

Shap Wastewater Treatment Works Cumbria



Watching Brief - Supplementary Report



Oxford Archaeology North

February 2010

United Utilities

Issue No: 2009/1016

OAN Job No: L10057

NGR: NY 55806 15803

Document Title: SHAP WASTEWATER TREATMENT WORKS, CUMBRIA

Document Type: Watching Brief Supplementary Report

Client Name: United Utilities

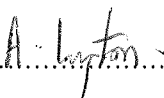
Issue Number: 2009/1016
OA Job Number: L10057
National Grid Reference: NGR NY 55806 15803

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SUMMARY

Following proposals by United Utilities for the extension of an existing Wastewater Treatment works in Shap, Cumbria (NGR NY 55806 15803), the Planning Archaeologist at Cumbria County Council recommended that a programme of archaeological evaluation be undertaken in advance of the development works. This was to comprise rapid research and a walkover survey, and to be followed by evaluation trial trenching. The first two elements were undertaken by OA North in 2008 (OA North 2008). The evaluation fieldwork has still to be programmed, and will be subject to a separate report.

In November 2009 United Utilities proposed the excavation of a series of geo-technical test pits within the footprint of the development works. This was to be undertaken in advance of the development works. Following discussions with the Planning Archaeologist, it was agreed that an archaeological watching brief should be maintained during the excavation of the pits.

Four test pits were excavated under archaeological supervision to bedrock depth. No archaeological features were observed within any of the test pits.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project. Thanks are also extended to MWH and Soil Mechanics for facilitating the works.

Becky Wegiel undertook the watching brief and compiled the report. Mark Tidmarsh produced the drawings. Alison Plummer managed the project, and also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 United Utilities proposed the extension of the existing Wastewater Treatment Works at Shap in Cumbria (Fig 1). Following recommendations made by the planning Archaeologist at Cumbria County Council Historic Environment Service, United Utilities commissioned Oxford Archaeology North (OA North) to undertake a rapid archaeological desk-based research and a walkover survey of the proposed development area (OA North 2008). Subsequently, and following further discussions with the Planning Archaeologist, a watching brief covering the excavation of a series of geo-technical test pits was completed, and the results presented in this supplementary report. This work is to be followed by an archaeological evaluation of the proposed development area, the results of which will be presented in a separate report.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The Wastewater Treatment Works (Fig 1) is located to the north-west of Shap, approximately 15km to the south of Penrith. The River Lowther is approximately 1km to the west. The works are on relatively flat land, lying between 250-260m AOD (Ordnance Survey 2002).

1.2.2 The underlying solid geological deposits comprise Tournaisian and Viséan rock of the Carboniferous Limestone Series (BGS 2007). Overlying this are typical brown earths of the Waltham Series (Ordnance Survey 1983).

2. METHODOLOGY

2.1 WATCHING BRIEF

2.1.1 The excavation of a series of four geo-technical test pits (Fig 2) was undertaken in advance of the development works, in order to assess the ground conditions. The pits were located within the footprint of the proposed extension to the treatment works. The topsoil, subsoil and natural deposits were removed down to the level of the bedrock using a mechanical excavator fitted with a 0.5m wide ditching bucket. As the pits were excavated, the soil horizons were systematically examined to assess the presence or otherwise of archaeological remains. The pits were photographed and a record of soil descriptions made on the relevant OA North *pro forma*. Four boreholes were also drilled but these were not watched due to the prohibitive nature of the boring.

2.2 ARCHIVE

2.2.1 Copies of this supplementary report will be deposited with the Cumbria Record Office in Kendal and the Cumbria County Council Historic Environment Service, also in Kendal.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 INTRODUCTION

- 3.1.1 The following section presents a very brief summary of the historical and archaeological background of the specific development area. A wider, more comprehensive view of the study area is provided by the desk-based research report (OA North 2008), which should be read in conjunction with this report.

3.2 HISTORICAL BACKGROUND

- 3.2.1 **Prehistory:** there is high potential for Neolithic and Bronze Age activity in the immediate area of the proposed development works. Shap Avenue formerly passed close to the development site, but most of the standing stones forming the monument have long since been removed/and or destroyed. In addition, there are a number of monuments in the wider area from the Neolithic/Bronze Age including stone circles, cairns and barrows, which testify to the extensive use of this area. Scheduled stone circles include those located at Shap, *c* 2.7km to the south-south-east of the study area (SM 22498); at Oddendale, *c* 4.5km to the south-east (SM 22450); and near Castlehowe Scar, *c* 3km to the east (SM 22451). Scheduled cairns in the area include those located at Burn Banks *c* 4.5km to the west of the study area (SM 22516); on Knipescar Common, *c* 4km to the north-west (SM 22510); east of Long Scar Pike, *c* 6km to the south-east (SM 22454); and at White Raise, *c* 3.3km to the south-west (SM 22491 and SM 22492). Scheduled barrows include a bowl barrow and round barrow at Scarside Plantation, *c* 4km to the north-west of the study area (SM 22513 and SM 22512); a bowl barrow on Wickerslack Moor, *c* 4km to the east (SM 22479); and bowl barrows on Iron Hill, *c* 4km to the east-south-east (SM 22458 and SM 22463).
- 3.2.2 **The Romano-British Period (c AD 43 – AD 410):** Roman forts are located at Low Borrowbridge, 15.4km to the south-east of the study area and Brougham *c* 13km to the north. Both forts are on the Roman road from Manchester to Carlisle which runs south/north through the east side of the Lake District, generally on the line of the modern day A6, but in the vicinity of Shap the Roman road is located approximately 5km further east.
- 3.2.3 **Medieval Period:** Shap village, shows considerable elements of planning in its layout, being a very linear village located on both sides of the Old Shap Road (now the A6). Strip-like crofts would have extended to the rear of the properties fronting the road, and a back lane would have run to the rear of these crofts for access. This style of layout probably originated in the twelfth century as the result of the consolidation of Anglo-Norman power (OA North 2008). The development is on the north-western edge of the village.
- 3.2.4 **Post-medieval Period:** the only archaeological features known to lie in close proximity or within the footprint of the proposed development, were those

identified by the walkover survey (OA North 2008). These comprised field drainage ditches and a footbridge over Shap Beck.

4. WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 A series of four test pits was excavated within the footprint of the proposed extension to the Wastewater Treatment Works (Fig 2). Test Pit 301 was excavated in the most southerly position of the four, and Test Pit 304 was the most northerly. The pits measured approximately 0.5m by 1.5m in plan and varied in depth from 1.9m to 2.5m.

4.2 RESULTS

4.2.1 **Test Pit 301:** this measured 0.5m x 1.5m in plan, and was excavated to a depth of 2.3m. The topsoil, a dark brown silt, 0.4m deep, was observed to overlie a 0.1m deep layer of dark blackish brown silt. This lay above the subsoil, which was a reddish brown silt, 0.3m in depth. The subsoil, in turn, overlay alluvial silt deposits 2.3m in depth. Bedrock was seen to be present beneath the alluvial silts. No archaeological features were encountered.

4.2.2 **Test Pit 302:** this test pit measured 0.5m x 1.5m, and was excavated to a depth of 1.9m. The topsoil, as described above (*Section 4.2.1*), overlay the subsoil, a reddish brown silt, measuring 0.3m in depth. Beneath the subsoil, a layer of peat, 0.2m in depth was observed. The peat was seen to overlie alluvial silt deposits, beneath which bedrock was observed at a depth of 1.9m. No archaeological features were observed.

4.2.3 **Test Pit 303:** the third pit excavated measured 0.5m x 1.5m and was excavated to a depth of 2m. There was no variation to the topsoil as described above (*Section 4.2.1*) or the subsoil as seen in Test Pit 302. The peat was also present as described above, and the alluvial deposits were seen to be 1.1m in depth. The bedrock was observed at a depth of 2m. No archaeological features were encountered.

4.2.4 **Test Pit 304:** the final pit measured 0.5m x 1.5m and was excavated to a depth of 2.5m. Beneath the topsoil and subsoil as described above (*Sections 4.2.1 and 4.2.2*), the peat was seen to be 0.3m in depth, and the alluvial layers 1.14m in depth. The bedrock was also present. No archaeological features were encountered.

4.3 CONCLUSIONS

4.3.1 Although no archaeology was observed in any of the test pits, the small size and spacing of the pits was not conducive to detecting or identifying archaeological remains. The peat deposits have the potential to contain preserved archaeological remains and palaeoenvironmental evidence. It is recommended that core samples are taken through the peat during the evaluation phase of works.

5. BIBLIOGRAPHY

5.1 PRIMARY SOURCES

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5.2 SECONDARY SOURCES

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OA North 2008, Shap Wastewater Treatment Works: Desk-based Research and Walkover Survey, unpubl rep

6. ILLUSTRATIONS

6.1 LIST OF FIGURES

Figure 1: Site Location

Figure 2: Location of Test Pits within the footprint of the proposed development

6.2 LIST OF PLATES

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Plate 2: Test Pit 302, facing south-west

Plate 3: Test Pit 303, facing south-west

Plate 4: Test Pit 304, facing south-west

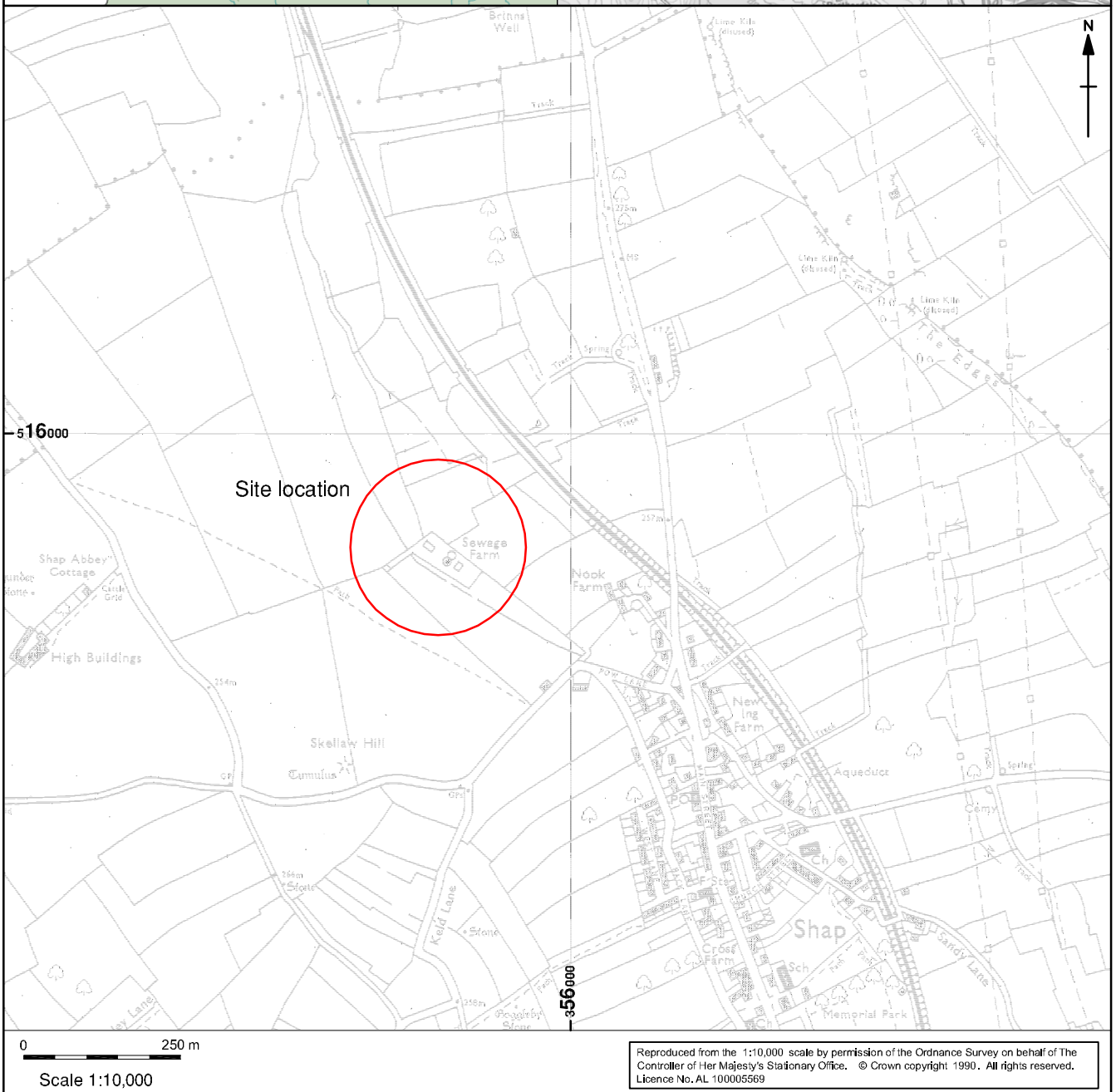
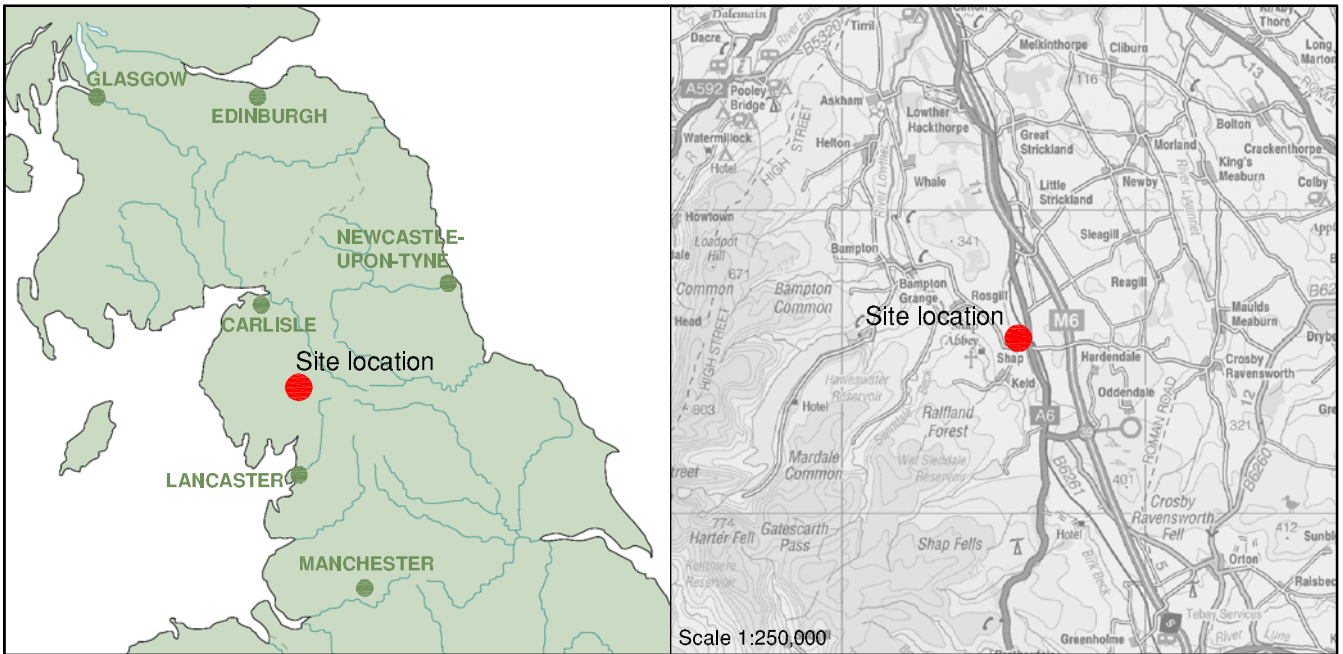
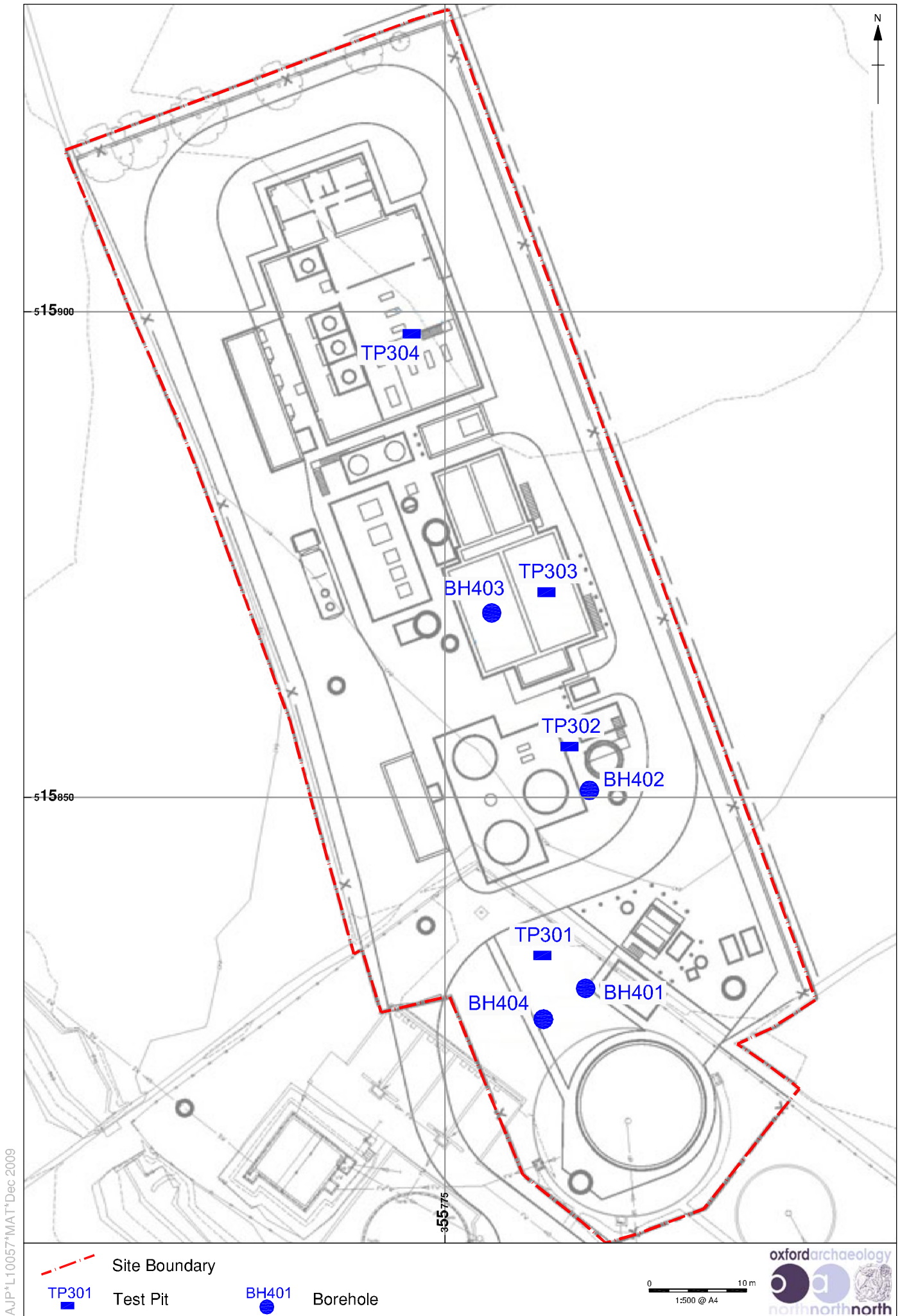


Figure 1: Site Location



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Figure 2: Location of Test Pits within the footprint of the proposed development



Plate 1: Test Pit 301, facing south-west



Plate 2: Test Pit 302, facing south-west



Plate 3: Test Pit 303, facing south-west



Plate 4: Test Pit 304, facing south-west