

# H2Teesside Project

Planning Inspectorate Reference: EN070009

Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham

Document Reference: 8.40: Technical Note for the Implications of Change 3 on Cultural Heritage

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)



Applicant: H2 Teesside Ltd

Date: February 2025

---

## TABLE OF CONTENTS

1.0	INTRODUCTION.....	3
1.1	Overview .....	3
1.2	Trial Trench Evaluation.....	3
1.3	Results and Mitigation.....	4
1.4	Section 17.8: Residual Effects and Conclusions: .....	5
APPENDIX 1: H2TEESSIDE PROJECT, LAND NEAR COWPEN BEWLEY, COUNTY DURHAM: ARCHAEOLOGICAL EVALUATION.....		7

## TABLES

Table 17-6: Summary of Residual Effects .....	6
---	---

---

## 1.0 INTRODUCTION

### 1.1 Overview

1.1.1 On 25 March 2024, H2Teesside Limited (the 'Applicant') made an application for a Development Consent Order (DCO) (the 'DCO Application') under the Planning Act 2008 to the Planning Inspectorate, the body which considers such applications on behalf of the Secretary of State for Energy Security and Net Zero. The DCO Application was accepted for Examination on 22 April 2024.

1.1.2 The Applicant is seeking development consent for the construction, operation (including maintenance where relevant) and decommissioning of the H2Teesside Project (the Proposed Development).

1.1.3 The Proposed Development is an up to 1.2-Gigawatt Thermal (GWth) Carbon Capture and Storage (CCS) enabled Hydrogen Production Facility, associated connections, temporary construction compound areas and landscape / ecological areas, on land in Redcar and Cleveland, Stockton-on-Tees, and Hartlepool (hereafter referred to as the 'Proposed Development Site').

1.1.4 The Local Planning Authorities' archaeological advisors, Tees Archaeology, were consulted throughout the DCO process for the Proposed Development.

1.1.5 Archaeological matters in the area of Redcar and Cleveland Borough were largely addressed through the Proposed Development's design, with any remaining mitigation to be secured through a DCO requirement.

1.1.6 In the area of Stockton-on-Tees, a programme of geophysical survey was requested by Tees Archaeology to target a relatively small area of previously undisturbed ground in the Proposed Development Site near Cowpen Bewley (GS Site 2). This survey identified a number of anomalies which warranted further investigation (Appendix 17A [APP-214]). The requested programme of targeted trial trench evaluation was carried out and completed between 18<sup>th</sup> to 22<sup>nd</sup> November 2024 (Appendix 1).

1.1.7 In light of the results of this targeted trench evaluation, this Technical Note considers how the results of those investigations, and the design of the Proposed Development with Change 3 (as identified in the Change Report) in place, relate to the content of the Cultural Heritage Chapter from the Original ES [APP-070].

### 1.2 Trial Trench Evaluation

1.2.1 Seven trenches measuring 30m by 2m were excavated south-east of Cowpen Bewley to characterise the significance and extent of geophysical anomalies recorded at GS Site 2. The results of this programme are presented in Appendix 1.

1.2.2 As set out in that Appendix, the trial trench investigation identified a Prehistoric to Romano-British enclosure and boundary ditches south-east of Cowpen Bewley. This was given a Heritage Value (using the methodology set out in the Original ES) of Medium.

- 
- 1.2.3 The results of the investigation were shared with Tees Archaeology in December 2024 and January 2025 and a suitable programme of archaeological mitigation was agreed in email exchanges on the 14th, 17th, 20th and 22nd January 2025. The agreed mitigation is further discussed below.
- 1.2.4 Please note that the description of the heritage asset identified in Table 17-5 revises and updates that present within the full list present in Chapter 17 [APP-070].
- 1.3 Results and Mitigation
- 1.3.1 The geophysical survey (Appendix 17A [APP-214]) and trial trench evaluation (Appendix 1) identified a small rectilinear enclosure and a number of boundary ditches of prehistoric to Romano-British date (GS Site 2) along the Hydrogen Pipeline Corridor south-east of Cowpen Bewley. No features were identified by either survey in the immediate vicinity of the enclosure, although it's possible it may relate to prehistoric remains identified to the north (GS Site 1) or the Romano-British settlement to the south (GS Site 3). The strongest anomaly which formed part of the possible enclosure identified in the geophysical survey was tested through trial trenching and revealed a shallow ditch containing animal bone, fired daub and a sherd of prehistoric pottery and two small pieces of ceramic building material for which a Romano-British (or later) date is possible. Fainter anomalies in the immediate surroundings to the enclosure were also trenched and found to be poorly preserved and/or of modern date. Although the material uncovered in the enclosure ditch showed good levels of preservation, the enclosure could not be securely dated and does not extend towards the western side of the 'coffee cup handle'. The remains are most likely to represent a small isolated agricultural building associated with the Romano-British settlement to the south, but they could also relate to a small prehistoric or later farmstead.
- 1.3.2 Given the results of the evaluation, the heritage value of the GS Site 2 remains has been lowered from Medium, as reported in the Original ES, and is now considered Low. The Hydrogen Pipeline and associated construction work will be designed to be as far west as possible within the Order Limits for the Proposed Development Site (having accounted for Change 3) to avoid impacting the remains. Furthermore, construction activities will make use of 'no dig' solutions such as bog mats where possible, minimising impacts to associated remains. These measures are embedded in the Framework CEMP, as updated at Deadline 7,) and secured by a Requirement of the Draft DCO (4.1), resulting in a Low magnitude of impact, which is lower than the Medium impact reported in the Original ES. The change in heritage value and impact will result in a Negligible effect, which is Not Significant, lower than the Significant Moderate Adverse effect reported in the Original ES.
- 1.3.3 As set out in the Original ES, known heritage assets have been avoided by design (embedded mitigation). Where it is not practicable to avoid archaeological heritage assets, or confirm that this is possible at this stage, essential mitigation will be secured through a programme of archaeological evaluation and mitigation, consisting of excavation and recording, which will be carried out prior to construction. Where possible, this will enable micro-siting to avoid impacts, if
-

---

practicable. This strategy will be suitable for previously unrecorded archaeological remains within the Proposed Development Site, including at GS Site 2.

1.4 Section 17.8: Residual Effects and Conclusions:

1.4.1 Based upon the worst-case scenario prior to essential mitigation, the Moderate Adverse (Significant) effect on GS Site 2 reported in the Original ES has been reduced to a Negligible effect (Not Significant). The residual effect table of the Original ES is therefore amended accordingly as presented in Table 17-1.

Table 17-1: Summary of Residual Effects

DESCRIPTION OF EFFECT	HERITAGE VALUE	MAGNITUDE OF IMPACT	INITIAL CLASSIFICATION OF EFFECT	ESSENTIAL MITIGATION MEASURES	RESIDUAL EFFECT SIGNIFICANCE
Construction					
Loss or truncation of undated enclosure and boundary ditches south-east of Cowpen Bewley (GS Site 2)	Low	Medium	Minor Adverse	Preservation in situ through movement of pipe trench to the western side of the Proposed Development Site and use of bog mats or other no-dig solutions.	Negligible

---

## APPENDIX 1: H2TEESSIDE PROJECT, LAND NEAR COWPEN BEWLEY, COUNTY DURHAM: ARCHAEOLOGICAL EVALUATION



# H2Teesside project, Land near Cowpen Bewley, County Durham

Archaeological Evaluation



Ref: 290111.3  
OASIS: wessexar1-529932  
January 2025





© Wessex Archaeology Ltd 2024, all rights reserved.

Unit R6  
Sheaf Bank Business Park  
Prospect Road  
Sheffield  
S2 3EN

[www.wessexarch.co.uk](http://www.wessexarch.co.uk)

Wessex Archaeology Ltd is a Registered Charity no. 287786 (England & Wales) and SC042630 (Scotland)

#### Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage.

## Document Information

Document title H2Teesside project, land near Cowpen Bewley, County Durham  
Document subtitle Archaeological Evaluation  
Document reference 290111.3

Commissioned by AECOM  
Address Bridgewater House, 60 Whitworth Street, Manchester, M1 6LT


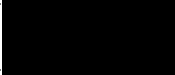
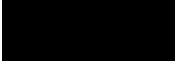
Site location Land south of Cowpen Bewley  
County County Durham  
National grid reference (NGR) 448640 524430 (NZ 48640 24430)  
Statutory designations None  
Planning authority Stockton-on-Tees Borough Council

Planning Inspectorate reference EN070009  
for Development Consent Order  
application

Museum name Tees Archaeology  
Museum accession code TBC  
OASIS Id wessexar1-529932

WA project name H2 Tees Crossing  
WA project code 290111  
Dates of fieldwork 18–22 Nov 2024  
Fieldwork directed by Joe Price  
Assisted by Rob Jones  
Project management by John Winfer  
Document compiled by Patrick Daniel  
Contributions from Dan Carter (ceramics and glass), with Lorrain Higbee (animal bone); Nicki Mulhall (environmental assessment)  
Graphics by Lizzie Garwood  
Document edited by Clare Jackson-Slater

## Quality Assurance

Issue	Date	Author	Approved by
1	12/12/2024	PMRD	
2	03/01/2025	PMRD	
3	21/01/2025	PMRD	



## Contents

Summary .....	iii
Acknowledgements .....	iii
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 Project and planning background .....	1
1.2 Scope of the report .....	1
1.3 Location, topography and geology .....	1
<b>2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND.....</b>	<b>2</b>
2.1 Introduction .....	2
2.2 Previous investigations related to the proposed development.....	2
2.3 Archaeological and historical context .....	2
<b>3 AIMS AND OBJECTIVES .....</b>	<b>3</b>
3.1 General aims .....	3
3.2 Site-specific objectives .....	3
<b>4 METHODS.....</b>	<b>3</b>
4.1 Introduction .....	3
4.2 Fieldwork methods.....	3
4.3 Finds and environmental strategies.....	4
4.4 Monitoring .....	4
<b>5 STRATIGRAPHIC EVIDENCE.....</b>	<b>4</b>
5.1 Introduction .....	4
5.2 Soil sequence and natural deposits.....	5
5.3 Prehistoric/Romano-British .....	5
5.4 Post-medieval .....	5
<b>6 FINDS EVIDENCE .....</b>	<b>6</b>
6.1 Introduction .....	6
6.2 Pottery .....	6
6.3 Ceramic building material .....	7
6.4 Fired clay .....	7
6.5 Glass .....	7
6.6 Animal bone .....	7
6.7 Recommendations for analysis .....	7
<b>7 ENVIRONMENTAL EVIDENCE .....</b>	<b>7</b>
7.1 Introduction .....	7
7.2 Aims and methods .....	8
7.3 Bulk samples .....	8
7.4 Results.....	8
7.5 Conclusions .....	8
7.6 Recommendations for future sampling .....	9
<b>8 OVERALL CONCLUSIONS .....</b>	<b>9</b>
8.1 Summary .....	9
8.2 Discussion .....	9
<b>9 ARCHIVE STORAGE AND CURATION .....</b>	<b>10</b>
9.1 Museum.....	10
9.2 Preparation of the archive .....	10
9.3 Selection strategy .....	11
9.4 Security copy .....	12
9.5 OASIS.....	12
<b>10 COPYRIGHT.....</b>	<b>12</b>
10.1 Archive and report copyright.....	12



---

10.2 Third party data copyright.....	12
<b>REFERENCES.....</b>	<b>13</b>
<b>APPENDICES.....</b>	<b>15</b>
Appendix 1 Trench summaries .....	15
Appendix 2 Environmental data.....	17
Appendix 3 OASIS summary.....	18

### List of Figures

<b>Cover</b>	Ditch 103 in trench 1, looking east to Billingham Industrial Plant
<b>Figure 1</b>	Location of evaluation area and wider development site
<b>Figure 2</b>	Results of evaluation trenching
<b>Figure 3</b>	West facing section of ditch 203 and ditch 103
<b>Figure 4</b>	Trench 6, north-facing representative section, 1 m scale
<b>Figure 5</b>	Trench 2, west-facing section of ditch 203, 1 m scale
<b>Figure 6</b>	Trench 1, west-facing section of ditch 103, 2 m scale
<b>Figure 7</b>	Trench 5, east-facing section of ditch 504, 1 m scale
<b>Figure 8</b>	Trench 4, looking east, 2 m scale and 1 m scale

### List of Tables

<b>Table 1</b>	Summary of results in relation to trench rationale set out in WSI
<b>Table 2</b>	Summary of finds by material type (number and weight in grammes)



## Summary

Wessex Archaeology was commissioned by AECOM to undertake an archaeological evaluation along the course of a proposed hydrogen pipeline. The pipeline forms an element within the larger H2Teesside hydrogen production facility, for which a Development Consent Order is currently being sought. The evaluated area is around 200 m long by 80 m wide and is situated to the south-east of Cowpen Bewley, County Durham (NGR 448640 524430).

Seven trial trenches were excavated. Each measured 30 m in length and 2 m wide and was set out in relation to the results of an earlier geophysical survey.

Four of the trial trenches contained buried features, indicating remains are present within the main part of the proposed pipeline corridor, with no features recorded in the northernmost and southernmost trenches.

The uncovered features comprise three field boundary ditches exposed across four trenches. One appears prehistoric or possibly Romano-British in date, the others were probably features of the post-medieval/modern landscape. A very small quantity of finds (125 g) was recovered during the evaluation. These derive from two of the trenches, and the assemblage comprises animal bone, ceramic building material, fired clay, glass and pottery. One soil sample was taken; this came from the prehistoric/Romano-British ditch and contained probable evidence of the contemporary burning of turves on the site, alongside plentiful signs of modern disturbance.

The results of the trial trenching suggest the earlier geophysical survey served as a reasonably reliable guide to the buried remains within the evaluation area, and that its archaeology has probably suffered from plough-truncation.

The remains within the evaluation area appear relevant to research questions focused on settlement patterns and use of material culture in later prehistory and/or the Romano-British period.

The evaluation has successfully met its aims and objectives.

## Acknowledgements

Wessex Archaeology would like to thank AECOM for commissioning the archaeological evaluation, in particular David Rosenberg and Reece Harvey. Wessex Archaeology is also grateful for the advice of the Archaeologist (Planning) at Tees Archaeology, who monitored the project for Stockton-on-Tees Borough Council, and to T & S Plant Hire Ltd for their cooperation and help on site.



# H2Teesside Project, Land near Cowpen Bewley, County Durham

## Archaeological Evaluation

### 1 INTRODUCTION

#### 1.1 Project and planning background

- 1.1.1 Wessex Archaeology was commissioned by AECOM to undertake an archaeological evaluation along the course of a proposed hydrogen pipeline. The pipeline forms an element within the larger H2Teesside hydrogen production facility, for which a Development Consent Order is currently being sought (application submitted to the Secretary of State for Energy Security and Net Zero 25 March 2024). The evaluated area is around 200 m long by 80 m wide and is situated to the south-east of Cowpen Bewley, County Durham (Fig. 1).
- 1.1.2 All works were undertaken in accordance with a written scheme of investigation (WSI) which detailed the aims, methodologies and standards to be employed (AECOM 2024a). The Tees Archaeology Team Leader, archaeological advisor to the Local Planning Authority (LPA), approved the WSI, on behalf of the LPA prior to the fieldwork.
- 1.1.3 The evaluation comprised the excavation and recording of seven trial trenches, and was undertaken 18–22 November 2024.

#### 1.2 Scope of the report

- 1.2.1 The purpose of this report is to provide a detailed description of the results of the evaluation, to interpret the results within a local, regional or wider archaeological context and assess whether the aims of the evaluation have been met.
- 1.2.2 The presented results provide further information on the archaeological resource that may be impacted by the proposed development and facilitate an informed decision with regard to the requirement for, and methods of, any further archaeological mitigation.
- 1.2.3 This report supersedes the interim report (Wessex Archaeology 2024) that was produced prior to the formal assessment of the finds and environmental sample.

#### 1.3 Location, topography and geology

- 1.3.1 The evaluation area is located between Cowpen Bewley to the north and the River Tees to the south. Cowpen Marsh and Billingham lie to the east and west respectively. The evaluation area is centred on NGR 448640 524430.
- 1.3.2 Existing ground levels are at around 5 m OD.
- 1.3.3 The bedrock geology is Sandstone of the Sherwood Sandstone Group (British Geological Survey 2024). Superficial deposits in the evaluation area are mapped as glaciolacustrine clay and silt, with an east–west ribbon of alluvium flanking a water channel that drains into the marshes to the east.



## 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

### 2.1 Introduction

- 2.1.1 The archaeological and historical background summarises and reproduces text from the WSI (AECOM 2024a), which itself summarised an earlier archaeological desk-based assessment related to the wider development (AECOM 2024b). Alphanumeric codes relating to heritage assets listed below relate to the reference system use by the Tees Archaeology Historic Environment Record (HER).

### 2.2 Previous investigations related to the proposed development

#### *Geophysical survey (2023)*

- 2.2.1 A geophysical survey was conducted across the wider development area wherever fields remained undisturbed by 19th and 20th-century industrial developments (ASDU 2023). The survey identified evidence of former ploughing, including former ridge and furrow cultivation, throughout. In some instances, these matched the ridge and furrow identified in aerial photographs and included in the HER (SMR 1513, 1519), but several additional areas of ridge and furrow were also identified. In addition, three sites of archaeological interest were detected: a possible enclosure and ring ditch 400 m north of the evaluation area, a possible enclosure with associated boundary ditches within the evaluation area and a number of linear and rectilinear anomalies 350 m to its south. The last probably formed outfield features on the northern periphery of a previously excavated Romano British settlement (see below). Other features recorded by the geophysical survey include former field boundaries, tracks and ponds recorded on 19th and 20th-century mapping, as well as modern land drains and utilities.

### 2.3 Archaeological and historical context

#### *Prehistoric (to AD 70)*

- 2.3.1 Bronze Age midden deposits have been identified in Cowpen Marsh, to the east of the evaluation area. There is little evidence of Iron Age occupation in the vicinity of the evaluation area, but the recent geophysical survey identified a single ring ditch 400 m to its north that may be of this date.

#### *Romano-British (AD 70–410)*

- 2.3.2 A Romano-British farmstead has been excavated 300 m south of the site (ASDU 2020; SMR9068, 9437, 9438, 9439, 9502 and 9523). The recent geophysical survey suggests its remains probably extend 20–50 m north of the previously completed archaeological investigations, towards the evaluation area.

#### *Medieval (AD 410–1550)*

- 2.3.3 Cowpen Bewley was founded in the medieval period and follows the traditional Norman form of two rows of properties on either side of a broad green. Earthwork remains of tofts survive at the eastern end of the southern row of properties (SMR604 and SMR624).
- 2.3.4 Remnants of ridge and furrow are recorded in the vicinity of Cowpen Bewley and form part of the village's medieval hinterland. To the south of the village are the vestiges of the medieval moat of Belasis Manor (SMR5156), which has been largely infilled, and a medieval fishpond (SMR6865) associated with the medieval grange of Billingham (SMR617).

#### *Post-medieval–modern (1550–present)*

- 2.3.5 Post-medieval features are concentrated in Cowpen Bewley and consist of extant buildings erected in the 18th to 19th centuries. There are six listed buildings located within the Cowpen Bewley Conservation Area.



2.3.6 Modern period remains comprise WWII defensive structures and features (SMR5266).

2.3.7 There are no World Heritage Sites, scheduled monuments, registered battlefields or registered parks and gardens located within 1 km of the evaluation area.

### **3 AIMS AND OBJECTIVES**

#### **3.1 General aims**

3.1.1 The broad aims of the archaeological works stated in the WSI were to:

- record the archaeological deposit sequence and the nature of the archaeological resource within the Site;
- assess the extent and significance of features identified by the geophysical survey;
- assess the level of ground disturbance and preservation of the archaeological resource;
- assess the validity of the geophysical survey results;
- inform the need for and design of any further archaeological investigation or mitigations works; and
- make the findings publicly available through submission of relevant archives.

#### **3.2 Site-specific objectives**

3.2.1 The WSI noted that the evaluation area has the potential to provide information that may contribute and inform upon the research questions posed in the North-East Regional Research Framework for the Historic Environment (Research Frameworks 2024). However, no specific research aims were identified for the evaluation because of a lack of information on the nature of the archaeological remains present within the area to be trenched.

### **4 METHODS**

#### **4.1 Introduction**

4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (AECOM 2024a) and in general compliance with ClfA standards and guidance (ClfA 2023a–b). The methods employed are summarised below.

#### **4.2 Fieldwork methods**

##### *General*

4.2.1 The trench locations were set out using a Global Navigation Satellite System (GNSS), in the positions proposed in the WSI (Figs 1–2).

4.2.2 Seven trial trenches, each measuring 30 m in length and 2 m wide, were excavated in level spits using a 360° excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist. Machine excavation proceeded until either the archaeological horizon or the natural geology was exposed.

4.2.3 Where necessary, the base of the trench/surface of archaeological deposits were cleaned by hand. A sample of the features and deposits was hand-excavated, sufficient to address project aims. With the agreement of the Archaeologist (Planning) at Tees Archaeology,



the ditch in trench 5 (which matched a boundary appearing on historical mapping – see below) was machine-excavated.

- 4.2.4 Spoil from machine stripping and hand-excavated archaeological deposits was visually scanned for the purposes of finds retrieval.
- 4.2.5 Trenches completed to the satisfaction of the client and the Archaeologist (Planning) at Tees Archaeology were backfilled using excavated materials in the order in which they were excavated, and left level on completion. No other reinstatement or surface treatment was undertaken.

#### *Recording*

- 4.2.6 All exposed archaeological deposits and features were recorded using Wessex Archaeology's pro forma recording system. A complete record of excavated features and deposits was made, including plans and sections drawn to appropriate scales (generally 1:20 or 1:50 for plans and 1:10 for sections) and tied to the Ordnance Survey (OS) National Grid.
- 4.2.7 A Leica GNSS connected to Leica's SmartNet service surveyed the location of archaeological features. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.
- 4.2.8 A full photographic record was made using digital cameras equipped with an image sensor of not less than 16 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long term accessibility of the image set.

### **4.3 Finds and environmental strategies**

- 4.3.1 Strategies for the recovery, processing and assessment of finds and environmental samples were in line with those detailed in the WSI (AECOM 2024a). The treatment of artefacts and environmental remains was in general accordance with: *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2014a), *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011), and ClfA's (n.d. a) *Toolkit for Specialist Reporting* (Type 2: Appraisal).

### **4.4 Monitoring**

- 4.4.1 The Archaeologist (Planning) at Tees Archaeology monitored the evaluation on behalf of the LPA. A monitoring meeting was held on 19 November 2024.

## **5 STRATIGRAPHIC EVIDENCE**

### **5.1 Introduction**

- 5.1.1 Four of the seven excavated trial trenches contained buried features, indicating remains are present within the main part of the proposed pipeline corridor, with no features recorded in the northernmost and southernmost trenches (Fig. 2).
- 5.1.2 The uncovered features comprise three ditches exposed in four trenches. One of the ditches tallies with the 'northern enclosure' detected by the geophysical survey, another matches a plot boundary recorded on historical mapping.

5.1.3 Detailed descriptions of individual contexts are provided in the trench summary tables (Appendix 1). Figure 2 shows all archaeological features recorded within the trenches, together with the preceding geophysical survey results (ASDU 2023) and historical Ordnance Survey mapping. Figures 5–7 comprise photographs of the excavated ditch cross-sections. Where two dimensions are given in the text below, this is to convey width x depth.

## 5.2 Soil sequence and natural deposits

5.2.1 The natural substrate was exposed in all seven trenches. It generally comprised a firm pale yellowish grey or yellowish brown silty clay, except in trenches 1 and 2 in the northern part of the evaluation area, where it was of a more pinkish hue. Its upper surface was first encountered at an average depth of 0.44 m below ground surface.

5.2.2 Subsoil was present in trenches 5 and 6 in the southern part of the evaluation area, where it comprised a pale yellowish brown clay silt up to 0.2 m thick (Fig. 4).

5.2.3 Topsoil was recorded throughout as a fairly compact mid-greyish brown silty clay.

## 5.3 Prehistoric/Romano-British

5.3.1 An east–west ditch (203: 0.93 x 0.39 m; Figs 3.1 and 5) was recorded crossing the southern part of trench 2. Excavation revealed it to have a concave, bowl-shaped profile and to contain two fills: a lower/main fill of mid-brownish grey clayey silt (204), overlain by a darker deposit (205) with evidence of burning (flecks of fired clay and charcoal).

5.3.2 Finds from the feature all derive from the lower fill and comprise a small sherd (3 g) of prehistoric pottery, animal bone (horse, sheep and cattle), fired clay (including one piece imprinted by wattle) and two tiny fragments of brick/tile of potential Romano-British date. A soil sample recovered from the lower fill was found to contain possible evidence for the burning of turves, a practice not out-of-keeping with the prehistoric pottery and probable fired daub.

## 5.4 Post-medieval

5.4.1 The central part of trench 1 was crossed by a ditch on an east–west alignment (103: 2 x 0.64 m; Figs 3.2 and 6). Excavation established that it had a flat-based, bowl-shaped profile and contained a single fill of mid-brownish grey silty clay, which was found to contain post-medieval/modern pottery, modern glass, and further animal bone.

5.4.2 Another east–west boundary was exposed in trenches 3 and 5 around 50 m to the south. The feature was excavated in trench 5 (504: 1.35 x 0.65 m; Fig. 7) and found to have a concave, bowl-shaped profile that contained a single fill of mid-pinkish brown silty clay. No finds were recovered, although the feature appears on historical Ordnance Survey mapping (Fig. 2) and cut through the alluvial subsoil present within trench 5, so it was probably of no great age. This boundary (surveyed but not formally excavated in trench 3) also matched an anomaly detected by the geophysical survey.

5.4.3 Trenches 4, 6 and 7 were blank (Fig. 8).

**Table 1** Summary of results in relation to trench rationale set out in WSI

Excavated trench no.	WSI target	Results
1	Investigate east–west possible ditch extending west from potential enclosure identified from geophysical survey	Matching feature excavated & recorded; modern finds recovered
2	Investigate potential northern enclosure ditch identified from geophysical survey	Matching feature excavated & recorded; prehistoric pottery and fired daub recovered
3	Investigate isolated anomalies and likely post-medieval field boundary on the southern periphery of potential enclosure identified in geophysical survey.	Matching boundary exposed; no other features present
4	Investigate possible north-south and east–west ditches to the west of potential enclosure identified from geophysical survey	Blank trench
5	Investigate blank area and likely post-medieval field boundary to the south of potential enclosure identified from geophysical survey	Matching boundary exposed & excavated; no finds recovered
6	Investigate blank southern periphery of potential enclosure identified from geophysical survey	Blank trench
7	Investigate blank northern periphery of potential enclosure identified from geophysical survey	Blank trench

## 6 FINDS EVIDENCE

### 6.1 Introduction

6.1.1 A very small quantity of finds, weighing 125 g, was recovered from two trenches. The assemblage ranges in date from prehistoric to modern and comprises a range of different material types. All finds have been cleaned and quantified by material type within each context; this information is presented in Table 2. The assemblage is in a generally good condition, with the animal bone being the most fragmentary material. The finds are associated with two ditches, 103 in trench 1 and 203 in trench 2.

**Table 2** Summary of finds by material type (number and weight in grammes)

Trench	Feature	Cxt. No.	Animal Bone		Ceramic Building Material		Fired Clay		Glass		Pottery	
			No.	Wgt.	No.	Wgt.	No.	Wgt.	No.	Wgt.	No.	Wgt.
1	Ditch 103	104	7	4					1	1	3	2
2	Ditch 203	204	53	48	2	18	5	49			1	3
<b>Total by Material Type</b>			<b>60</b>	<b>52</b>	<b>2</b>	<b>18</b>	<b>5</b>	<b>49</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>5</b>

### 6.2 Pottery

6.2.1 The pottery comprises a small group of sherds that range in date from prehistoric to modern. The prehistoric piece (3 g) is a handmade plain body sherd from ditch 203 (fill 204) that occurs in a rock-gritted fabric, possibly a coarse-grained sandstone. It cannot be dated with any great accuracy because of its small size. The piece is relatively unabraded given its age but displays no evidence to indicate vessel form. The remainder are modern industrially

produced refined whitewares collected from ditch 103 (fill 104). These can be loosely dated from the late 18th century onwards, with one piece being decorated with a transfer-printed 'Flow Blue' technique that dates from the 1840s onwards. The provenance of these refined whitewares is almost impossible to narrow down, with multiple centres making very similar pieces using comparable methods. The refined whitewares are relatively abraded with heavily crazed glazes.

### **6.3 Ceramic building material**

6.3.1 Two tiny pieces of ceramic building material were recovered, both derive from ditch 203 (fill 204). One fragment (1 g) was recovered from environmental sampling (sample 1) and the other (17 g) was collected during hand excavation of the feature. Both pieces occur in an oxidised red, hard, and sandy fabric that are most likely post-medieval or later in date. However, both are small fragments, and it is therefore difficult to be certain regarding a precise date with such small examples. Given the Romano-British nature of certain known archaeology in the area (AECOM 2024a, 5–6), coupled with the presence of daub and prehistoric pottery from the same feature, it is plausible that these fragments could be hard-fired Romano-British pieces.

### **6.4 Fired clay**

6.4.1 The fired clay comprises six fragments, all from ditch 203 (fill 204). The pieces are oxidised in a sandy and soft fabric, which explains their relatively rounded and abraded nature. Despite this, one piece (19 g) displays a clear wattle impression, measuring 6 mm in diameter, suggesting that at least some of the material derives from wattle and daub construction. There is a further piece (16 g) that displays a smoothed surface, which could be indicative of use as lining material for a hearth or oven, but this is not certain. The material is consistent with a prehistoric date of the associated pottery, but is not readily datable with any accuracy.

### **6.5 Glass**

6.5.1 One tiny fragment (1 g) of clear window glass was collected from ditch 103. The piece is industrially manufactured and most likely derives from a vehicle light or window.

### **6.6 Animal bone**

6.6.1 The animal bone occurs in a highly fragmented state, with the material from ditch 103 being so fractured as to be completely undiagnostic. The pieces from ditch 203 comprise a horse tooth and proximal radius, with the charred shaft of a sheep metacarpal. Additional pieces recovered as part of an environmental sample from ditch 203 (sample 1) include a fragment of cattle tooth, one indistinct burnt fragment with the remainder being small unidentifiable fragments.

### **6.7 Recommendations for analysis**

6.7.1 The artefacts are generally readily identifiable and datable, apart from the ceramic building material from ditch 203. The prehistoric/Roman nature of the finds from ditch 203 fits with the character of the known archaeology in the surrounding area (AECOM 2024a, 5–6). The remainder of the artefacts are modern in date. For this reason, no additional analysis is required on the material.

## **7 ENVIRONMENTAL EVIDENCE**

### **7.1 Introduction**

7.1.1 One bulk (flotation) sample taken from a ditch was processed for the recovery and assessment of the environmental evidence.

## 7.2 Aims and methods

7.2.1 The aim of this assessment is to determine the nature and significance of the environmental remains preserved at the site. This assessment has been undertaken in accordance with Historic England's guidelines outlined in *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation* (English Heritage 2011).

## 7.3 Bulk samples

7.3.1 The bulk sediment sample was 40 litres in size and was processed by standard flotation methods on a Siraf-type flotation tank. The flot was retained on a 0.25 mm mesh and the residue was retained on a 1 mm mesh. The residue was split into coarse (>4 mm) and fine (1–4 mm) fractions. The coarse fraction of the residue was sorted by eye for artefactual and environmental remains and discarded. Environmental material extracted from the residue was added to the flot.

7.3.2 The flot and fine residue fractions were examined using a Leica MS5 stereomicroscope at up to x40 magnification. The presence of recent material was noted in the samples, including modern roots, modern seeds, soil fungal sclerotia, shells of the burrowing blind snail (*Cecilioides acicula*), earthworm eggs, and modern insects. Plant remains were identified through comparison with modern reference material held by Wessex Archaeology and relevant literature (Cappers *et al.* 2006). Nomenclature follows Stace (1997) for wild taxa.

7.3.3 All remains were recorded semi-quantitatively on an abundance scale: C = <5 ('Trace'), B = 5–10 ('Rare'), A = 10–30 ('Occasional'), A\* = 30–100 ('Common'), A\*\* = 100–500 ('Abundant'), A\*\*\* = >500 ('Very abundant/Exceptional').

## 7.4 Results

7.4.1 The results are presented in Appendix 2.

7.4.2 The flot was moderate in size. Potential indicators of bioturbation (modern roots, seeds and earthworm eggs) are present in very high quantities indicating the possibility of contamination from later intrusive material.

7.4.3 Environmental evidence is sparse and moderately preserved. Charred plant remains are limited to indeterminate tubers/rhizomes, a seed of heath grass (*Danthonia decumbens*), a fragment of an onion-couch grass (*Arrhenatherum elatius* subsp. *bulbosum*) tuber, and a small amount of well-preserved wood charcoal. Highly fragmented coal and clinker/cinder are also present.

## 7.5 Conclusions

7.5.1 The sample contains a range of charred plant remains typical of a Middle/Late Iron Age to Romano-British site in northern England. The presence of charred tubers/rhizomes, onion-couch grass tubers and heath grass likely indicate that turves could have been burnt as a fuel (Hall 2003). Evidence for the exploitation of grassy heathland habitats for fuel is widely recorded in sites dating to this period in central and northern England (Carruthers and Hunter Dowse 2019; Hall and Huntley 2007). The coal and clinker/cinder recorded in the sample potentially reflect the use of coal as a fuel source, although some of this material could reflect later contamination.



## 7.6 Recommendations for future sampling

- 7.6.1 Environmental sampling should continue to follow Wessex Archaeology's in-house guidance/the site-specific sampling strategy. Samples for the recovery of charred plant remains and wood charcoal should be taken from as wide a range of feature types as possible, covering different phases of activity. Samples should be 40 litres in size (or 100% of small contexts), and they should be taken from individual, secure contexts.

## 8 OVERALL CONCLUSIONS

### 8.1 Summary

- 8.1.1 The evaluated area contains archaeological remains in the form of three ditches. One appears prehistoric/Romano-British in date, and probably defined an enclosure. The other two appear to have been field boundary ditches and were filled in more recently, probably in the modern period.
- 8.1.2 The results of the trial trenching suggest the geophysical survey has served as a reasonably reliable guide to the buried remains within the evaluation area, and that its archaeology has probably suffered from plough-truncation.
- 8.1.3 Research aims to which the oldest of the three ditches (and any further associated remains) may be able to contribute have been identified.

### 8.2 Discussion

- 8.2.1 The ditch (203) in trench 2 correlates with the 'northern enclosure' detected by the geophysical survey. It contained, alongside animal bone and fired daub, a sherd of prehistoric pottery and two small pieces of ceramic building material for which a Romano-British (or later) date is possible. The character of the environmental remains from ditch 203, which point to the burning of turves in the evaluation area in the past, is not at odds with the dating evidence. The balance of the evidence suggests the enclosure may represent some activity in the hinterland of the Saltholme Romano-British settlement excavated 300 m to the south of the evaluation area (ASDU 2020), perhaps an ancillary outpost or part of a neighbouring establishment.
- 8.2.2 A possible interpretation for the assemblage from ditch 203 is that it contains material deriving from some nearby turf-roofed, wattle and daub structure which burnt down. This is only a suggestion, however, and other mechanisms may have led to the material being present in the feature. Remains of burnt turves were recorded at the nearby Saltholme Romano-British settlement, where they were interpreted as the potential remains of fuel, construction material (e.g., roofing, ovens) or the 'clearance of lowland heath through burning to enlarge cultivated areas' (ASDU 2020, 62).
- 8.2.3 To judge by their position and shared course, and the geophysical signals connecting them (Fig. 2), ditch 103 in trench 1 may be the westward extension of ditch 203 in trench 2. However, it is more likely – to judge by their differing sizes, fills, profiles and datable contents – that they represent two separate features. Ditch 103 appears to be a much more modern feature than ditch 203.
- 8.2.4 The evaluation had the general aim of assessing the validity of the geophysical survey results. All three ditches recorded during the evaluation were also detected by the gradiometer. The findings from the trenches therefore appear to validate the results of that work, although there were no buried remains found accompanying the 'soil filled lines' and 'disturbed area' noted within the geophysical survey report.



- 8.2.5 The evaluation was also tasked with assessing the level of ground disturbance and preservation of the archaeological resource. It found that the archaeological horizon was sealed directly below the topsoil, and therefore it is highly probable that any ploughing of the local ground surface would have adversely affected the preservation of the archaeological resource. Where subsoil was recorded within trenches that contained archaeological remains (trench 5), the archaeology had been cut into the subsoil, rather than sealed beneath it, and so the subsoil afforded no protection to the excavated evidence in that instance.
- 8.2.6 Finally, the results of the trial trenching suggest that the evaluation area contains remains capable of contributing to research questions posed in the North-East Regional Research Framework for the Historic Environment (Research Frameworks 2024), in particular those relating to the Late Iron Age and Romano-British periods, such as:
- *La2: How can we improve our understanding of late prehistoric settlement and settlement patterns?*
  - *La4: How can we develop our understanding of the use and exploitation of the coastal zone during late prehistory in north-east England?*
  - *La6: How can we better understand the use of ceramics in late prehistoric north-east England?*
  - *R4: How does archaeology shed light on the lives of civilians and natives in NE England in the Roman period?*
  - *R5: How can we better frame our understanding of Roman and native material culture in NE England?*

## 9 ARCHIVE STORAGE AND CURATION

### 9.1 Museum

9.1.1 The archive is currently held at the offices of Wessex Archaeology in Sheffield. Tees Archaeology has agreed in principle to accept the archive on completion of the project, under an accession code to be agreed. Deposition of any finds with the museum will only be carried out with the full written agreement of the landowner to transfer title of all finds to the museum.

### 9.2 Preparation of the archive

#### *Physical archive*

9.2.1 The physical archive will be prepared following the standard conditions for the acceptance of excavated archaeological material by Tees Archaeology, and in general following nationally recommended guidelines (Brown 2011; ClfA 2014b; SMA 1995).

9.2.2 All archive elements are marked with the site code 290111, and a full index will be prepared. The physical archive currently comprises the following:

- 1 cardboard box or airtight plastic box of artefacts and ecofacts, ordered by material type
- 1 file of paper records and A3/A4 graphics

#### *Digital archive*

- 9.2.3 The digital archive, which comprises born-digital data (e.g., site records, survey data, databases and spreadsheets, photographs and reports), will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata.

### **9.3 Selection strategy**

- 9.3.1 It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during an archaeological project require preservation in perpetuity. These records and materials will be subject to selection to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected for retention are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities (i.e., the retained archive should fulfil the requirements of both future researchers and the receiving museum).
- 9.3.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993; Wessex Archaeology's internal selection policy) and follows ClfA's (n.d. b) *Toolkit for Selecting Archaeological Archives*. It should be agreed by all stakeholders (e.g., Wessex Archaeology's specialists, local authority, museum) and fully documented in the project archive.
- 9.3.3 Project-specific proposals for selection are presented below. The proposals are based on recommendations by Wessex Archaeology's specialists and will be updated in line with any further comment by other stakeholders (e.g., museum, local authority), prior to deposition of the archive. Any material not selected for retention may be used for teaching or reference collections by Wessex Archaeology.

#### *Finds*

- 9.3.4 It is recommended that all material be retained until the likelihood for additional work has been established. Should no further work be undertaken, it is recommended that the modern elements be discarded, and the remainder of the assemblage be retained for long-term deposition.

#### *Environmental remains*

- 9.3.5 The flot should be retained as part of the archive until further sampling has been undertaken, following which recommendations for deposition will be made. The fine residue was discarded after sorting

#### *Documentary records*

- 9.3.6 Paper records comprise site registers (other pro forma site records are digital), drawings and reports (written scheme of investigation, client report). All will be retained and deposited with the project archive.

#### *Digital data*

- 9.3.7 The digital data comprise site records (tablet-recorded on site) in spreadsheet format; finds records in spreadsheet format; survey data; photographs; reports. All will be deposited, although site photographs will be subject to selection to eliminate poor quality and duplicated images, and any others that are not directly relevant to the archaeology of the site.





## **9.4 Security copy**

- 9.4.1 In line with current best practice (e.g., Brown 2011), on completion of the project, a security copy of the written records will be prepared, in the form of a digital PDF/A file.

## **9.5 OASIS**

- 9.5.1 An OASIS (online access to the index of archaeological investigations) record (<http://oasis.ac.uk>) has been initiated, with key fields completed (wessexar1-529932; Appendix 3). A .pdf version of the final report will be submitted following approval by the Archaeologist (Planning) at Tees Archaeology on behalf of the LPA. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.

## **10 COPYRIGHT**

### **10.1 Archive and report copyright**

- 10.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*.
- 10.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

### **10.2 Third party data copyright**

- 10.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (e.g., Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.

## REFERENCES

- ADS 2013. *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service and Digital Antiquity Guides to Good Practice.
- AECOM 2024a. *H2Teesside Project. Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham: Written Scheme of Investigation: Archaeological Trial Trench Evaluation*.
- AECOM 2024b. *H2Teesside Project Environmental Statement Volume III – Appendices Appendix 17A: Cultural Heritage Desk Based Assessment Document Reference: 6.4.30*.  
<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN070009/EN070009-000395-H2T%20DCO%20-%206.4.30%20ES%20Vol%20III%20Appendix%2017A%20Cultural%20Heritage%20Desk%20Based%20Assessment.pdf> (accessed November 2024).
- Archaeological Services Durham University (ASDU) 2020. *Saltholme, Cowpen Bewley, Stockton-on-Tees: Post-excavation Assessment*. Unpublished report ref. 5049.
- ASDU 2023. *H2Teesside, Billingham, Stockton-on-Tees: Geophysical Survey*. Unpublished report ref. 5968.
- British Geological Survey 2024. *BGS Geology Viewer* <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> (accessed November 2024).
- Brown, D. H. 2011. *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum.
- Cappers, R. T. J., Bekker, R. M. and Jans, J. E. A. 2006. *Digital Seed Atlas of the Netherlands*. Groningen: Barkhuis Publishing.
- Carruthers, W. and Hunter Dowse, K. L. 2019. *A Review of Macroscopic Plant Remains from the Midland Counties*. Portsmouth: Historic England Research Report Series 47/2019.
- Chartered Institute for Archaeologists [ClfA] 2014a (revised October 2020). *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Reading: ClfA.
- ClfA 2014b (revised October 2020). *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Reading: ClfA.
- ClfA 2023a. *Standard for Archaeological Field Evaluation*. Reading: ClfA.
- ClfA 2023b. *Universal Guidance for Archaeological Field Evaluation*. Reading: ClfA.
- ClfA n.d. a. *Toolkit for Specialist Reporting* <https://www.archaeologists.net/reporting-toolkit> (accessed 10/12/2023).
- ClfA n.d. b. *Toolkit for Selecting Archaeological Archives* <https://www.archaeologists.net/selection-toolkit> (accessed 10/12/2023).
- English Heritage 2011. *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (2nd edition). Portsmouth: English Heritage.



- Hall, A. R. 2003. *Recognition and characterisation of turves in archaeological occupation deposits by means of macrofossil plant remains*. Portsmouth: English Heritage Centre for Archaeology Report 16/2003.
- Hall, A. R. and Huntley, J. P. 2007. *A Review of the Evidence for Macrofossil Plant Remains from Archaeological Deposits in Northern England*. Portsmouth: English Heritage Research Department Report 2007/87.
- Research Frameworks 2024. *North-East Regional Research Framework for the Historic Environment*. <https://researchframeworks.org/nerf/> (accessed November 2024).
- SMA 1993. *Selection, Retention and Dispersal of Archaeological Collections*. London: Society of Museum Archaeologists.
- SMA 1995. *Towards an Accessible Archaeological Archive*. London: Society of Museum Archaeologists.
- Stace, C. 1997. *New Flora of the British Isles* (2nd edition). Cambridge: Cambridge University Press.
- Wessex Archaeology 2024. *H2Teesside Project, Land near Cowpen Bewley, County Durham: Interim Report on Archaeological Evaluation*. Unpublished report ref. 220911.2.



## APPENDICES

### Appendix 1 Trench summaries

BGL= depth Below Ground Level (metres)

Trench No 1		Length 30 m	Width 2 m	Depth 0.50 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
101		Topsoil	Mid-greyish brown silty clay. Fairly compact. No visible inclusions.	0–0.45
102		Natural	Light yellowish grey silty clay. Solid. No visible inclusions.	0.45+
103	104	Ditch	Linear ditch aligned east–west with moderate, straight sides and a flat base. Length: 1.00 m. Width: 2.00 m. Depth: 0.64 m.	0.45–1.09
104	103	Secondary fill	Mid-brownish grey silty clay (20 / 80) with coarse gravel (< 50 mm) - rare (> 1 %) - sub-angular - poorly sorted	0.45–1.09

Trench No 2		Length 30 m	Width 2 m	Depth 0.40 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
201		Topsoil	Mid-greyish brown silty clay. Fairly dense. No visible inclusions.	0–0.38
202		Natural	Light pinkish grey silty clay. Dense. No visible inclusions.	0.38+
203	204, 205	Ditch	Linear ditch aligned east–west with steep, straight sides and a concave base. Length: >1.80 m. Width: 0.93 m. Depth: 0.39 m.	0.38–0.77
204	203	Secondary fill	Mid-brown grey clayey silt	0.38–0.77
205	203	Secondary fill	Dark brown black clayey silt	0.38–0.49

Trench No 3		Length 30 m	Width 2 m	Depth 0.50 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
301		Topsoil	Mid-greyish brown silty clay. Sticky. No visible inclusions.	0–0.45
302		Natural	Light pinkish grey silty clay. Dense. No visible inclusions.	0.45 +

Trench No 4		Length 30 m	Width 2 m	Depth 0.40 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
401		Topsoil	Mid-greyish brown silty clay. Fairly solid. No visible inclusions.	0–0.38
402		Natural	Mid-yellowish grey silty clay. Yellow patches. No visible inclusions.	0.38 +



Trench No 5		Length 30 m	Width 2 m	Depth 0.57 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
501		Topsoil	Mid-greyish brown silty clay. Sticky. No visible inclusions.	0–0.30
502		Subsoil	Light yellowish brown clay silt. Alluvium. No visible inclusions.	0.30–0.50
503		Natural	Light greyish yellow silty clay. Dense. No visible inclusions.	0.50 +
504	505	Ditch	Linear ditch aligned east–west with steep, concave sides and a U-shaped base. Length: 1.00 m. Width: 1.35 m. Depth: 0.65 m.	0.50–1.15
505	504	Secondary fill	Mid-pinkish brown with a grey hue silty clay with cobbles (140 mm) - rare (> 1 %) - sub-angular - poorly sorted.	0.50–1.15

Trench No 6		Length 30 m	Width 2 m	Depth 0.42 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
601		Topsoil	Mid-greyish brown silty clay. Fairly dense. No visible inclusions.	0–0.30
602		Subsoil	Light yellowish brown silty clay. Alluvium. No visible inclusions.	0.30–0.40
603		Natural	Light greyish yellow silty clay. Solid. No visible inclusions.	0.40 +

Trench No 7		Length 30 m	Width 2 m	Depth 0.60 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
701		Topsoil	Mid-greyish brown silty clay. Solid. No visible inclusions.	0–0.55
702		Natural	Light yellowish brown silty clay. Sticky. No visible inclusions.	0.55 +



## Appendix 2 Environmental data

<b>Feature type</b>	Ditch
<b>Feature</b>	203
<b>Context</b>	204
<b>Sample code</b>	290111_1
<b>Sample vol. (l)</b>	40
<b>Flot vol. (ml)</b>	120
<b>Bioturbation proxies</b>	90%, A, E
<b>Grain</b>	-
<b>Chaff</b>	-
<b>Cereal notes</b>	-
<b>Charred other</b>	A
<b>Charred other notes</b>	Tubers/rhizomes (incl. <i>Arrhenatherum elatius</i> ssp. <i>bulbosum</i> tuber fragment), <i>Danthonia decumbens</i>
<b>Charcoal &gt;2mm (ml)</b>	<5
<b>Charcoal</b>	Good condition
<b>Other</b>	Coal (C), Clinker/cinder (A)
<b>Preservation</b>	Moderate

Key: : C = <5 ('Trace'), B = 5–10 ('Rare'), A = 10–30 ('Occasional'), A\* = 30–100 ('Common'), A\*\* = 100–500 ('Abundant'), A\*\*\* = >500 ('Very abundant/Exceptional')



## Appendix 3 OASIS summary

**OASIS ID (UID):** wessexar1-529932

**Project Name:** Evaluation at H2Teesside project, land near Cowpen Bewley, County Durham

**Activity type:** Evaluation

**Sitecode(s):** 290111

**Project Identifier(s):** 290111

**Planning Id:** EN070009

**Reason for Investigation:** Planning: Between application and determination

**Organisation Responsible for work:** Wessex Archaeology

**Project Dates:** 18-Nov-2024 - 22-Nov-2024

**HER:** Tees Archaeology HER

**HER Identifiers:** [no data]

**Project Methodology:** Seven trial trenches, each measuring 30 m in length and 2 m wide, were excavated. The trenches were positioned to investigate anomalies detected by an earlier geophysical survey.

**Project Results:** Four of the trial trenches contained buried features, indicating remains are present within the main part of the proposed pipeline corridor, with no features recorded in the northernmost and southernmost trenches. The uncovered features comprise three field boundary ditches exposed across four trenches. One appears prehistoric or possibly Romano-British in date, the others were probably features of the post-medieval/modern landscape. A very small quantity of finds (125 g) was recovered during the evaluation. These derive from two of the trenches, and the assemblage comprises animal bone, ceramic building material, fired clay, glass and pottery. One soil sample was taken; this came from the prehistoric/Romano-British ditch and contained probable evidence of the contemporary burning of turves on the site, alongside plentiful signs of modern disturbance. The results of the trial trenching suggest the earlier geophysical survey served as a reasonably reliable guide to the buried remains within the evaluation area, and that its archaeology has probably suffered from plough-truncation. The remains within the evaluation area appear relevant to research questions focused on settlement patterns and use of material culture in later prehistory and/or the Romano-British period.

**Keywords:**

**Subject/Period:** Boundary Ditch: LATER PREHISTORIC

FISH Thesaurus of Monument Types

**Subject/Period:** Boundary Ditch: POST MEDIEVAL

FISH Thesaurus of Monument Types

**Subject/Period:** Pot: LATER PREHISTORIC

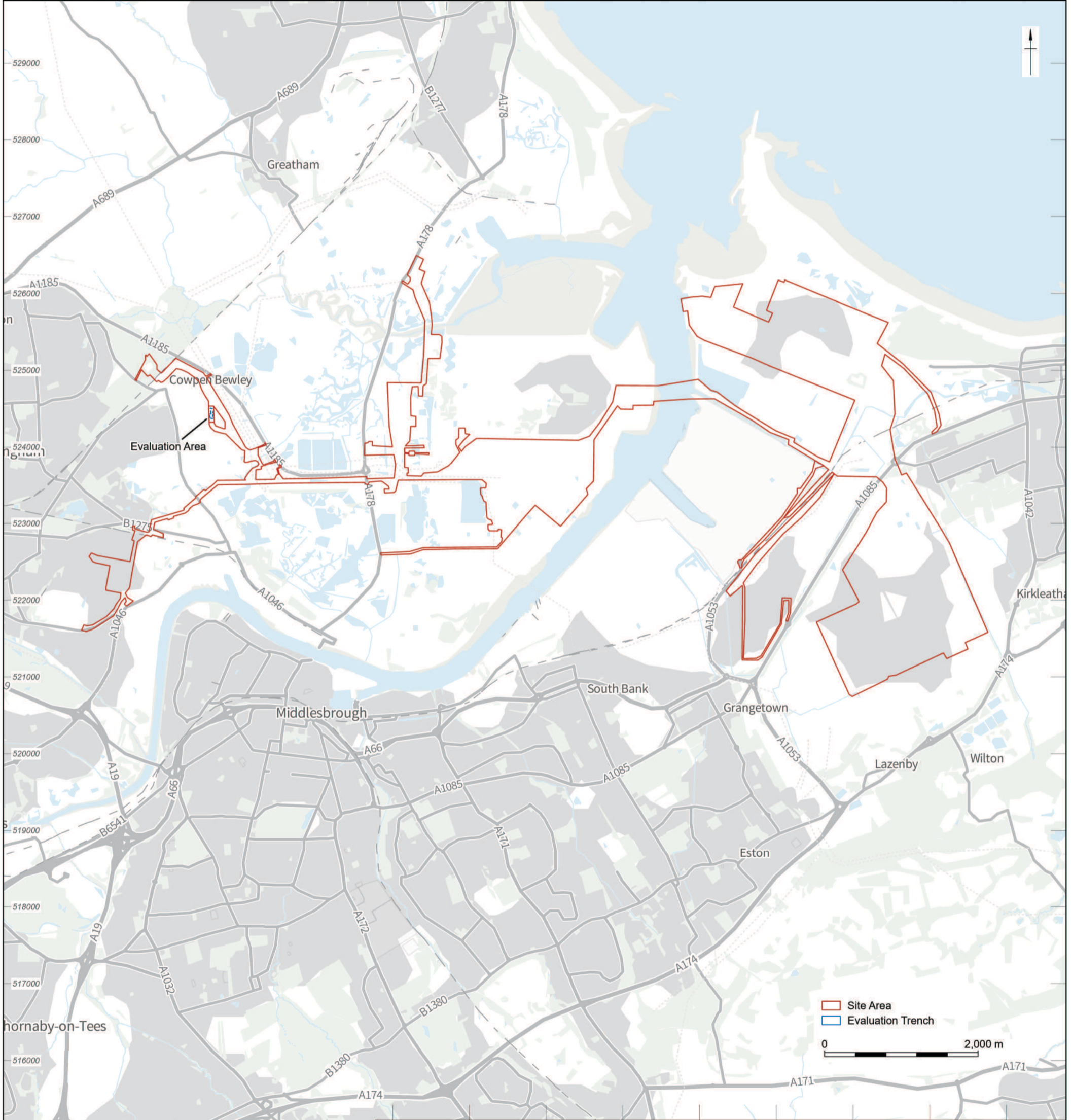
FISH Archaeological Objects Thesaurus

**Archive:**

Physical Archive - to be deposited with Tees Archaeology;

**Reports in OASIS:**

Daniel, P., (2024). *H2Teesside project, land near Cowpen Bewley, County Durham: Archaeological Evaluation*. Wessex Archaeology: Wessex Archaeology



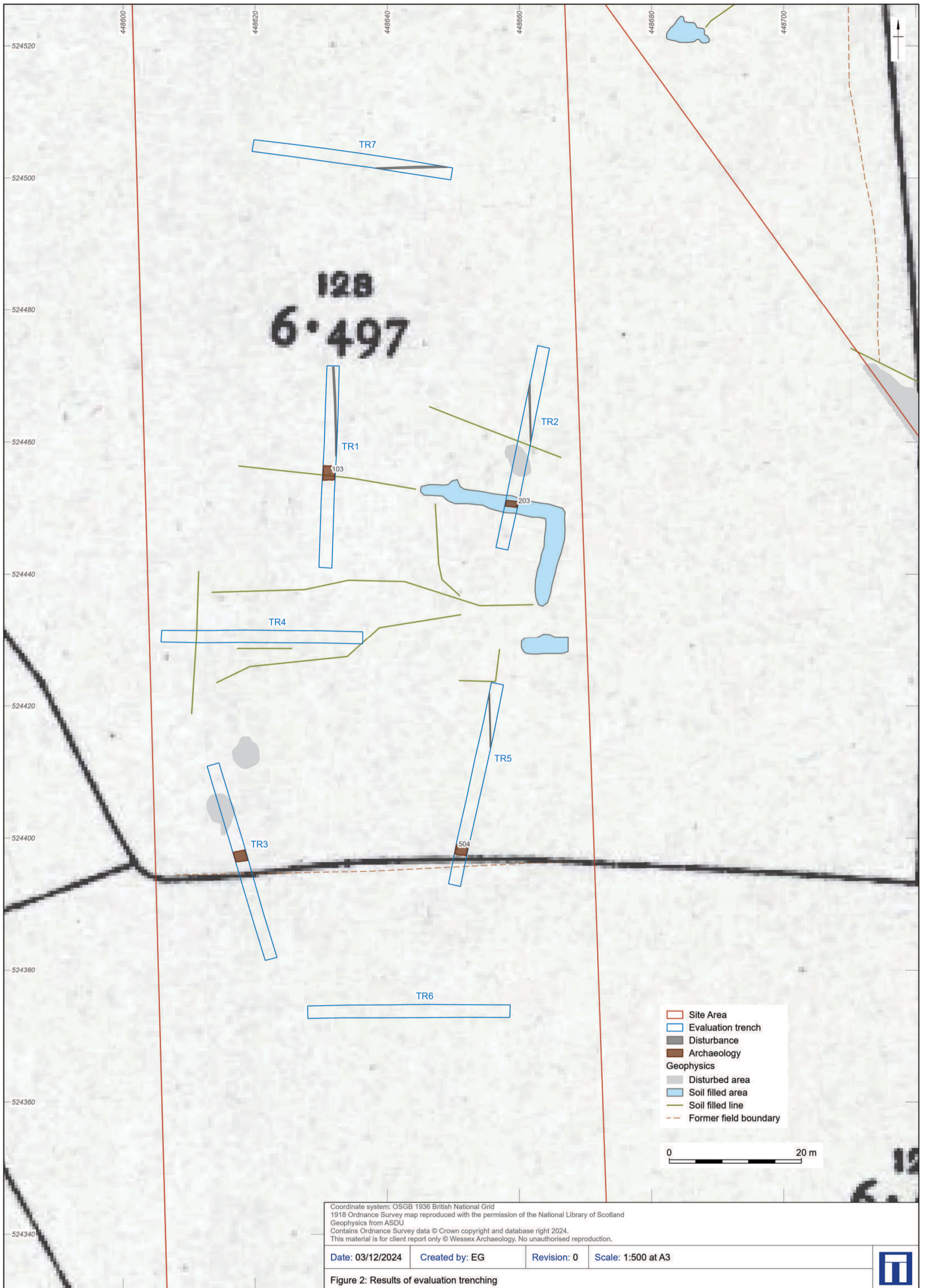
Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2024.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 03/12/2024    Created by: EG    Revision: 0    Scale: 1:50,000 at A3

Figure 1: Location of evaluation area and wider development site







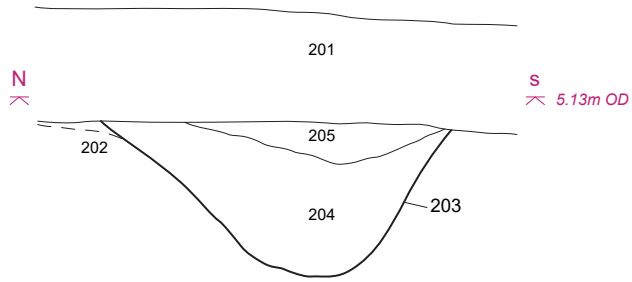
Coordinate system: OSGB 1936 British National Grid  
 1918 Ordnance Survey map reproduced with the permission of the National Library of Scotland  
 Geophysics from ASDU  
 Contains Ordnance Survey data © Crown copyright and database right 2024.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 03/12/2024	Created by: EG	Revision: 0	Scale: 1:500 at A3
------------------	----------------	-------------	--------------------

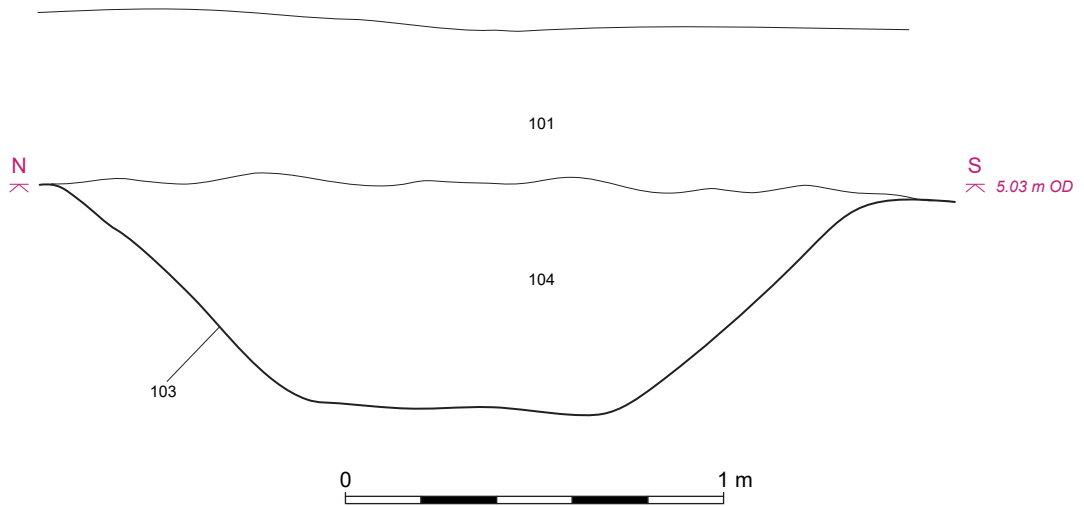
Figure 2: Results of evaluation trenching



West facing section of ditch 203



West facing section of ditch 103



This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 02/01/2025 Created by: EG Revision: 0 Scale: 1:20 at A4



Figure 3: West facing section of ditch 203 and ditch 103



Figure 4: Trench 6, north-facing representative section, 1 m scale



Figure 5: Trench 2, west-facing section of ditch 203, 1 m scale



Figure 6: Trench 1, west-facing section of ditch 103, 2 m scale



Figure 7: Trench 5, east-facing section of ditch 504, 1 m scale



Figure 8: Trench 4, looking east, 2 m scale and 1 m scale



Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB  
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk