

ARCHAEOLOGICAL
SERVICES
DURHAM UNIVERSITY

on behalf of
BMMJV Limited

North West Habitat
Greatham
Stockton-on-Tees

archaeological evaluation

report 4755
April 2018



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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 north of Greatham Creek. The works comprised 12 evaluation trenches.
- 1.2 The works were commissioned by BMMJV Limited and conducted by Archaeological Services Durham University.

Results

- 1.3 No archaeological deposits were recorded in the trenches. One fragment of Roman pottery, one sherd of medieval pottery, and two 19th century sherds were recovered.

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 Cowpen Marsh, Greatham, Stockton-on-Tees (NGR centre: NZ 5000 2620). It covers an area of approximately 4.4 ha. To the south is Greatham Creek, to the north is Marsh House Farm.

Development proposal

- 2.2 The proposed scheme aims to create an intertidal habitat, by excavating a channel from Greatham Creek and by removing bunds, allowing the flooding of a low lying natural depression.

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:

Science and Environment Slii Palaeoenvironmental evidence

Palaeolithic and Mesolithic Mi Understanding coastal environmental change, in particular the drowning of the North Sea basin and its links with patterns of early human settlement

Late Bronze Age and Iron Age lii Settlement; liv The later prehistoric coastal zone; Iv Material culture: general

Roman Ri The Iron Age to Roman transition; Riv Native and civilian life; RV Material culture

Later medieval MDviii Other medieval industries

20th century MOvi Military and defence

Specification

- 2.5 The works have been undertaken in accordance with a methods statement provided by Archaeological Services (reference DS18.76), prepared in response to a project design by Mott MacDonald (2018b).

Dates

- 2.6 Fieldwork was undertaken between 21st March and 4th April 2018. This report was prepared for April 2018.

Personnel

- 2.7 Fieldwork was conducted by Jenny Richards and Mark Randerson (supervisor). This report was prepared by Jenny Richards, with illustrations by David Graham, and pottery assessment by Jennifer Jones. The Project Manager was Daniel Still.

Archive/OASIS

- 2.8 The site code is **GNW18**, for **Greatham North West Habitat 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 **Online Access to the Index of archaeological investigations project (OASIS)**. The OASIS ID number for this project is **archaeol3-314129**.

3. Landuse, topography and geology

- 3.1 At the time of this assessment, the proposed development area comprised a field of arable grass.
- 3.2 The survey area was predominantly level with a mean elevation of approximately 4m OD. To the south is Greatham Creek.
- 3.3 The underlying solid geology of the area comprises sandstone of the Sherwood Sandstone Group, which is overlain by Devensian Diamicton till and tidal flats deposits of sand, silt and clay (www.bgs.ac.uk).

4. Historical and archaeological background

- 4.1 The archaeological and historical background to the site is given within the cultural heritage desk-based assessment (Mott MacDonald 2018a) and summarised below.
- 4.2 The site is adjacent to a large-scale later prehistoric settlement; excavations took place here between 2010 and 2015 (NAA 2015). These excavations also found evidence from earlier periods, including assemblages of Mesolithic flint and Neolithic/ Early Bronze Age flints. A Neolithic flint has also been found within the development site. The excavations also identified evidence for a possible Bronze Age roundhouse, found substantial quantities of Bronze Age pottery, and Bronze Age burnt mounds. A Bronze Age burial mound has been identified within 500m of the site. Subsequently the site was occupied in the Iron Age.
- 4.3 The Iron Age settlement continued to be used into the Roman period, and Roman finds within the enclosures attests to this. No Roman finds have been found within the site.
- 4.4 The archaeological record demonstrates utilisation of natural resources within the area in the medieval period. Salt production may have also taken place in the prehistoric and Roman periods. There are 11 Salterns located within 400m of the site boundary. 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 finished in the area in the mid-17th century once the area had been inundated with water, ruining the salt works and leading to the abandonment of the industry. Salt production restarted in the area in the later 19th Century, with the construction of a salt works next to the site access road, and finished in 1970.
- 4.5 There is substantial evidence in the area for defences built in the Second World War to defend industry and the coastline. This includes a tank trap and pill box built within the immediate vicinity of the site, and an anti-aircraft battery that was possibly located in or south of Marsh House farmstead.

- 4.6 The is the potential for an archaeological resource to be present on the site, particularly relating to the prehistoric period, the medieval salt industry, and the World War II anti-aircraft battery.

5. The evaluation trenches

- 5.1 Twelve trenches were excavated. Trenches 1-10 were 30m long and trenches 11 and 12 were 20m long. Trench data is summarised in Table 1.2. Trenches were excavated with a mechanical excavator equipped with a ditching bucket under archaeological supervision, with each significant horizon examined for its archaeological potential.
- 5.2 Trenches were excavated up to 1.5m deep in order to reach the natural subsoil (Photo 1). The natural clay subsoil [3] varied from mi- brownish red to dark purplish brown, and was overlain by a yellow and brown silt subsoil [2: 0.1-1.2m]. Over the subsoil throughout the site was a dark brown silt topsoil [1: 0.3-0.35m thick].
- 5.3 In addition, sondages were excavated at one end of each trench to a depth of 2m below ground level (Photo 2). These works aimed to confirm the presence or absence of palaeochannels within the site, which may have the potential to contain palaeoenvironmental deposits associated with the formation of the salt marshes and tidal reaches.
- 5.4 No archaeological features or palaeoenvironmental deposits were identified.

6. The artefacts

- 6.1 Four sherds of pottery (85g wt) were hand-recovered, three unstratified and one from topsoil context [1].
- 6.2 The u/s material comprises an abraded, unglazed body sherd of medieval oxidised ware, a thick body sherd of 19th century salt-glazed stoneware with an applied floral motif, and a rim sherd of 19th century earthenware with a yellow, green and brown patterned glaze.
- 6.3 The small fragment from [1] is an abraded body sherd of Roman greyware of 1st-3rd century date.

Recommendation

- 6.4 No further work is recommended.

7. The palaeoenvironmental evidence

- 7.1 No material suitable for palaeoenvironmental assessment was identified.

8. The archaeological resource

- 8.1 No archaeological or palaeoenvironmental deposits were recorded in the trenches.

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
- Mott MacDonald 2018a Greatham South, North West Habitat cultural heritage desk-based assessment
- Mott MacDonald 2018b Greatham South, North West Habitat Project Design – archaeological evaluation
- NAA 2015 *Greatham Managed Realignment, Teeside: archaeological excavation report*. Unpublished.
- 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 horizon
3	Natural glacial subsoil

Table 1.2: Trench data

Trench	Length (m)	Depth (m)	Glacial Geology	Subsoil	Features
1	30	0.3-0.7	Dark purplish brown clay		0
2	30	0.4-0.6	Mid brownish red		0
3	30	0.6-1	Dark purplish brown clay	Light brownish yellow silt	0
4	30	0.7-1.05	Dark purplish brown clay	Dark brownish yellow silt	0
5	30	1-1.2	Dark purplish brown clay with layers of grey and reddish brown	Mid yellowish brown silt	0
6	30	0.7-1.4	Mid reddish brown	Dark yellowish brown silt	0
7	30	0.7-1	Mid reddish brown	Mid yellowish brown silt	0
8	30	0.9-1.5	Mid reddish brown	Light reddish brown silt	0
9	30	0.9-1.3	Mid reddish brown	Mid brownish yellow silt	0
10	30	0.9-1.5	Mid reddish brown	Mid brownish yellow silt	0
11	20	0.6-0.8	Dark brownish red	Light brownish yellow silt	0
12	20	1.1-1.4	Mid yellowish brown	Mid yellowish brown silt	0

Appendix 2: Stratigraphic matrix





Photograph 1: Trench 7, looking south



Photograph 2: Sondage in Trench 6, looking north

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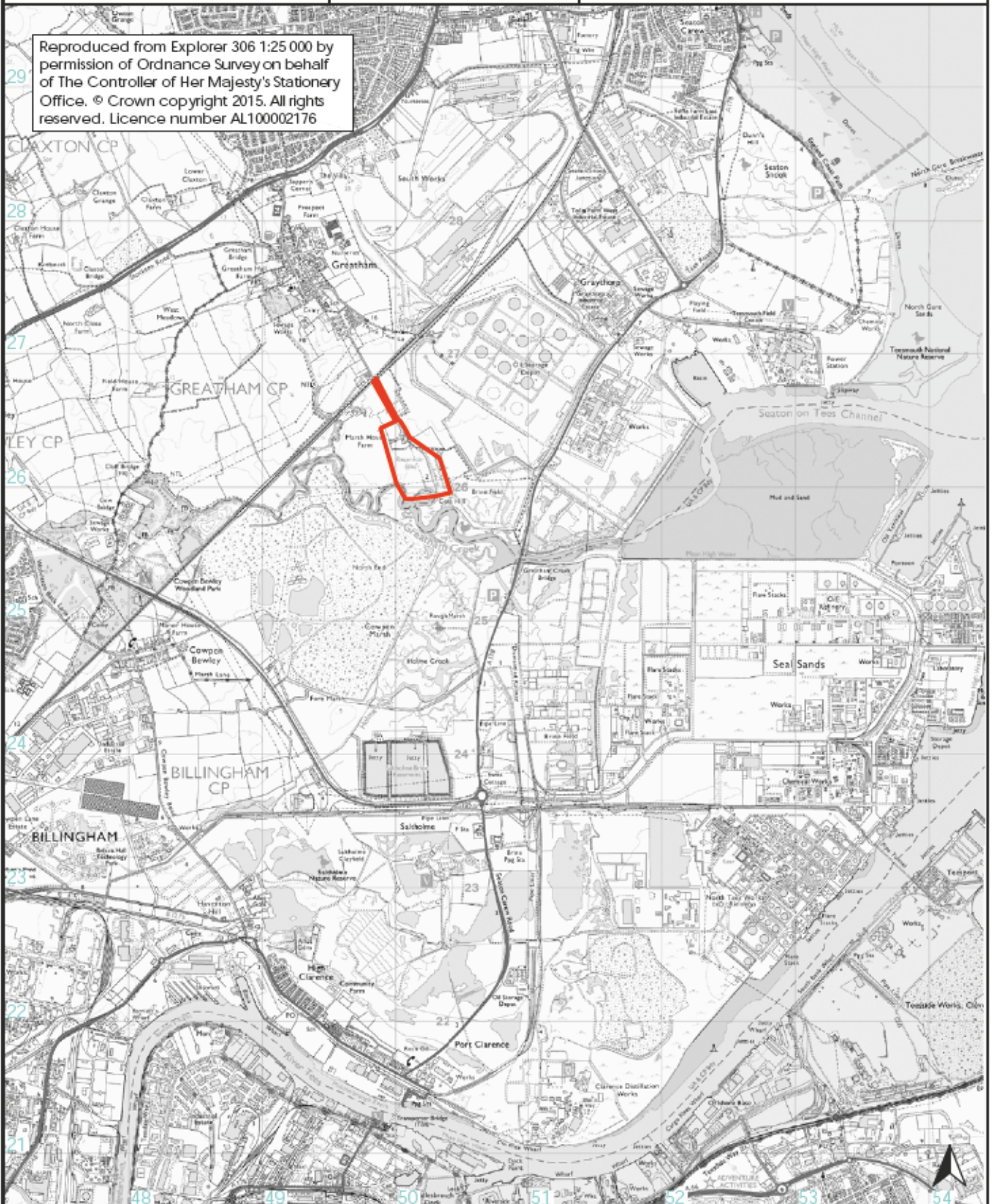
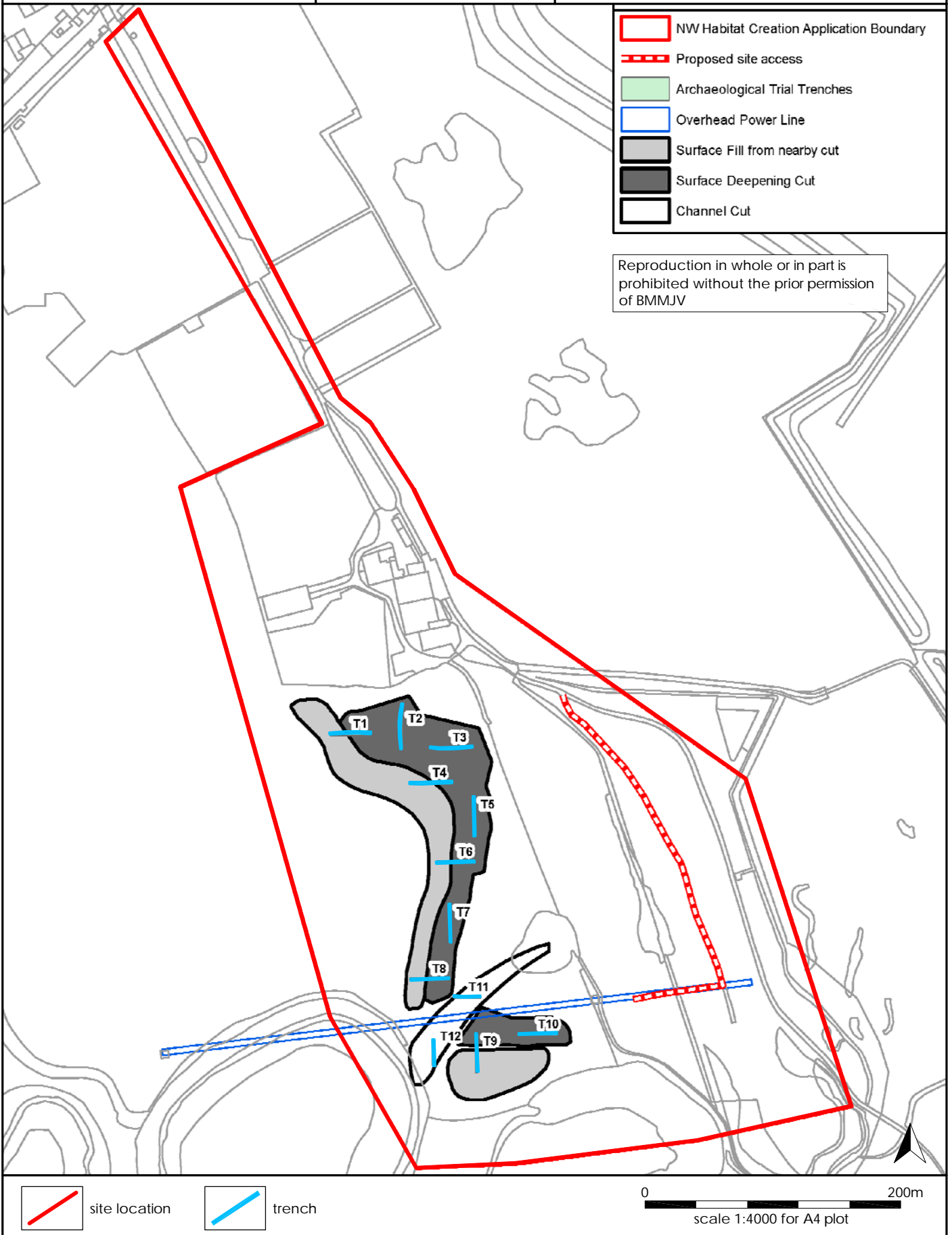


Figure 2: Trench locations



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site location



trench

0 200m

scale 1:4000 for A4 plot