



TECHNICAL APPENDIX 10.3: NETHERTON HUB PROGRAMME OF ARCHAEOLOGICAL WORK



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WRITTEN SCHEME OF INVESTIGATION



Netherton Hub

Programme of Archaeological Work

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HER Event/Consultation No.	-

This document has been prepared in accordance with CFA Archaeology Ltd standard operating procedures.

Netherton Hub

Programme of Archaeological Work

Written Scheme of Investigation

1. Introduction

The Proposed Development would cover an area of c.230 hectares (ha) and involve the installation of the following new elements: 400kV Substation, 132kV Substation, High Voltage Direct Current (HVDC) Switching Station, Spittal to Peterhead HVDC Converter Station, Eastern HVDC Green Link 3 (EGL3) Converter Station, an Operations Depot and Store. The Proposed Development would also include the following ancillary works: temporary construction compounds and laydown areas, site clearance works, earthworks (including landscaping), permanent access from the public road network and relevant public road improvements, the formation of internal access roads, underground cables connecting the components on the Site, drainage, permanent water supply, lighting, security fencing, biodiversity enhancement measures and the demolition of existing buildings within the Site. The Proposed Development is part of SSEN Transmission's Pathway to 2030 projects. These projects are part of a proposed major upgrade of the electricity transmission network across Great Britain to help deliver United Kingdom (UK) and Scottish Government climate change and energy security targets. They would connect UK based low carbon renewable electricity generation to areas of demand across the country, with the aim of building a cleaner, more secure and affordable energy system for homes and businesses across Great Britain.

Pre-application consultation and subsequent discussion with Aberdeen Council Archaeology Service (ACAS) has identified that consent for any development would be subject to a programme of archaeological work to mitigate the impact of the proposed development. This written Scheme of Investigation (WSI) has been produced by CFA Archaeology to satisfy the requirements of ACAS, on behalf of the planning Authority, for the agreed programme of work. It is considered likely that the majority of any works will be carried out at potentially a pre-application / consent stage.

2. Archaeological Background

An Environmental Impact Assessment Scoping Report was produced and submitted in October 2023. According to this report 5 non designated sites were identified within the site boundary. These comprised four extant farmsteads recorded within NRHE and the ruin of a house discovered during the walkover survey that matches the location of a structure labelled as Redlums on the Ordnance Survey 1st edition map.

The identified sites were:

- Longleys (Historic Environment Record (HER) NK04NE0096);
- Inverveddie, farmhouse (Canmore 20998);
- Tiffery (HER NK04NW0118);
- Netherton (HER NK04NE0085); and
- Redlum House ruin – identified during walkover survey.

The HER site of Longleys is no longer within the site boundary and lies to the immediate east of the site. The HER site of Tiffery also mainly lies outside of the site, there is a

small overlap with mapped polygon but the standing buildings all lie outside of the current site boundary to the immediate west of the site.

It is recognised within the report that there are also 10 non-designated heritage assets within 250m of the Proposed Development including a range of heritage assets dating from the prehistoric to the post-medieval period. However, the site itself is apparently devoid of any such known remains.

A watching brief was undertaken on GI works between June and August 2023. No features or deposits of archaeological interest were identified (Baker 2023).

3. Aims and Objectives

The aims and objectives of the evaluation are:

- To survey what, if anything survives of a Hydraulic Ram at c. NGR NK 0519 4653 and the remains of 2 buildings to the south of Longleys farmstead and located at NGR NK 05844 46073.
- To establish the presence/absence, extent, condition, character, quality and date of any archaeological features or deposits within the proposed development area through trial trenching evaluation.
- To establish the vulnerability of any archaeological features to the proposed development.
- To propose mitigation measures where appropriate to avoid, reduce or offset any predicted negative impacts on the archaeological resource.

4. Planning Issues

This WSI provides the detailed method statement for the trial trench evaluation and survey of the Hydraulic Ram and the 2 buildings to the south of Longleys Farmstead. This forms Stage 1 of what may be a multi-stage response to the archaeological requirements as discussed with ACAS. The current programme has these works happening potentially prior to planning consent being granted, but if not then the requirement for these works is expected to be secured by a condition. Stage 1 will be used to record the Hydraulic Ram and the 2 buildings to the south of Longleys Farmstead and identify the presence/absence, character and quality of any archaeologically sensitive deposits that may lie within the proposed development area. If features of archaeological significance are found within the development area through trial trenching, then further phases of work to mitigate the archaeologically adverse effects of the development may be required to fully comply with the terms of this WSI.

The evaluation and survey work (Stage 1), along with any work required in mitigation (Stage 2), will be conducted prior to construction work commencing at an affected location.

Stage 2 will involve the implementation of appropriate archaeological mitigation measures, which may consist of further evaluation and/or excavation and recording. Stage 3 will include suitable post-excavation analysis, reporting, and publication of discovered archaeological remains, if appropriate. Further details of Stages 2 and 3 of the work programme cannot be developed until such time as the Stage 1 works have taken place.

Any further mitigation thought necessary will be proposed in writing and specified in *addenda* to this document, to be called *project designs* for any proposed fieldwork at Stage 2, and *post- excavation research designs* for work required at Stage 3. These *addenda*, if required, will be submitted by the applicant for the agreement of ACAS on behalf of the planning authority, prior to the commencement of any archaeological work, which may be specified in the *addenda* documents. In the case of *addenda* relating to Stage 2 works (*project designs*), the onsite works will be implemented in full before any development work proceeds in any relevant development location. ACAS, on behalf of the planning authority, will be the judge of the need for implementation of further stages of the proposed archaeological programme, as set out in this *Written Scheme of Investigation*.

5. Archaeological Methods

5.1 Introduction

The programme of archaeological work will be undertaken in accordance with the guidance provided in the ClfA documents 'Standard for archaeological field evaluation' (ClfA 2023a) and 'Universal guidance for archaeological field evaluation' (ClfA 2023b), and other appropriate ClfA guidance documents (ClfA 2020a and 2020b), and with the ClfA Code of Conduct (ClfA 2022).

The programme of archaeological work will be managed by a qualified archaeologist, preferably a corporate member of the Chartered Institute for Archaeologists (ClfA). The archaeologists undertaking the fieldwork will be appropriately experienced.

The excavation, analysis and reporting of any findings during the works will be, where applicable, subject to the research recommendations in the ScARF National Research Framework.

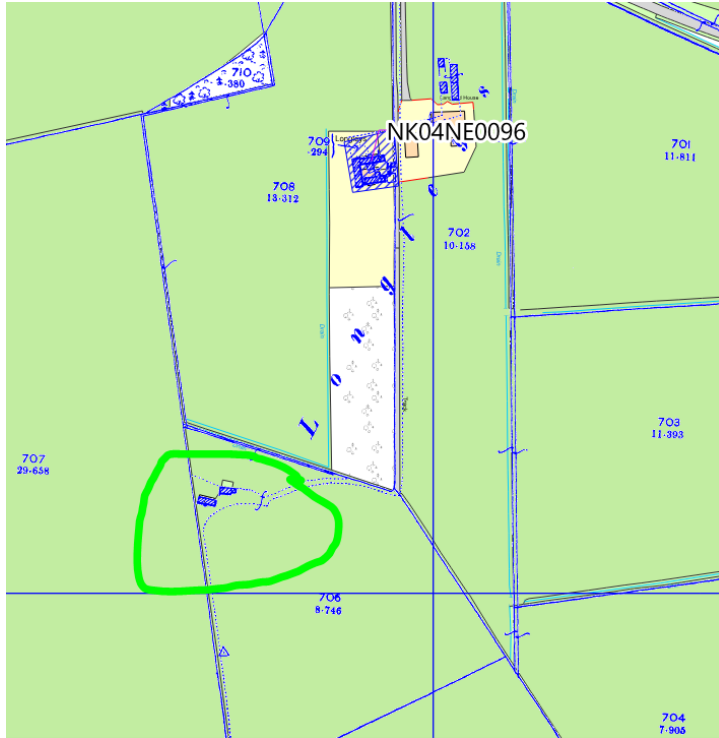
All relevant and applicable health and safety legislation, regulations and approved codes of practice will be respected. Prior to the commencement of any works on site CFA will submit a detailed Health and Safety Risk Assessment to the client.

5.2 Survey

The 2nd Edition OS map of the area indicated the presence of a Hydraulic Ram to the south of Flushing. It is located in one of the main N-S drains running across that part of the site a c. NGR NK 0519 4653 (See below). What survives of this is currently unknown. However, if anything does survive it will be recorded by photographic survey and written record.



To the south of Longleys farmstead, and within the site boundary two structures are mapped on the 1st Edition OS map, (see below). These buildings are still present on current mapping and can be seen of aerial photographs of the site. The report on the monitoring of the GI works also records their presence (Baker 2023). The level of survey will be dependent on their state of preservation which is currently unknown, however, at a minimum this will be photographic and descriptive (Level 0) and at a maximum it will be a Level 1 survey as per the Aberdeenshire council guidance. This will be agreed in advance with ACAS once the state of preservation of the structures is known.



5.3 Trial Trenching

The evaluation will cover the areas shown on Figure 1. The trenching ratio is 5%. The areas and ratio of trenching has been advised by ACAS.

Area	% Ratio of Trenching	Available Area (m2)	Evaluation Area (m2)
1	5%	258,134	12,907
2	5%	167,028	8351
3	5%	63,364	3168
4	5%	144,472	7223
5	5%	40,908	2045
6	5%	52,464	2623
7	5%	41,978	2099

The size of the available area for trenching in each area may be subject to alteration if additional constraints are recognised, such as currently unknown services and ecological constraints. All changes will be agreed with ACAS in advance.

The trenches will be distributed evenly across the individual areas to the required ratio. Trench plans will be supplied by CFA to ACAS in advance of the works.

Trial trenches will provide good coverage of the area while avoiding on-site constraints, such as, services and ecological constraints, and where applicable will target sites identified in the forthcoming EIA report. The location of each trench will be scanned with a Cable Avoidance Tool prior to the commencement of any work.

Topsoil/ overburden removal will be conducted by a machine equipped with a smooth-bladed ditching bucket under close archaeological supervision, to reveal the subsoil surface or the surface of the first significant archaeological level. All excavation after this will be undertaken by hand unless otherwise agreed with ACAS.

Spoil from the trenches will be stored at a safe distance from the trench. Deep excavations will not be left open overnight and as far as possible trenches will be backfilled on the day of excavation.

Samples of any features of archaeological interest will be excavated in order to establish their likely character, date, extent and condition. All such sample excavation will be conducted by hand. The samples excavated will be limited to the minimum considered necessary to achieve the evaluation objectives.

All excavation and on-site recording will be carried out according to ClfA guidelines, principally by drawing, photography and by pro-forma record forms. The stratification of all excavated areas will be fully recorded whether or not significant archaeological deposits have been identified.

The positions of trenches will be recorded using industry standard surveying equipment (GPS or Total Station).

If human remains are identified, they will be left in situ and the police and ACAS will be contacted. If removal is required this will take place in compliance with the Policy Paper *The Treatment of Human Remains in Archaeology*.

6. Reporting

The products of the project will comprise:

- Illustrated reports, describing the results of the Stage 1 works. The report(s) will include all elements normally required by ACAS.
- A Post-Excavation Research Design (PERD) for post-excavation and publication (as appropriate), should no further fieldwork be required.
- The project will be reported using the online OASIS protocol which will include the generation of a summary report for *Discovery and Excavation in Scotland*.

Reports(s) will be produced by the approved archaeological contractor and distributed as required by ELCAS within 4 weeks of the completion of any relevant stage of fieldwork.

An *OASIS Scotland* entry and a *Discovery and Excavation in Scotland Entry* (DES) will be completed.

Any requirement for post excavation analyses will be treated as further mitigation and will require submission and agreement of a PERD, where appropriate. This will be produced within 3 months of ACAS' agreement to the DSR, and any publication

required will be completed within a year of agreement to the PERD, unless agreed otherwise.

The project archive, comprising all record sheets, plans and reports, will be deposited with the NRHE within twelve months of completion of fieldwork and any relevant post-excavation analyses. Copies of reports will be lodged with the Aberdeenshire Council Historic Environment Record. Finds will be subject to the Scots laws of Treasure Trove and Bona Vacantia and will be reported to the Crown Agent for disposal. Appropriate conservation of finds will be conducted before disposal.

7. Mitigation

This section outlines possible mitigation measures that may be required as a result of the Stage 1 work. The client should be aware that any or all of these responses may be required.

ACAS will be the final judge of the significance of any archaeological remains identified and may require full excavation of features to be destroyed by the proposals.

If no or limited remains of archaeological interest are identified during the evaluation then the CFA can recommend that no further work in mitigation will be required prior to development. However, the final decision regarding mitigation lies with Aberdeenshire Council as advised by ACAS.

If substantial remains are revealed, further work may be required, and in these cases additional time and resources will be required. Should substantial remains be discovered the archaeological contractor will make recommendations for mitigation to be discussed between CFA, the client and ACAS.

Mitigation can take several forms depending on the scale and quality of the remains identified. Such measures may include; evaluation, watching briefs and strip map and record excavation of areas prior to any development.

If the *in situ* preservation of archaeological deposits is to be considered as part of any mitigation, engineering advice must be provided regarding the feasibility of such measures on this site. Confirmation of the engineers' views on the feasibility of preservation *in situ* will be required to satisfy Aberdeenshire Council as advised by ACAS.

In the event of further work, a programme of post-excavation analysis and reporting will be required.

Any post-excavation programme may include the results of analysis of artefacts, faunal remains and palaeoenvironmental work. The archaeological contractor would discuss the results of the work within the wider context of the archaeology of this area.

In the event that the results of the investigation are of sufficient significance to merit full publication, this requirement may be secured by a planning condition and proceeding to this stage would be subject to the approval of the client and in consultation with ACAS.

8 Public Engagement & Interpretation

ACAS require a programme of public/community engagement to be undertaken. It is recognised that the evaluation phase of work is not an appropriate juncture for any such activity. The full scope of any programme of public/community engagement will be agreed with ACAS but could include social media/press comms and temporary interpretation boards during archaeological works if the results so merit it. This work would follow the guidelines set out by ALGAO (2023).

9. Project Personnel

Bruce Glendinning BSc PgDip MCIfA will manage this project. Mr Glendinning graduated from the University of Glasgow in 1993 with a BSc in Archaeology. Since then he has worked as a professional archaeologist with many units throughout Scotland and England. He has extensive experience of managing large-scale archaeological projects in both rural and urban environments. In addition to project management he has acted as a consultant for ERM, Environ, RSK, Morrison Homes, Robertson Residential, Apex Hotels, Wimpey Homes, Miller Homes and Stewart Milne Homes amongst many others.

Field Director for CFA will be selected from CFA's pool of Project Officers, all of whom have appropriate experience. CVs for the appropriate staff can be forwarded prior to the start of the project.

Report illustration will be by CFA's Senior Graphic's Officer is **Shelly Werner BSc MPhil PhD MCIfA**. Dr Werner is responsible for the organisation and management of all GIS, CAD and Illustrative material at CFA. She is an experienced illustrator with specialist knowledge in GIS and has worked on a variety of projects in Scotland and England.

We will be pleased to supply CVs of these staff upon request.

10. Monitoring

Close contact will be maintained with the client and ACAS for the purposes of managing the project. Important or unexpected discoveries will be communicated to the client and ELCAS, with whom a monitoring visit will be arranged. Contact numbers for the archaeological contractor will be forwarded to ACAS in advance of the work starting.

ACAS require notification of the start of on-site works. This will be supplied by the CFA in advance of the works.

11. References

Bibliographic

Baker N 2023 *Peterhead Substation Ground Investigations: Data Structure Report*. GUARD Archaeology Technical Report Project 6321

CIfA 2020a *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists, December 2014, updated October 2020.

CIfA 2020b *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*, Chartered Institute for Archaeologists, December 2014, updated October 2020.

CIfA 2022 *Code of Conduct*, Chartered Institute for Archaeologists, December 2014, revised October 2019

CIfA 2023a *Standard for archaeological field evaluation*.

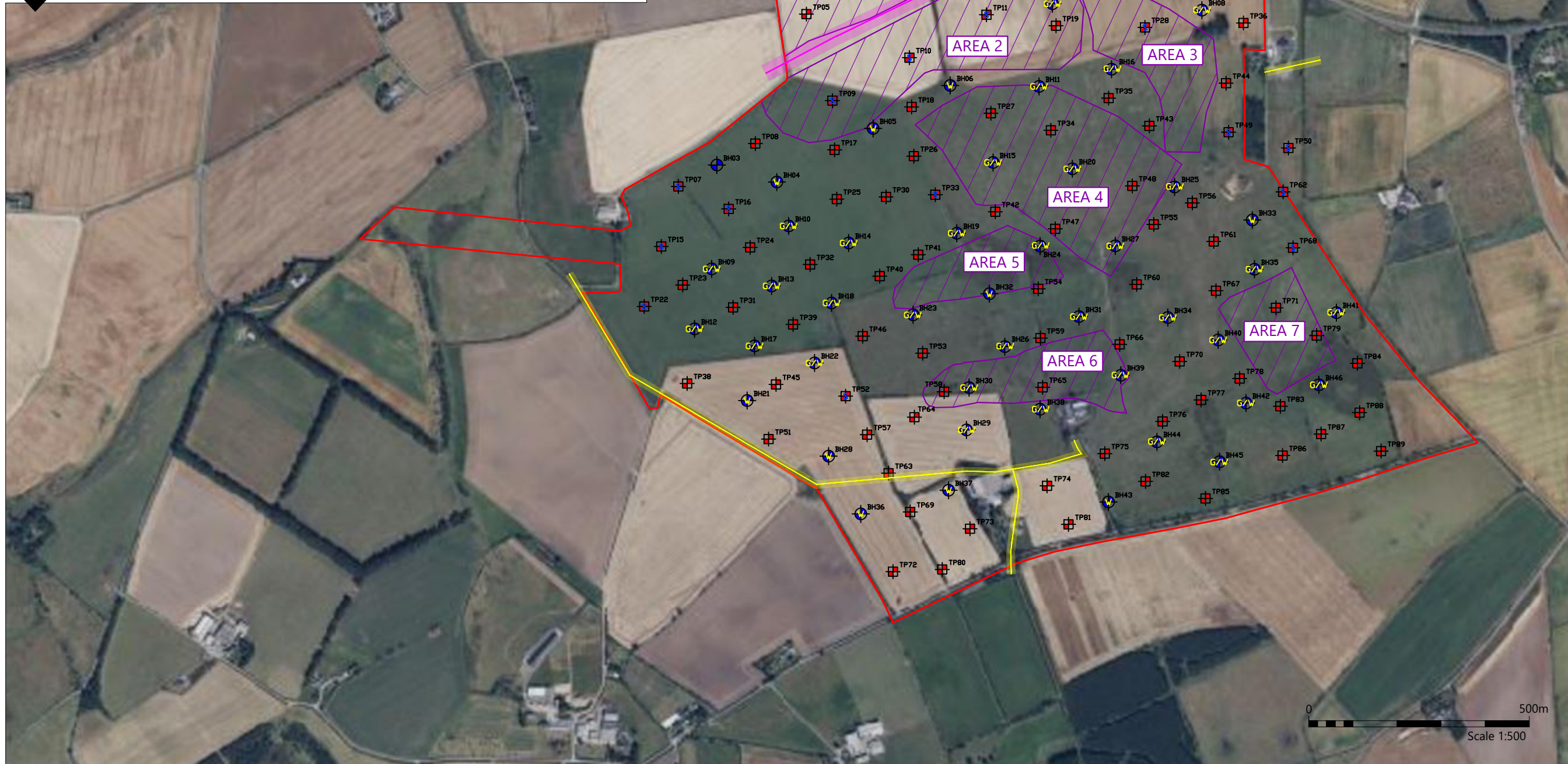
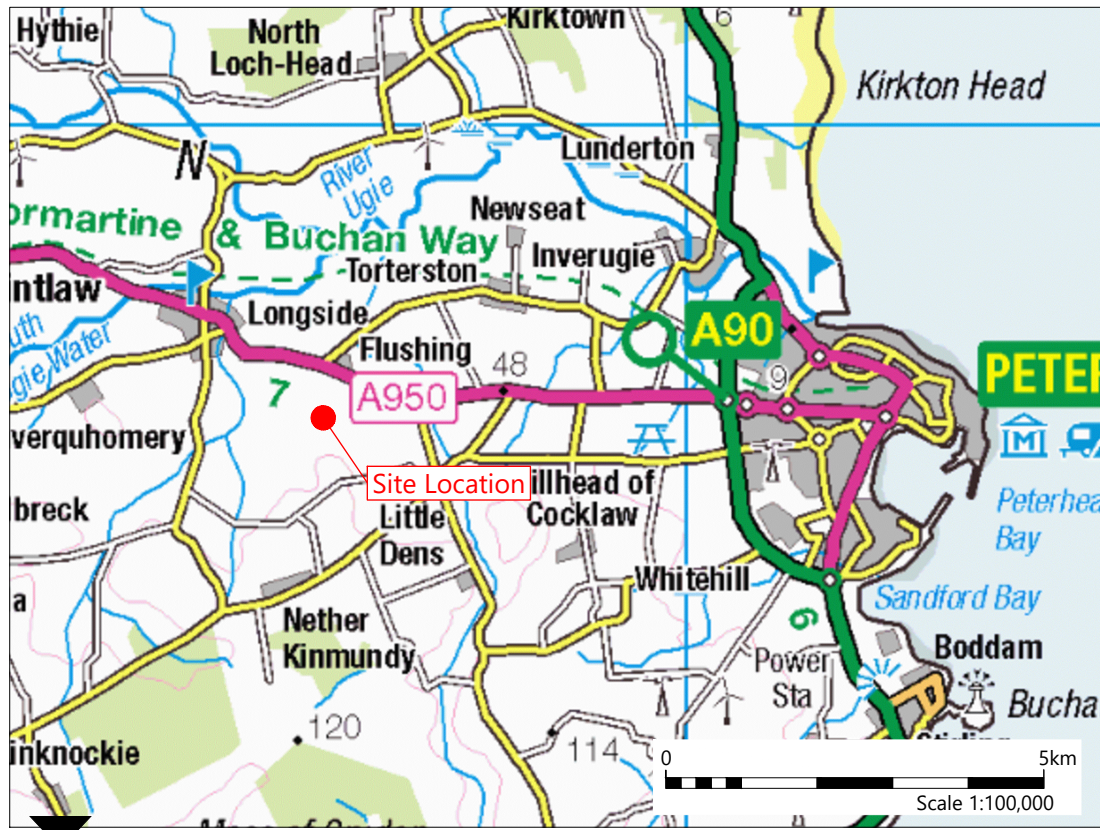
CIfA 2023b *Universal guidance for archaeological field evaluation*, Chartered Institute for Archaeologists, December 2023

ScARF *ScARF National Framework*. <https://scarf.scot/national/>. Accessed 31 January 2024.

Cartographic

Odnance Survey 6 inch to 1 mile Aberdeenshire Sheet XXII Surveyed 1868 – 70, Published 1872

Odnance Survey 6 inch to 1 mile Aberdeenshire Sheet XXII.NE Revised 1900, Published 1902



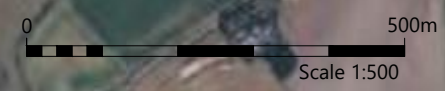
Key:

- Site Boundary
- Area
- Proposed Borehole
- Proposed Trial Pit
- Proposed Borehole (with Gas Monitoring and/or Water Monitoring)
- Proposed Trial Pit with (Soakaway)
- Underground Gas
- Overhead Electricity

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Title: Evaluation Locations		
Project: Netherton Hub		
Client: SSE		
Scale at A3: 1:10000		
Drawn by: SB	Checked: SW	Date: 19/04/2024
Report No: SB	Fig. No: 1	





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