston*, unpubl rep
- Elsworth, DW, and Dawson, J, 2003 *Excavations at Sir John Barrow Cottage, Dragley Beck, Ulverston, Cumbria*, unpubl rep
- English Heritage, 1991 *Management of Archaeological Projects*, second edition, London
- Fair, M, 1945 An interim review of types of Bronze Spear heads and axes of Cumberland, Westmorland and Lancaster *Trans Cumberland Westmorland Antiq Arch Soc*, **5**, n ser, 175
- Fell, A, 1968 *The Early Iron Industry of Furness*, second edition, Cass Library of Industrial Classics, **21**, London
- Gaythorpe, H, 1899 Pre-historic Implements in Furness, *Trans Cumberland Westmorland Antiq Arch Soc*, **15**, o ser, 161-71
- Hodgkinson, D, Huckerby, E, Middleton, R and Wells, CE, 2000 *The Lowland Wetlands of Cumbria*, Lancaster Imprints **8**, Lancaster
- IfA, 2008 *Standards and Guidance for an Archaeological Watching Brief*, Reading
- Lee, J, 1998 *The Place Names of Cumbria*, Carlisle
- Marshall, JD, 1958 *Furness and the Industrial Revolution*, Barrow-in-Furness
- Ordnance Survey, 1968 *Plan SD 2878 and Plan SD 2978*, 1:2500
- Rollinson, W, 1966 Ulverston – A Furness Market Town During the Late 18th and Early 19th Centuries, in Twyman, M, *John Soulby, Printer, Ulverston*, Reading
- Shotter, DCA, 1989 Roman Coin-finds in Cumbria, *Trans Cumberland Westmorland Antiq Arch Soc*, **89**, n ser, 41-50
- Swainson Cooper, H, 1888 Some Prehistoric remains in North Lonsdale, *Trans Cumberland Westmorland Antiq Arch Soc*, **9**, o ser, 200-205
- UKIC, 1990 *Guidelines for the Preparation of Archives for Long-Term Storage*, London

Walton, J, 1996 *Glaxo Wellcome at Ulverston*, Ulverston

West, T, 1802 *A Guide to the Lakes of Cumberland, Westmorland and Lancashire*,
8th edn, Kendal

6. ILLUSTRATIONS

6.1 LIST OF FIGURES

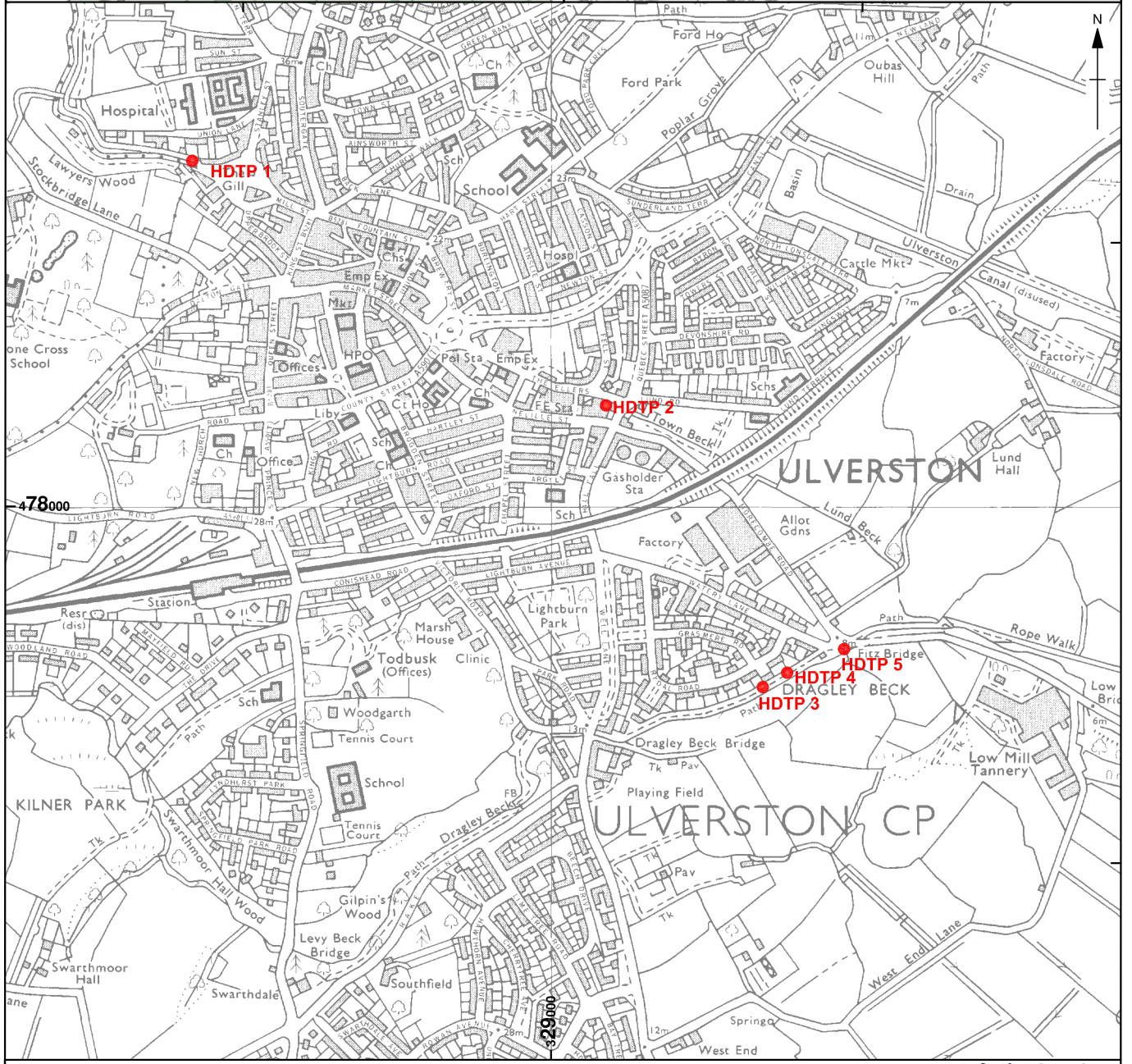
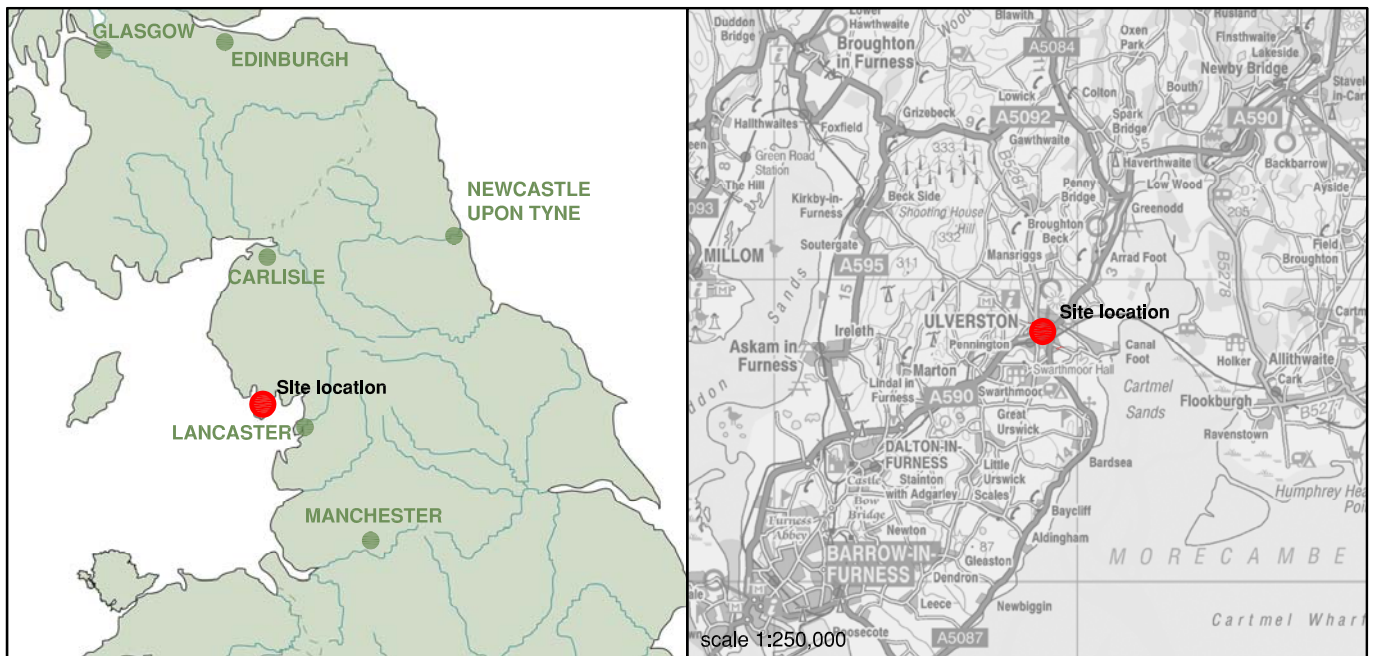
Figure 1: Location of the hand-dug test pits

6.2 LIST OF PLATES

Plate 1: Brick-lined culvert with slate cap, *103*

Plate 2: Exposed brick-lining to culvert *103*

Plate 3: HDTP 2 showing natural, *203*



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Figure 1: Location of the hand-dug test pits

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Plate 1: Brick-lined culvert with slate cap, **103**



Plate 2: Exposed brick-lining to culvert **103**



Plate 3: HDTP 2 showing natural, 203

APPENDIX 1: PROJECT DESIGN

1 INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 The Environment Agency (hereafter ‘the Client’), has requested that Oxford Archaeology North (OA North) submit proposals for a programme of archaeological work to be undertaken during a geotechnical investigation at a series of sites within and around Ulverston, Cumbria (NGR SJ 285 785). The overall programme of groundworks will take place in five locations around the historic town, and will comprise the excavation of a series of hand dug test pits (HDTP) and the drilling of a number of boreholes (BH) and windowless samples (WS) at each site, as follows (the locations of the SI works are shown on the accompanying figures):

Location	Monitored test pits	Boreholes/Windowless samples (not monitored)
The Allotments	No Test pits	WS1-5 (5no)
The Gill	HDTP1 (1 no)	BH1 (1 no)
Wall on open channel	HDTP2 (1 no)	
Rydal Road	HDTP3-4 (2 no)	WS6-10 (4 no)
Rope Walk	HDTP5-9 (5 no)	BH2-3 (2 no)
Total	9 test pits	12 boreholes/windowless samples

- 1.1.2 In order to mitigate the impact of the SI works on the cultural heritage resource, and to provide data that may help to inform future decisions, the Environment Agency Archaeological Advisor and the Cumbria County Council Historic Environment Service (CCCHES) requested that an archaeological watching brief be conducted during the excavation of the test pits, but not of the boreholes or windowless samples, nor of the small hand-dug test pits that precede them. The following document represents a project design to carry out the above programme of work and has been prepared in accordance with standard CCCHES, IfA and EH requirements.

1.2 OXFORD ARCHAEOLOGY NORTH

- 1.2.1 OA North has considerable experience of excavation of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 25 years. Evaluations, desk-based assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IfA) registered organisation, registration number 17, and all its members of staff operate subject to the IfA Code of Conduct.

2 OBJECTIVES

- 2.1 The following programme has been designed to identify and record any archaeological deposits affected by the proposed SI works, in order that they can be preserved by record. To this end, the following programme has been designed, in accordance with EH and IfA standards, to provide a watching brief. The required stages to achieve these ends are as follows:

2.2 ARCHAEOLOGICAL WATCHING BRIEF

- 2.2.1 To undertake a programme of observation and recording during any ground disturbance to determine the presence, quality, extent and importance of any archaeological remains on the site.

2.3 REPORT AND ARCHIVE

- 2.3.1 A report will be produced for the Client within eight weeks of completion of the fieldwork. A site archive will be produced to English Heritage guidelines (1991) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3 METHOD STATEMENT

3.1 WATCHING BRIEF

- 3.1.1 **Methodology:** a programme of field observation will accurately record the location, extent, and character of any surviving archaeological features and/or deposits within the whole area of the proposed ground disturbance. This work will comprise observation during all excavations for the test pits, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.
- 3.1.2 Putative archaeological features and/or deposits identified during the observation of groundworks, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions and, where appropriate, sections will be studied and drawn. Any such features will be sample excavated (ie. selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal).
- 3.1.3 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 co-ordinates where appropriate). Features will be planned accurately at appropriate scales and annotated on to a large-scale plan provided by the Client, which will also show the location and extent of the ground disturbance. Sections to a suitable scale will be drawn as and where appropriate. An indexed photographic record utilising monochrome print and colour digital imaging will be undertaken simultaneously.
- 3.1.4 **Treatment of finds:** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.
- 3.1.5 **Treasure:** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 3.1.6 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.
- 3.1.7 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. CCCHES and the local Coroner will be informed immediately. If removal is essential, the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. The removal of human remains will be carried out with due care and sensitivity under the environmental health regulations.

3.1.8 **Contingency plan:** in the event of significant archaeological features being encountered during the watching brief, discussions will take place with the Planning Archaeologist or his representative, as to the extent of further works to be carried out. All further works would be subject to a variation to this project design. In the event of environmental/organic deposits being present on site, it would be necessary to discuss and agree a programme of palaeoenvironmental sampling and or dating with the Planning Archaeologist.

3.2 REPORT AND ARCHIVE

3.2.1 **Report:** bound, unbound and digital copies of a written synthetic report will be submitted to the Client, and further copies submitted to Cumbria HER within twelve weeks of completion. Interim statements can be issued sooner, if required. The report will include:

- a front cover to include the planning application number and the NGR;
- a site location plan, related to the national grid;
- the dates on which the fieldwork was undertaken;
- a concise, non-technical summary of the results;
- a description of the methodology employed, work undertaken and results obtained;
- plans and sections at an appropriate scale, showing the location of features;
- other illustrations and photographic plates showing, as appropriate, features of interest or to demonstrate the absence of archaeological features;
- a description of any environmental, finds, or other specialist work undertaken, and the results obtained;
- an appropriate discussion the data generated and a consideration of its significance and implications for further development of the site;
- the report will also include a complete bibliography of sources from which data has been derived;
- a copy of this project design in the appendices, and indications of any agreed departure from that design.

3.2.2 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (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. All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists

3.2.3 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. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the local HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the County Record Office. The material archive (artefacts and ecofacts) will be deposited with an appropriate museum following agreement with the client.

3.2.4 The Arts and Humanities Data Service (AHDS) online database project Online Access to index of Archaeological Investigations (OASIS) will be completed as part of the archiving phase of the project.

3.2.5 **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. They 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.

4. HEALTH AND SAFETY

4.1.1 OA North provides a Health and Safety Risk Assessment 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 Archaeological Unit Managers (1997).

5. WORK TIMETABLE

5.1 **Archaeological Watching Brief:** the duration of this element is dependant upon the duration of any ground disturbing activities on the site, which are currently estimated to be two weeks.

5.2 **Report and Archive:** an evaluation report will be submitted within twelve weeks of the completion of the fieldwork. However, should an interim statement be required this can be issued within two weeks but instruction must be received from the client prior to completion of the fieldwork.

6. PROJECT MONITORING

6.1 **Access:** it is assumed that all arrangements for site access will have been made by the client, or by the SI contractor.

6.2 Whilst the work is undertaken for the client, the EA Archaeological Advisor and CCCHES will be kept fully informed of the work and its results, and will be notified in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed consultation with the client, with the EA Archaeological Advisor and CCCHES.

7. STAFFING PROPOSALS

7.1 The project will be under the direct management of **Stephen Rowland** (OA North project manager) to whom all correspondence should be addressed.

7.2 All elements of the archaeological investigation will be supervised by an OA North Project Officer or Supervisor experienced in this type of project. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North Project Officers and Supervisors are experienced field archaeologists capable of carrying out the proposed projects.

7.3 Assessment of any finds from the watching brief will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis BA MIFA** (OA North Finds Manager). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England. However, she has specialist knowledge regarding glass, metalwork, and leather, the recording and management of waterlogged wood, and most aspects of wetland and environmental archaeology.

7.4 Assessment of any palaeoenvironmental samples which may be taken will be undertaken by **Elizabeth Huckerby MSc** (OA North Palaeoenvironmental Manager). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English

Heritage-funded North West Wetlands Survey. Assessment of any faunal material will be undertaken by **Andrew Bates MSc** (OA North Project Officer).

8. BIBLIOGRAPHY

Institute of Field Archaeologists (IFA), 1992, *Guidelines for data collection and compilation*

SCAUM (Standing Conference of Archaeological Unit Managers), 1997, *Health and Safety Manual*, Poole

United Kingdom Institute for Conservation (UKIC), 1990, *Guidelines for the preparation of archives for long-term storage*, London

United Kingdom Institute for Conservation (UKIC), 1998, *First Aid for Finds*, London