

## 1MC12 - Stage 2 - Main Works Civils for C2 and C3 Sectors

# Survey Report for Construction Integrated Recording at C31073 and C31081 Blackgrounds Farm Northamptonshire

Document no: 1MC12-EKF-EV-REP-CS10-000497

Version	Date	Author	Checked by	Approved by	Revision details	EKFB Reviewer (EKFB Contractors only)
C01	23.11.2023	Eleonora Massacci	Katie-Morag Hutton	Mike Kimber	First Issue	Carsten Mieves

Stakeholder review required (SRR)	Purpose of SRR
<input type="checkbox"/> County / District / London Borough Council	<input type="checkbox"/> Acceptance
<input type="checkbox"/> LOV	<input type="checkbox"/> Approval
<input type="checkbox"/> LUL	<input type="checkbox"/> No Objection
<input type="checkbox"/> NRL	<input type="checkbox"/> Consent
<input type="checkbox"/> TFL	
<input type="checkbox"/> Utilities Company	
<input type="checkbox"/> Other (please specify)	

HS2 Ltd - Code 5 - Not Client Reviewed

# Contents

1	Introduction.....	3
2	Survey Methodology .....	3
2.1	Set out Survey .....	3
2.2	Post-Survey Processes.....	3
2.3	Archive Deposition .....	4
3	Acknowledgements.....	4
4	References .....	5
5	Glossary of Terms.....	5
6	List of Illustrations.....	7

Figure 1 Site Plan

7

# 1 Introduction

- 1.1.1 Headland Archaeology (UK) Ltd was commissioned to undertake Construction Integrated Recording at C31073 – C31081 Blackgrounds Farm (site code: 1C22BLCCI; 1MC12-EKF-EV-REP-CS10-000495). This report details the methodology for setting out and surveying the archaeological works.

# 2 Survey Methodology

## 2.1 Set out Survey

- 2.1.1 The extent of the excavation was located to a horizontal accuracy of  $\pm 20\text{mm}$  using Global Navigation Satellite System (GNSS) equipment with Real Time Kinematic (RTK) corrections. The area was assigned a unique ID in accordance with HS2 Ltd Asset Information Management System (AIMS).
- 2.1.2 The limits of excavation were surveyed using RTK GNSS equipment to a 3-dimensional accuracy of  $\pm 20\text{mm}$ . In the case of archaeology, extents were surveyed of all features and the limits of slots, feature bases, and sections were surveyed for all interventions. Complex archaeology was hand drawn with the drawing points being surveyed.
- 2.1.3 The equipment used comprised a carbon fibre detail pole and a Trimble R10 Receiver connected to a TSC5 Handset. It was connected via a SIM card run on a Roaming network to connect to the Trimble VRS Now service for corrections. There was good cellular signal in the survey area meaning a repeater signal, permanent ground markers or other aides were not required.
- 2.1.4 All survey was undertaken by appropriately trained and competent Headland staff. All features were surveyed in accordance with the Employer's Geographic Information System Standards: Section 5.9 Primary data collection using GPS receivers (HS2-HS2-GI-STD-000-000002), the Employer's Technical Standards - Specification for historic environment investigation (HS2-HS2-EV-STD-000-000035) and Headland Archaeology's technical specifications, which are compliant with Historic England Metric Survey Specifications (HE, 2015).

## 2.2 Post-Survey Processes

- 2.2.1 All spatial data recorded on Trimble equipment was saved on the unit's internal storage and transferred via Trimble Sync Manager. Survey data was processed using Trimble Business Centre and exported as a Shapefiles. After processing, the data was gathered in GIS software and projected into the Ordnance Survey National Grid (ESPG:27700 CSGB- 1936).
- 2.2.2 All figures comprised of polygons, polylines, and points in accordance with the requirements of GIS industry and Headland Archaeology's internal standards and practices. All GIS works comply with the *Employer's* Geographic Information System Standards (HS2-HS2-GI-STD-000-000002).

- 2.2.3 Figures 1 illustrates the primary survey data converted into GIS. Hardcopy maps derived from GIS shall be exported to PDF format, unless otherwise specified by the Employer as per Geographic Information System Standards and Specification (HS2-HS2-GI-STD-000-000002; HS2-HS2-GI-SPE-000-000004).
- 2.2.4 Metadata will be supplied with the GIS data in accordance with the *Employer's* Metadata Standard - (HS2-HS2-GI -STD-000-000007).

## 2.3 Archive Deposition

- 2.3.1 The digital data is stored on Headland Archaeology servers and backed up daily. The archive is prepared and stored according to industry best practice and standards (ClfA 2014a, 2014b, 2014c). The data will be submitted to HS2 as per the Employer's Historic Environmental Digital Data Management and Archiving Procedure (HS2-HS2-EV-STD- 000-000040).

# 3 Acknowledgements

**Project Manager:** Mike Kimber

**Site Director:** Beth Doyle & Robyn Tranter

**Field Archaeologists:**

**Illustrator:** Eleonora Massacci

## 4 References

Title	Reference
AWH -Project Plan for Archaeological monitoring and Construction Integrated Recording – Route Wide	1EW03-FUS-EV-REP-C000-009812
Fieldwork Report for Construction Integrated Recording at C31073 and C31081 Blackgrounds Farm Northamptonshire	1MC12-EKF-EV-REP-CS10-000495
Chartered Institute for Archaeologists (ClfA), 2014a. Code of Conduct.	ClfA 2014a
Chartered Institute for Archaeologists (ClfA) 2014c Standard and Guidance for Archaeological Excavation	ClfA 2014b
Chartered Institute for Archaeologists (ClfA) 2014d Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives	ClfA 2014c
HS2 Technical Standard: Cultural Heritage GIS Specification	HS2-HS2-GI-SPE-000-000004
HS2 Technical Standard: Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy	HS2-HS2-EV-STR-000-000015
HS2 Technical Standard: Specification for historic environment investigations	HS2-HS2-EV-STD-000-000035
HS2 Technical Standard: Historic Environment Digital Data Management and Archiving Procedure	HS2-HS2-EV-STD-000-000040

## 5 Glossary of Terms

5.1.1 The following terms have been used in this report:

- **Archaeological Contractor** – the organisation undertaking the specific historic environment works for the Contractor.
- **Contractor** – the organisation undertaking the Enabling Works on behalf of the Employer.
- **Detailed Desk Based Assessment (DDBA)** – analytical document that builds on the information gathered previously in the Environmental Statement to address particular issues, questions or uncertainties within a given area. It may be developed to provide a more detailed understanding of the resource in an area to inform design development or construction programming.
- **Employer** – HS2 Ltd, the organisation responsible for delivery of HS2 Phase One Scheme and all terms and conditions, policies, procedures, and payments.
- **Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy (GWSI: HERDS)** – the framework for delivering all historic environment investigations undertaken as part of the HS2 Phase 1 programme.

- **Location** – a specific HS2 worksite or group of worksites that are being addressed as a combine historic environment investigation programme of assessment, evaluation and investigation.
- **Project Plans** – specification document for each specific package of activity (e.g. a survey, desk-based assessment, excavation, recoding project). The plans would respond to the Specific Objectives set out in the GWSI: HERDS and be delivered within an agreed budget.
- **Works** – the specific historic environment assessment, evaluation or investigation works at each location.

## 6 List of Illustrations

1MC12-EKF-EV-MAP-CS10-000038	Maps for Survey Report for Construction Integrated Recording at C31073 and C31081 Blackgrounds Farm Northamptonshire
------------------------------	---

*Figure 1 Site Plan*

## 1MC12 - Stage 2 - Main Works Civils for C2 and C3 Sectors

# Maps for Survey Report for Construction Integrated Recording at C31073 and C31081 Blackgrounds Farm Northamptonshire

Document no: 1MC12-EKF-EV-MAP-CS10-000038

Revision	Date	Author	Checked by	Approved by	Revision details	EKFB Reviewer (EKFB Contractors only)
C01	29.02.2024	Courtney Mainprize	Katie-Morag Hutton	Mike Kimber	First issue	Carsten Mieves
C02	14.10.2024	Karolina Saxerbo Sjoberg	Katie-Morag Hutton	Mike Kimber	Revised in Line with Comments	Carsten Mieves
C03	02.12.2024	Lei Ding	Katie-Morag Hutton	Mike Kimber	Revised in Line with Comments	Carsten Mieves

Stakeholder review required (SRR)	Purpose of SRR
<input type="checkbox"/> County / District / London Borough Council	<input type="checkbox"/> Acceptance
<input type="checkbox"/> LOV	<input type="checkbox"/> Approval
<input type="checkbox"/> LUL	<input type="checkbox"/> No Objection
<input type="checkbox"/> NRL	<input type="checkbox"/> Consent
<input type="checkbox"/> TFL	
<input type="checkbox"/> Utilities Company	
<input type="checkbox"/> Other (please specify)	

HS2 Ltd - Code 1 - Accepted



**Legend**

LLAU	Archaeology	Modern	Natural	Structure	Tree Throw
Limit of Excavation	Deposit	Excavated	Sondage		



Map Number	Figure 1
Map Name	Site Plan
HS2 EKFB - 1C22BLCCI - C31073 and C31081	

**HS2** HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issue incomplete in any way.

Registered in England. Registration number 06791686.  
Registered office: Eland House, Bressenden Place, London SW1E 5DU.

© Crown copyright and database rights 2024.  
Ordnance Survey Licence Number 100049190.

Doc Number: 1MC12-EKF-EV-MAP-CS10-000038\_C03

Scale at A3: 1:800

**Date: 13/12/24**

Accepted Code 1 - Accepted