ARCHAEOLOGICAL SERVICES
DURHAM UNIVERSITY

on behalf of
BMMJV Ltd

Reservoir Wetlands
Greatham South
Stockton-on-Tees

archaeological evaluation

report 4756
May 2018

Durham University

Contents

Photographs

Figures

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1. Summary

The project

1.1 This report presents the results of an evaluation conducted in advance of a proposed development at Reservoir Wetlands. The works comprised 6 evaluation trenches.

1.2 The works were commissioned by BMMJV Ltd and conducted by Archaeological Services Durham University.

Results

1.3 No archaeological deposits were recorded in the trenches.

Recommendations

1.4 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 Reservoir Wetlands, Greatham South, Stockton-on-Tees (NGR centre: NZ 4966 2397). It covers an area of approximately 2.5 ha. To the south and west is the A1185, and to the east are the Saltholme brine reservoirs.

Development proposal

2.2 The proposed scheme aims to create an intertidal habitat by the creation of new embankments. It is proposed that material needed for the creation of these embankments will be sourced from low lying areas of the site and works on the site will be limited to removal of soil.

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, which is incorporated into regional planning policy implementation with respect to archaeology. In this instance the scheme of works was designed to address agenda items SIii: Palaeoenvironmental evidence and MDviii: Other medieval industries.

Specification

2.5 The works have been undertaken in accordance with a Project Design provided by Mott MacDonald and approved by the planning authority.

Dates

2.6 Fieldwork was undertaken between 6th and 11th April 2018. This report was prepared for May 2018.

Personnel

2.7 Fieldwork was supervised by Jenny Richards, who also prepared this report, with illustrations by David Graham. The Project Manager was Daniel Still.

Archive/OASIS

2.8 The site code is **GSW18**, for **G**reatham **S**abic **W**etland **2018**. The archive is currently held by Archaeological Services Durham University and will be transferred to Tees Archaeology 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 **archaeol3-314155**.

3. Landuse, topography and geology

3.1 At the time of this assessment, the proposed development area comprised a field of grazing land with flooded areas.

3.2 The survey area was predominantly level with a mean elevation of approximately 3m OD. It lies on the edge of the Cowpen Marsh, a low-lying reclaimed salt marsh.

3.3 The underlying solid geology of the area comprises Permian and Triassic strata of the Sherwood Sandstone Group, which are overlain by Devensian glaciolacustrine deposits of clay and silt in the south and tidal flat deposits of sand, clay and silt in the north (www.bgs.ac.uk).

4. Historical and archaeological background

Previous archaeological works

4.1 Ground Investigation (GI) was undertaken by Mott MacDonald in 2016 during an earlier phase of the project. This was accompanied by an archaeological watching brief. It revealed organic material in the form of a layer of dark brown peat which, although undated, is likely to be associated with palaeo-channels that extend across the salt marsh.

4.2 North of Greatham Creek (approximately 1.8km north of the site) a large-scale prehistoric settlement was uncovered in 2012. Flint tools, pottery fragments, jet jewellery, an arrowhead, flint thumbnail scrapers, Bronze Age blades and ancient burial mounds were discovered (NAA 2015). In 1979 and 1993 a saltern mound located *c.*1.85km from the site was excavated revealing a series of small clay-lined bowl-shaped features intended to hold seawater, a 13th century pottery sherd and rectangular features, presumed to be hearths.

4.3 Targeted excavation of two salterns was conducted (Archaeological Services 2017). Organic deposits were identified at both saltern sites indicating former channels beneath the saltern mounds. Above these natural deposits, various laminate deposits and thin layers of soil were identified, forming the mounds themselves. These were interpreted as being waste deposits from the 'sleeching' process during salt production. Industrial residue was present in several of the laminate deposits, perhaps indicating that an area of industrial activity was nearby.

4.4 A trench was excavated in order to evaluate the old sea wall in section (Archaeological Services 2017). Prior to excavation, it was assumed that the old sea wall defences consisted of two embankments. However, the difference in the construction materials indicated that only the narrower western embankment formed the sea wall. The eastern embankment, constructed of various industrial deposits and stone layers is likely to be part of a road built by Prisoners of War during the First World War. This road is believed to go from Port Clarence to Seaton Carew, running for most of its length under the existing road (the A178 Seaton Carew road).

4.5 A geophysical survey was conducted over the development site (Archaeological Services 2018). This did not identify any archaeological features.

The prehistoric period (up to AD 70)

4.6 Evidence for prehistoric activity south of Greatham Creek is limited to Bronze Age animal remains and a prehistoric midden. A large scale prehistoric settlement has been found north of Greatham Creek (NAA 2015), increasing the likelihood of prehistoric salt working on this site.

The Roman period (AD 70 to 5th century)

4.7 There is no evidence for Romano-British activity on this site, although evidence of round houses and Roman pottery have been uncovered north of Greatham Creek, suggesting occupation occurred during the Romano-British period (NAA, 2015).

The medieval period (5th century to 1540)

4.8 The archaeological record demonstrates utilisation of natural resources within the area in the medieval period. Located north of the site and south of Greatham Creek were 22 recorded saltern sites, with two salterns located within 500m of the site. Salterns are the remains of salt works or salt production sites, usually surviving as earthworks. Salt production is believed to have begun in the 12th century and came to an end in the mid-17th century once the area had been inundated with water, ruining the saltcotes and leading to the abandonment of the industry (Page, 1928).

The modern period (1900 to present)

4.9 The Second World War had a major impact on the area. The surrounding area was hit by two high explosive devices, leaving two craters, one of which is located within 500m of the site. During the Second World War three section posts and a pillbox were constructed. A road was built by prisoners of war. A Second World War bomb decoy site is situated 124m from the site. This is a QL/QF site, which means it was a night structure which utilised a combination of diversionary fire (QF), simulated urban lighting (QL) and dummy buildings.

5. The evaluation trenches

5.1 Trench data is are summarised in Table 1.2. All trenches had a greyish yellow natural clay subsoil [3, Photo 1] overlain by a brownish yellow silty clay subsoil horizon [2: 0.1-0.3m deep]. Over the subsoil throughout the site was a dark greyish brown sandy silt topsoil [1: 0.2-0.3m deep, Photo 2]. No archaeological features were identified and no artefacts recovered.

6. The artefacts

6.1 No artefacts were recovered.

7. The palaeoenvironmental evidence

7.1 No material suitable for palaeoenvironmental assessment was identified.

8. The archaeological resource

8.1 No archaeological resource has been identified.

9. Impact assessment

9.1 Development of the site is unlikely to impact on any archaeological deposits.

10. Recommendations

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

11. Sources

Archaeological Services 2017 *Greatham South Flood Alleviation Scheme: archaeological works.* Unpublished report **4590**, Archaeological Services Durham University

Archaeological Services 2018 SABIC Wetland (South), *Greatham, Stockton-on-Tees: geophysical survey.* Unpublished report **4742**, Archaeological Services Durham University

NAA 2015 *Greatham Managed Realignment,* Unpublished report

Page, W, 1928 *A History of the County of Durham. Vol 3. Victoria County History*

Petts, D, & Gerrard, C, 2006 *Shared Visions: The North-East Regional Research Framework for the Historic Environment*. Durham

Appendix 1: Data tables

Table 1.1: Context data

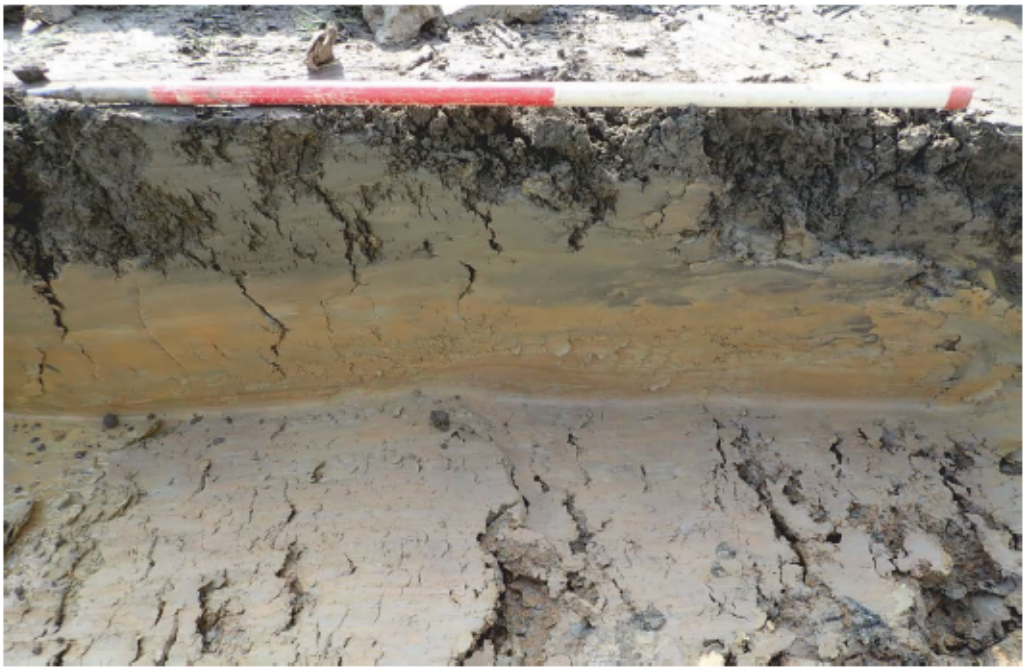
No	Description
1	Topsoil
2	Subsoil
3	Natural subsoil

Table 1.2: Trench data

Trench	Length (m)	Depth (m)	Field Drains- number and orientation	Features
1	30	0.3-0.4	0	0
2	30	0.35-0.55	0	0
3	30	0.3-0.55	0	0
4	30	0.35-0.45	0	0
5	30	0.35-0.55	2; N-S	0
6	30	0.3-0.45	1; N-S	0

Appendix 2: Stratigraphic matrix

Photograph 1: Trench 6, looking north-east



Photograph 2: Trench 3, looking south-west

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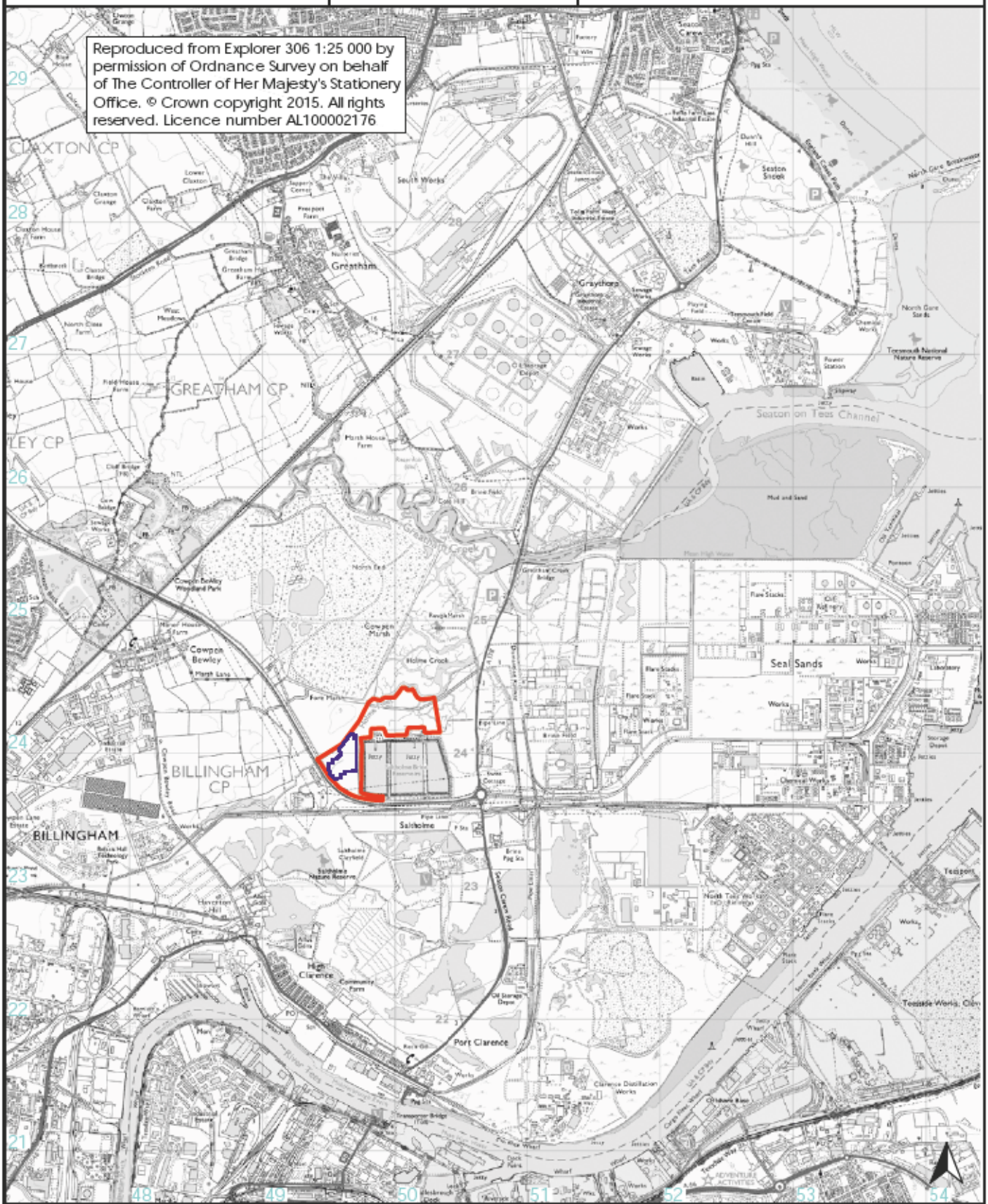
Figure 1: Site location



site boundary

magnetic survey

former creeks

disturbed area

former ploughing

trench

approximate area of waterlogging

241

240

239

238

495

496

497

1

2

3

4

5

6

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0 50m
scale 1:1250 for A3 plot

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Figure 2: Trench locations