

on behalf of Northumbrian Water Ltd

Rochester Water Treatment Works Rochester Northumberland

archaeological evaluation

report 5187 October 2019



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1. Summary

The project

- 1.1 This report presents the results of an archaeological evaluation conducted in advance of a proposed development at Rochester Waste Water Treatment Works, Northumberland. The works comprised the excavation of three evaluation trenches.
- 1.2 The works were commissioned by Northumbrian Water Ltd and conducted by Archaeological Services Durham University.

Results

- 1.3 Naturally occurring glacial till deposits were identified, overlain by up to 1m of peaty deposits.
- 1.4 No archaeological deposits were identified.

Recommendations

1.5 No further scheme of archaeological works is recommended in relation to this development.

2. Project background

Location (Figure 1)

2.1 The site is located at the Rochester Water Treatment Works, in Northumberland (NGR centre: NY 8323 9791). It is irregular in plan, and covers an area of approximately 0.24ha. The existing water treatment works is within the north-west of the development area and there is agricultural land to the west, south and east. The A68 roadway is to the north.

Development

2.2 The development comprises a new water treatment works, associated pipework and construction compound.

Objective

2.3 The objective of the scheme of works was to assess the nature, extent and potential significance of any archaeological resource within the proposed development area, so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in relation to the development.

Research Objectives

2.4 The regional research framework (Petts & Gerrard 2006) contains an agenda for archaeological research in the region. The scheme of works was designed to address agenda items Iii: Late Bronze Age and Iron Age settlement, Riv: Roman native and civilian life MDii: Later medieval landscape.

Written Scheme of Investigation

2.5 The works have been undertaken in accordance with a Written Scheme of Investigation provided by Archaeological Services Durham University (reference DS18.391) and approved by the planning authority.

Dates

2.6 Fieldwork was undertaken w/c 7th October 2019. This report was prepared for October 2019.

Personnel

2.7 Fieldwork was supervised by Matthew Claydon, who also prepared this report, with illustrations by Janine Watson. The Project Manager was Daniel Still.

Archive/OASIS

2.8 The site code is **RTW19**, for **Ro**chester Waste Water **T**reatment **W**orks 20**19**. The archive is currently held by Archaeological Services Durham University and will be transferred to Berwick Borough Museum in due course. Archaeological Services Durham University is registered with the **O**nline **A**cces**S** to the **I**ndex of archaeological investigation**S** project (**OASIS**). The OASIS ID number for this project is **archaeol3-369704**.

Acknowledgements

2.9 Archaeological Services Durham University is grateful for the assistance of Jason Sweeney from J N Bentley Ltd in facilitating this scheme of works.

3. Landuse, topography and geology

- 3.1 At the time of this assessment, the proposed development area comprised the existing water treatment works, and boggy ground to the east and south.
- 3.2 The ground across the site slopes from 187m OD adjacent to the A68 to 184m OD at the south end of the site. The site is within the Natural England Border Moors and Forests (5) National Character Area. The area is defined as a thinly populated upland plateau which is crossed by the North Tyne and Rede rivers that form wide valleys through the upland area. The Lyne and Irthing rivers flow south-west to the Solway Firth. The uplands are drained by smaller rivers in enclosed valleys, with upland hay meadows, scattered farmsteads and copses of broadleaved woodland (Natural England 2013).
- 3.3 The underlying solid geology of the area comprises Carboniferous period limestone, sandstone, siltstone and mudstone of the Tyne Limestone Formation, which are overlain by Devensian diamicton till formed in the Quaternary Period (British Geological Survey 2019).
- 3.4 The soils of the area are described as loamy soils with naturally high groundwater (Soilscape 22) (http://www.landis.org.uk/soilscapes/).

4. Historical and archaeological background

- 4.1 A detailed archaeological desk-based assessment has been conducted for the proposed development (Archaeological Services 2018); the results of that assessment are summarised below.
- 4.2 While there is no direct evidence for prehistoric or Roman activity within the proposed development area, the presence of significant and extensive activity in the surrounding vicinity indicates that an as yet unidentified resource has the potential to exist within the proposed boundary. This could include evidence for burial, settlement or field systems.
- 4.3 The proposed development area may have been used as agricultural land during the medieval and post-medieval. Evidence relating to this in the form of cultivation remains or field boundaries may survive within the site. These would have limited archaeological significance.
- 4.4 There are several modern drainage channels across the proposed site. These are not of archaeological significance.

5. The evaluation trenches (Figure 2)

Introduction

Three trenches were excavated on the site using a mechanical excavator fitted with a toothless ditching bucket and under constant archaeological supervision.

5.2 Trench 1

This trench (Photo 1) was 8m long, and was located in the south-west of the site. The trench was repositioned from its intended location and slightly shortened in

order to avoid an outflow pipe, a ditch and waterlogged areas. Natural subsoil, a grey clay [1], was identified at a depth of 0.6m at the south end of the trench and 1m at the north end. This was overlain by peat [2: 0.4-0.8m deep; Photo 2] which was sealed by a peaty topsoil [3: 0.2m deep].

Trench 2

Trench 2 (Photo 3) was 12m long and was located in the north-east of the site. The trench was repositioned from its intended location and slightly shortened in order to avoid ditches and waterlogged areas. Natural subsoil, a stony grey sandy clay [1], was identified at a depth of 0.7m at the south end of the trench and 0.5m at the north end. This was overlain by a deposit of sandstone [4: 0.3-0.4m deep], over which was a peaty topsoil [3: 0.2-0.3m deep].

Trench 3

Trench 3 (Photo 4) was 10m long and was located in the north-east of the site. The trench was also repositioned from its intended location and slightly shortened in order to avoid ditches and waterlogged areas. Natural subsoil, a stony grey sandy clay [1], was identified at a depth of 0.4m. This was also overlain by a deposit of sandstone [4:0.2-0.3m deep], over which was a peaty topsoil [3:0.2-0.3m deep].

6. The artefacts

6.1 No artefacts were recovered.

7. The palaeoenvironmental evidence

7.1 No archaeological deposits suitable for assessment were identified.

8. The archaeological resource

- 8.1 No features of archaeological significance were encountered, and no artefacts recovered.
- 8.2 In the northern part of the site medium-large sandstone fragments were recorded overlying the natural sandy clay. Similar stone was identified within the clay, suggesting these are naturally occurring glacial till deposits. These were overlain by peat.
- 8.3 Further down the hill in the south part of the site the peat was up to 1m deep. Palynological analysis of peat can provide observable vegetation changes over time, from which human activity and manipulation can be inferred. This type of analysis forms part of Research Theme 1: Palaeoenvironmental Research, in the Archaeological Research Framework for Northumberland National Park (Young et al 2010), and agenda SE3: pollen within the regional research framework (Petts & Gerrard 2006); These frameworks prioritise lowland sites as previous peat analysis has concentrated on the Northumberland uplands. In this case, significant analysis of several sites in the area has already been conducted. These include Bloody Moss on the Otterburn ranges (9km north-east north of the site) and at Drowning Flow in Redesdale (7km west of the site), suggesting cultivation in the area began in the

Bronze Age, with grazing intensifying through the Iron Age (Frodsham 2004, 165-166). Given this previous work, further palynological analysis is not recommended.

9. Impact assessment

9.1 No archaeological deposits were identified during the evaluation that could be impacted on by the development.

10. Recommendations

10.1 No further scheme of archaeological works is recommended in relation to this development.

11. Sources

Archaeological Services 2018 Rochester Water Treatment Works, Rochester, Northumberland: archaeological desk-based assessment. Report **4730**, Archaeological Services Durham University

Frodsham, P, 2004, Archaeology in the Northumberland National Park, York
Natural England, 2013 National Character Area Profile: 5. Border Moors and Forests
Petts, D, & Gerrard, C, 2006 Shared Visions: The North-East Regional Research
Framework for the Historic Environment. Durham

Young, R, Frodsham, P, Headley, I & Speak, S, 2010 The Archaeological Research Framework for Northumberland National Park

www.landis.org.uk/soilscapes www.bgs.ac.uk

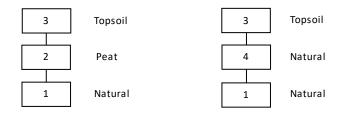
Appendix 1: Data tables

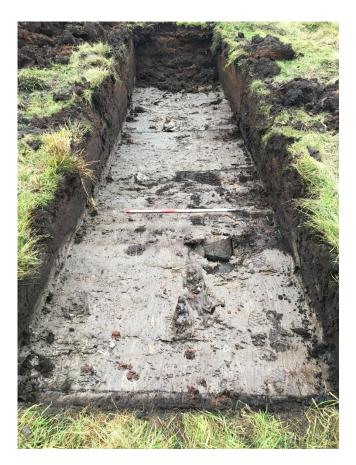
Table 1.1: Context data

| No | Trench | Description |
|----|--------|--------------|
| 1 | All | Natural |
| 2 | 1 | Peat |
| 3 | All | Peatytopsoil |
| 4 | 2 & 3 | Natural |

Appendix 2: Stratigraphic matrices

Trench 1 Trenches 2 & 3





Photograph 1: Trench 1, looking north



Photograph 2: Trench 1, looking east



Photograph 3: Trench 2, looking north



Photograph 4: Trench 3, looking east

ARCHAEOLOGICAL SERVICES DURHAM UNIVERSITY

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Figure 1: Site location



