



STORY CONTRACTING LTD

THE IRON LINE PROJECT: RSPB HODBARROW

**WRITTEN SCHEME OF INVESTIGATION FOR AN
ARCHAEOLOGICAL WATCHING BRIEF**

APRIL 2025

DATE ISSUED: April 2025
JOB NUMBER: CL13062
REPORT NUMBER: 1
VERSION: V0.1
STATUS: Draft

STORY CONTRACTING LTD

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL WATCHING BRIEF

PREPARED BY:

Frank Giecco Technical Director



APPROVED BY:

David Jackson Regional Manager



This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.



Wardell Armstrong is the trading name of Wardell Armstrong LLP, Registered in England No. OC307138.

Registered office: Sir Henry Doulton House, Forge Lane, Etruria, Stoke-on-Trent, ST1 5BD, United Kingdom

UK Offices: Stoke-on-Trent, Birmingham, Bolton, Bristol, Bury St Edmunds, Cardiff, Carlisle, Edinburgh, Glasgow, Leeds, London, Newcastle upon Tyne and Truro. International Office: Almaty .

ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

CONTENTS

1	INTRODUCTION AND CONTEXT OF THE PROJECT.....	1
2	BACKGROUND	2
	Site and Search Area	2
	Historical Development.....	2
3	THE ARCHAEOLOGICAL WATCHING BRIEF AND PHOTOGRAPHIC SURVEY	3
4	FINDS.....	6
5	ENVIRONMENTAL SAMPLES	6
6	REPORTING	7
7	PUBLICATION	7
8	ARCHIVE	8
9	HEALTH AND SAFETY POLICY	8
	Risk Assessments.....	8
10	STAFFING AND COMPANY SUMMARY.....	9
11	BIBLIOGRAPHY	13

1 INTRODUCTION AND CONTEXT OF THE PROJECT

Wardell Armstrong (WA) has been commissioned by the Story Contracting Ltd (hereafter referred to as 'the client') to prepare a Written Scheme of Investigation (WSI) for a watching brief to be maintained during groundworks associated with two distinct elements of the scheme (see below) and a photographic survey of Townsey Hall Windmill.

The response from Jeremy Parsons (Historic Environment Officer) dated 23rd September 2023 (Ref# JNP/4232249) on behalf of Cumberland Council states the following:

"I therefore recommend that, in the event planning consent is granted, an archaeological watching brief is undertaken during the course of construction of two elements of the scheme: the proposed footpath to Hodbarrow Beacon, and the proposed car park access located to the north of the proposed welcome building. Furthermore, I also recommend that a photographic record of Towsey Hole Windmill should be carried out prior to the construction work commencing. This programme of archaeological work should be commissioned and undertaken at the expense of the developer and can be secured through the inclusion of a condition in any planning consent. I suggest the following form of words: Prior to the commencement of development, a written scheme of investigation for: 1) an archaeological watching brief; and 2) a photographic record of Towsey Hole Windmill, must be submitted by the applicant and approved by the Local Planning Authority. Once approved, the scheme shall be implemented in full with an archaeological watching brief and a photographic record being undertaken by a qualified archaeologist. Within two months of the completion of the development, a digital copy of the archaeological report shall be furnished to the Local Planning Authority".

Reasons: Watching brief - To afford reasonable opportunity for an examination to be made to determine the existence of any remains of archaeological interest within the site and for the investigation and recording of such remains. Photographic record of Towsey Hole Windmill - To ensure that a permanent record is made of the building of architectural and historical interest prior to its alteration as part of the proposed development.

The proposed watching brief also follows a previous desk-based study of the site (Wardell Armstrong LLP 2024) updated in March 2025 (Wardell Armstrong LLP 2025) associated with the proposed development. This work highlighted that development site lies within an area of very high archaeological potential proven to retain upstanding and sub-surface archaeological remains some of which are of National importance, such as the Hodbarrow Beacon a scheduled ancient monument (NHLE 1007097). Any works on the Beacon, including archaeological recording will be detailed in a Scheduled Monument Application (which will be supported by a separate standalone WSI) for Scheduled Monument Consent (SMC) to undertake these works.

2 BACKGROUND

Site and Search Area

The Iron Line Project aims to enhance public access and understanding of the RSPB Hodbarrow Site. Broadly, the proposals are for the provision of a new welcome building towards the north-eastern extent of the site, to include a café and gallery space and associated parking, and for the enhancement of existing features throughout the site, such as the upgrading of the existing pathways to create more space for nature and the provision of associated signage and furniture. In addition, several of the upstanding heritage features will be considered for repurposing, to preserve them from further deterioration; there are proposals for the windmill to be used as a camera obscura, for the scheduled lighthouse to be made structurally sound and for the base of the iron lighthouse to be made more robust.

Historical Development

This is intended only as a summary of historical developments around the proposed development site.

During the prehistoric period, the coastline in the vicinity of the site was exploited, at least seasonally, evidenced by footprint evidence (HER 44596), and possibly more permanently, suggested by the recovery of human remains (HER 43333), though the context of these has likely been lost by later mining operations.

Throughout the medieval and much of the post medieval period, agriculture dominated the landscape, and the intertidal/ low lying land would have been fertile. The Hodbarrow site was farmed by three landholdings, Red Hill (HER 43711), New Hall Farm (HER 41922) and Hodbarrow (HER43729), and some of the field boundaries associated with these survived into the 19th century; the windmill is also associated with this phase of land use (HER 5530).

Drastic changes occurred within the site boundary with the discovery of the largest body of ore in England in 1856, although earlier, unsuccessful prospection had occurred in the vicinity of Hodbarrow Point. Initial mining structures and pits were established in the 1860s and 1870s, supported by quarry sites, clay extraction sites and a brickworks. Vast expansions in mining operations had occurred by the 1890s and continued into the 20th century, and this resulted in a large number of structures and associated infrastructure being constructed across the site boundary in this period. The methods of extraction likely impacted on any earlier archaeological remains, although the industrial activity itself is of archaeological interest. The mine eventually closed in 1968 and was followed by a thorough dismantling of upstanding structures. Despite this, the site visit has confirmed that there is the potential for

upstanding remains to survive.

Visible features within the present landscape represent several phases of evolution of site-use, as summarised below:

- 18th century agricultural landscape: windmill (HER 5530), Hodbarrow Farm;
- Early 19th century prospection: timber sleepers;
- 1866 initial mining landscape: lighthouse (NHLE 1007097); scheduled monument;
- 1870s-1890s mine expansion: former shaft; former building; bridge wall; floor surfaces
- Mid-20th century mining: wall corner; OS trigpoint pillar;
- 1968/9 Demolition of mine: areas of rubble and uncertain structural remains.

3 THE ARCHAEOLOGICAL WATCHING BRIEF AND PHOTOGRAPHIC SURVEY

The definition of an archaeological watching brief is *‘a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, in an inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.’* (CIFA 2020a).

The purpose of a watching brief is to:

- *allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works.*
- *Provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.*

During the project, Wardell Armstrong will adhere to the following guidelines:

- *Standard and Guidance for an Archaeological Evaluation*, Chartered Institute for Archaeologists: Reading (CIFA 2020a).
- *Code of Approved Conduct for the Regulation of Arrangements in Field Archaeology*, Chartered Institute for Archaeologists: Reading (CIFA 2020b).

- *Wardell Armstrong: Excavation Manual*, Wardell Armstrong Archaeology, internal document, edition 1.4 (WA 2020).

This archaeological watching brief will comprise the archaeological monitoring of all significant groundworks associated with the construction of the new footpath to Hodbarrow Beacon and on the area of the new car park and access to the north of the new welcome building.

The general aims of the watching brief are to:

- determine the character, date and extent of any surviving archaeological deposits in the two areas that require archaeological monitoring;
- disseminate the results of the fieldwork through an appropriate level of reporting.

Any archaeological features encountered will be cleaned by hand and all features will be recorded in plan according to the Wardell Armstrong standard procedure as set out in the Excavation manual (WA 2021). If required archaeological features exposed will be sample excavated; which will typically involve the 50% sampling of discrete features, 25% of linear features with a non-uniform fill and 10% of linear features with a uniform fill. It is understood that the level of recording will always have to take into consideration health and safety constraints which may impact on the level of recording possible.

A photographic survey will also be undertaken of Towsey Hole Windmill that will follow guidance issued for a Level 1 building survey set out in the recording levels described in *Understanding Historic Buildings: A Guide to Good Recording Practice* (Historic England 2016). A Level 1 survey is essentially a basic photographic record, supplemented by the minimum of information needed to identify the building's location, age and type. Only if circumstances and objectives allow will any drawings be produced, and these are likely to take the form of sketches.

All fieldwork will be carried out in accordance with codes and practices outlined by the Chartered Institute for Archaeologists regarding archaeological watching briefs (CIfA 2020a, *Standards and Guidance: Archaeological Watching Brief*). A Harris matrix will be compiled for stratified deposits to provide a detailed record of the stratigraphic sequence, according to the conventions written in the WA LLP excavation manual.

All non-modern finds will be collected and retained for processing. Ceramics and animal bone will be collected in bulk and recorded by context. Significant in situ finds will be recorded in three dimensions prior to collection. A metal detector will be utilised to maximise the collection of metal artefacts from the excavated spoil, in accordance with current legislation.

Any environmental evidence found during the work will be sampled according to the Wardell Armstrong LLP standard environmental sampling procedure and nationally agreed procedures (English Heritage 2011, *Environmental Archaeology: A Guide to the Theory and Practice of Methods from Sampling and Recording to Post-Excavation*). The sampling will typically take the form of bulk samples of 40 litre volume, taken from the full range of context types encountered.

The palaeoenvironmental assessment will be undertaken of deposits identified during the fieldwork through the sampling of cut features, buried soils and occupation layers, in order to maximise the recovery of faunal remains (e.g. fish bones) and ecofacts.

If hearths, kilns or ovens (of whatever period, date or function) are identified during the fieldwork, provision will be made to collect at least one archaeo- magnetic date to be calculated from each individual hearth surface (or in the case of domestic dwellings sites a minimum of one per building identified). Where applicable, samples to be collected from the site and processed by a suitably trained specialist for dating purposes. This specific aspect of the sampling strategy will also be discussed with the client and HE.

Should any human remains be discovered during the archaeological evaluation the local police and coroner's office will be contacted immediately. Further excavation or disturbance of the remains will cease until the excavation director is advised formally by the legal authorities that work may continue.

All written records will utilise the WA pro-forma record sheets. Plans and sections will be drawn on water resistant permatrace. Plans will be drawn to a scale of 1:20 and sections at 1:10. A full photographic record of all contexts will be maintained in monochrome and digital formats. All photographs will include a clearly visible, graduated metric scale. A register of all photographs will be maintained. A combination of multi and single context planning will be utilised as appropriate.

Any electronic survey work will be undertaken using a Trimble R10 GPS System and will be transferred into a CAD environment. The site will be levelled with respect to the Ordnance Datum, and the trenches will be tied into the National Grid.

Sufficient notice will be given to Jeremy Parsons (Historic Environment Officer), prior to the start of works and the opportunity given to inspect the areas under archaeological monitoring.

4 FINDS

Finds analysis will be under the direction of Megan Stoakley, Finds and Archives Officer. WA LLP will undertake first aid conservation, but if further conservation is required following the production of an assessment report, there will be extensive consultation with appropriate specialists, the Local Planning Archaeologist (Jermey Parsons) and representatives of the client. Should the finds assemblage merit analysis at our main Carlisle.

Specialist services to be provided as required, by:

Illustration	Helen Phillips WA LLP.
Prehistoric Pottery	Rob Young PhD, Archaeological Consultant.
Romano-British Pottery	Louise Hird, Archaeological Consultant.
Medieval Pottery	Sue Thompson WA LLP.
Post Medieval Pottery	Megan Stoakley WA LLP
Lithics	Andy Peachey BA, WA LLP.
Glass	Gail Drinkall, BA, MA, PhD.
Wood	Steve Allan, YAT.
Leather	Rowan Gillis, AOC Archaeology.
Textiles	Rowan Gillis, AOC Archaeology.
Conservation	Karen Barker, Archaeological Consultant.
Osteoarchaeology	Megan Stoakley, BA Hons MA FCIA, WA LLP.
Zooarchaeology	Megan Stoakley, BA Hons MA FCIA, WA LLP.

5 ENVIRONMENTAL SAMPLES

Detailed work on environmental samples will take place at the WA LLP premises at Carlisle. Further specialist services will be utilised at the Wardell Armstrong LLP premises, if required. Environmental samples will be processed under the direction of Katherine Bostock, WA LLP Environmental Archaeologist, in consultation with the regional scientific advisor for Historic England.

Recommendations will also be made regarding the suitability of recovered organic deposits and ecofacts for radiocarbon dating. This will only be undertaken in consultation with the client and the regional scientific advisor for Historic England.

6 REPORTING

The fieldwork programme will be followed by the production of an assessment report in accordance with the best practice guidelines as defined by the ClfA. The report will include details of the planning history of the site, site geology and a summary of the archaeological and historical background. The report will contain a phased summary of the archaeological sequence encountered at the site, containing brief descriptions of archaeological structures, features and deposits and incorporating details of any artefacts or environmental evidence (where sampled).

The report will contain illustrative material including maps, plans, sections, drawings and photographs, as necessary at a recognisable planning scale (1:10, 1:20, 1:50 or 1:100, as appropriate). A location plan of the site, at an appropriate scale and tied into the OS National Grid, will be included. A plan showing the location and layout of the areas of investigation, at an appropriate scale, will also be included.

The report will identify areas of defined archaeology, and an assessment and statement of the actual and potential significance of the archaeology will be made within the broader context of regional and national archaeological priorities.

Copies of the final report will be made available for comment no later than two months following the completion of all fieldwork, once approved by the client.

Confidentiality: all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

7 PUBLICATION

If justified, the findings of the archaeological evaluation may be published in summary form in the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society. Any further archaeological mitigation works at the site will be subject to an updated written scheme of investigation for archaeological recording. Any additional work resulting in the need for publication will require an updated project design which will be submitted following the assessment of the recording results and in full agreement with the client and LPA.

Wardell Armstrong support the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index and access to the extensive and

expanding body of grey literature created because of developer-funded archaeological fieldwork. Once approval has been granted by the client, the results of this study will be made available by Wardell Armstrong as a part of this national project.

8 ARCHIVE

The project archive will be prepared in accordance with the recommendations in Brown (2011) *'Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation'*. The physical archive will be deposited within an appropriate repository.

9 HEALTH AND SAFETY POLICY

Wardell Armstrong is fully compliant with HSE guidance and legislation. It is the duty of all personnel, under the Health and Safety at Work Act etc 1974, to take reasonable care for the health and safety of him/herself and other persons who may be affected by his/her acts or omissions at work. He/she must also co-operate with the Technical Director regarding any duty or requirement imposed on the Technical Director or any other person by or under any of the relevant statutory provisions so far as it is necessary to enable that duty or requirement to be performed or complied with.

Any personnel contravening relevant statutory provision may be prosecuted in a Sheriff Court. All personnel taking part in field work have a responsibility to adhere to sensible standards of behaviour. Personnel are made aware that fieldwork activities have inherent hazards which staff members minimise with appropriate safety precautions. However, the potential dangers make it imperative that personnel co-operate by behaving responsibly to reduce the risk of accidents.

All project work will be undertaken in accordance with the Federation of Archaeological Managers and Employers Health and Safety Manual (2015).

Risk Assessments

WA will carry out a risk assessment prior to commencement of fieldwork and, where appropriate, a COSHH assessment. Risks and measures to reduce risk will be communicated to all working on and visiting the site. During the fieldwork, appropriate PPE will always be utilised BY WA staff. The client will be provided with an approved copy of the WA Risk Assessment.

Once on site, the relevant health and safety documents will be assessed, and any variations will be highlighted and added to the appropriate assessment. These will be re-evaluated periodically during the fieldwork to make sure that they remain consistent to the site-specific

risks. All members of WA and visitors will be required to be inducted and sign these documents on first arrival to site to show that they have read and understood the contents and any variations will be communicated as required.

10 STAFFING AND COMPANY SUMMARY

The work will be undertaken under the overall direction of Frank Giecco MCIfA, WA LLP Technical Director. The archaeological watching brief will be undertaken by a suitably qualified, experienced field archaeologist who will be fully briefed on the archaeological background prior to the commencement of any construction related activities.

Wardell Armstrong LLP has a fully staffed professional field team and is highly experienced in the assessment and recording of archaeological sites and monuments throughout the United Kingdom.

11 BIBLIOGRAPHY

- British Geological Survey (BGS) 2023. *Geology of Britain Viewer*
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> – Accessed March 2023
- Brown, D.H. 2011. *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*. Archaeological Archives Forum
- CIfA. 2020a. *Standard and Guidance for an Archaeological Watching Brief*. Reading: Chartered Institute for Archaeologists
- CIfA. 2020b. *Code of Approved Conduct for the Regulation of Arrangements in Field Archaeology*. Reading: Chartered Institute for Archaeologists
- CIfA. 2020c. *Standards and Guidance for Finds Work*. Reading: Chartered Institute for Archaeologists
- English Heritage. 2011. *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*. London: English Heritage
- Historic England. 2016. *Understanding Historic Buildings: A Guide to Good Practice*. London: Historic England
- UKIC. 1990. *Guidelines for the preparation of Excavated archives for long-term storage*, United Kingdom Institute for Conservation of Historic and Artistic Works. London
- Wardell Armstrong LLP. 2020. *Wardell Armstrong: Excavation Manual*. Carlisle: Grey Literature Report
- Wardell Armstrong LLP. 2023. *The Iron Line Project: RSPB Hodbarrow, Archaeological Desk Based Assessment*: Unpublished Grey Literature Report CL12812
- Wardell Armstrong LLP. 2025. *The Iron Line Project: RSPB Hodbarrow, Updated Archaeological Desk Based Assessment*: Unpublished Grey Literature Report CL13062



KEY

Site Boundary

Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

Contains OS data © Crown Copyright and database right 2025
Contains data from OS Zoomstack, © 2025 Microsoft Corporation
© 2025 Maxar ©CNES (2025) Distribution Airbus DS © 2025 TomTom

Site Boundary from file 'PDF redline boundary.pdf' received on 18/03/25 from Story Contracting LTD

A	First Issue	04/04/25	HP	FG	FG
REVISION	DETAILS	DATE	DRAWN	CHKD	APPD

CLIENT

STORY CONTRACTING LTD

PROJECT

THE IRON LINE PROJECT: RSPB HODBARROW

DRAWING TITLE

DETAILED SITE LOCATION

DRG No.	CL13062-001	REV	A	SUIT. CODE	---
DRG SIZE	A3	SCALE	1:10,000	DATE	04/04/2025
DRAWN BY	HP	CHECKED BY	FG	APPROVED BY	FG


PART OF 



STOKE-ON-TRENT

Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM

Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON

41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BRISTOL

Temple Studios
Temple Gate
Redcliffe
Bristol
BS1 6QA
Tel: +44 (0)117 203 4477

BURY ST EDMUNDS

Armstrong House
Lamdin Road
Bury St Edmunds
Suffolk
IP32 6NU
Tel: +44 (0)1284 765 210

CARDIFF

Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE

Marconi Road
Burgh Road Industrial Estate
Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH

Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW

24 St Vincent Place
Glasgow
G1 2EU
Tel: +44 (0)141 428 4499

LEEDS

36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON

Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE

City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

TRURO

Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International office:

ALMATY

29/6 Satpaev Avenue
Hyatt Regency Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310