

Historic Building Recording

Site & Landscape Survey

Geophysical Survey



Aberdeen Western Peripheral Route/Balmedie-Tipperty Lot 4 – Fastlink Invasive Archaeological Investigations

Mitigation Excavation

AWPR/B-T/FL/006

Report No. 3199



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NON-TECHNICAL SUMMARY

As part of a programme of mitigation investigations along the Fastlink section of the Aberdeen Western Peripheral Route/Balmedie-Tipperty (AWPR/B-T), the south-east quadrant of a possible cairn at Stranog Hill, site AWPR/B-T/FL/006, was excavated. The quadrant was excavated to a maximum depth of 0.7m at which point it became evident the mound was not archaeological in origin and the excavation was halted.

1. INTRODUCTION

1.1 General

- 1.1.1 This report presents the results of a mitigation excavation undertaken by CFA Archaeology Ltd (CFA) in July 2014 at site AWPR/B-T/FL006 (abbreviated to FL/006 in this report) for the Fastlink section (Lot 4) of the Aberdeen Western Peripheral Route/Balmedie-Tipperty (AWPR/B-T).
- 1.1.2 The possible cairn FL/006 was located at Stranog Hill (NGR: NO 87012 96942; Fig. 1).
- 1.1.3 The employer for this project was Aberdeen City Council and overall responsibility for its delivery lies with the AWPR/B-T Managing Agent. Jacobs UK Ltd was appointed as the Consultants, CFA Archaeology Ltd was the Contractor for this part of the programme of works, and the curator was Historic Scotland.

1.2 Background

- 1.2.1 The Aberdeen Western Peripheral Route/Balmedie-Tipperty is being developed by Transport Scotland in partnership with Aberdeen City and Aberdeenshire Councils. These two projects were individually identified as proposed transport interventions within the Modern Transport System (www.aberdeencity_gov.uk/transport_streets/roads_pavements/transport_proje cts/roa_wrp_mts.asp) and developed separately through the statutory process. In November 2010 the Scottish Government confirmed its intention to procure both projects under a single Non Profit Distributing contract.
- 1.2.2 The two major improvements to the trunk-road network are close to each other and together will provide significant benefits to the north-east of Scotland by reducing journey times and cutting congestion within Aberdeen City. They comprise four sections: a Northern Leg from North Kingswells to Blackdog; a Southern Leg from Charleston to North Kingswells; a Fastlink from Stonehaven to Cleanhill Junction; and the Balmedie to Tipperty improvements. The work undertaken during the construction of these four sections will consist of 34.6km of wholly new dual carriageway around the outskirts of Aberdeen along with an 11.5km Fastlink running from the A90 at Stonehaven and joining the AWPR/B-T near to Maryculter. An additional 9km of new dual carriageway will also be constructed during the Balmedie to Tipperty part of the project along with 3km of on-line improvements.

1.3 Archaeological Background

1.3.1 Previous archaeological work was undertaken in 2012 and consisted of a programme of non-invasive archaeological investigations comprising a desk-based assessment, topographic surveys, photographic surveys, palaeoenvironmental assessment, geophysical surveys, field walking, metal detecting and building recording. These were carried out in areas with suitable ground conditions within the Land Made Available (LMA) for the AWPR/B-T

project. The general aim of these archaeological investigations was to identify the extent and character of known and unknown archaeological remains in order to enable a programme of further archaeological evaluation and mitigation to be designed.

- 1.3.2 Chapter 43 (Part D: Fastlink) of the Environmental Statement (ES) (Jacobs 2007) undertaken for the project identified 43 cultural heritage sites within a study area extending c.250m either side of the centreline of the road alignment.
- 1.3.3 Very few sites of prehistoric date are found in close proximity to site FL/006. East Crossley Hut Circle and Field System (NMRS No. NO89NE 25), a single hut-circle in a complex of cairns and banks, likely date to the prehistoric period and are located approximately 170m south-east of site FL/006. Another group of cairns are located on the north-east flanks and the top of Stranog Hill (NMRS No. NO89NE 17 and NO89NE 28). It is possible that some of the larger, more circular cairns, some of which may have stone kerbs, are prehistoric in date. However, the majority of the cairns on Stranog Hill are clearance cairns of a modern date. The majority of the sites within the vicinity of FL/006 relate to the 18th/19th century agricultural improvements and consist of farmsteads, clearance cairns, consumption dykes and field systems. These improvements saw the creation of larger enclosed fields which dominate the surrounding landscape.
- 1.3.4 Topographic surveys were carried out in November 2012 (Headland Archaeology 2012c) at Howieshill Farmstead (Site 32), Burnhead Cairns (Site 121) and Crossley Cairn (Site 506). A further survey should have been carried out in relation to the Scottish North Eastern Railway (Site 257), but this was postponed due to health and safety reasons.
- 1.3.5 The geophysical survey carried out in December 2012 (Headland Archaeology 2012a) identified several anomalies, notably those in close proximity to the former village of Cowie (Site 490). Thirty-five trenches excavated as part of the invasive archaeological investigations were positioned to target these anomalies.
- 1.3.6 A palaeoenvironmental survey carried out in October 2012 (Headland Archaeology 2012b) identified areas of peat within Red Moss Wetland (Site 67) and Backburn Moss Wetland (Site 119). The earlier find of a Late Bronze Age sword reportedly from the base of the peats at Red Moss indicates peat formation in this area may be relatively late, beginning in the Late Bronze Age. However, the initial estimate for peat formation in Aberdeenshire is 10,600–9800 cal BP (Tipping 2007) possibly suggesting that the depth at which the sword was recovered was not accurately recorded. This early date for peat formation was supported by palaeoenvironmental sampling and analysis carried out by CFA at Backburn Moss Wetland as part of this programme of works. The report on this has been produced under separate cover (Cressey and McCulloch 2013).

- 1.3.7 A programme of intrusive trial trenching was undertaken by CFA in 2013 within Lot 4 (Fastlink) of the Aberdeen Western Peripheral Route (Kirby 2014). Crossley Cairn lay within the road corridor and was excavated as part of this programme of works.
- 1.3.8 Four sites were revealed by the trial trenching, including: two areas of pits and linear features (trenches FL0034 and FL0242); a possible alignment of shallow pits (trench FL0381); and a stone spread or surface (trench FL0328) which was situated on the site of a farmstead annotated 'Broomhill' on the First Edition Ordnance Survey map (1868). A sherd of prehistoric pottery was recovered from one of the areas of pits and linear features, but lithics from the other area of pits and linear features proved undiagnostic, and there was no secure dating evidence from the pit alignment.
- 1.3.9 Following the trial trenching, nine sites were identified for further mitigation works. These consisted of four sites identified during trial trenching (sites FL/001, FL/003B, FL/004, FL/005), two cairns identified as upstanding features (FL/002, FL/006), and an additional three areas identified by Jacobs following the trial trenching programme (FL/003A, FL/007, FL/008).
- 1.3.10 It was agreed with the Consultant, and with the approval of Historic Scotland, that the mitigation measures relating to the two cairns, one located at Fishermyre and the other located near Stranog Hill, would take the form of a topographic survey (Fig. 2), followed by hand excavation. The results of the topographic surveys of FL/002 and FL/006 are covered in separate reports (See Mitchell 2014a and 2014b).
- 1.3.11 It was agreed with the Consultant, and with the approval of Historic Scotland, that the mitigation measures relating to the other sites identified during and following trial trenching should take the form of strip and map, with hand excavation of any features revealed subject to further agreement. These are reported under separate cover.

Mitigation site ref	Trench Number	Description				
AWPR/B-T/FL/001	FL0034/FL0034a	Pit and curvilinear feature				
AWPR/B-T/FL/002	N/A	Cairn (near Fishermyre NO 870 903)				
AWPR/B-T/FL/003A	N/A	Historical map evidence for earlier settlement				
AWPR/B-T/FL/003B	FL0328	Stone surface (Broomhill Farm)				
AWPR/B-T/FL/004	FL0242/FL0242a	Pit/linear feature. Prehistoric pottery				
AWPR/B-T/FL/005	FL0381	Pit alignment				
AWPR/B-T/FL/006	N/A	Cairn (near Stranog Hill NO 870 969)				
AWPR/B-T/FL/007	N/A	Historical map evidence for earlier settlement				
AWPR/B-T/FL/008	N/A	Historical map evidence for earlier settlement				

1.3.12 The areas which required further mitigation work are summarised below.

Sites requiring further mitigation

1.3.13 This report covers the mitigation excavation for trench FL/006, as agreed with the Consultant and set out in the topographic survey report (Mitchell 2014a). This consisted of excavating the south-east quadrant of the cairn. However, during the course of the excavation it became evident the mound was natural. After consultation with the Consultant it was decided that sufficient excavation had been carried out to illustrate the mound was natural and not a cairn as previously thought.

2. METHODOLOGY

2.1 General

- 2.1.1 All work was carried out in accordance with the Specification (Schedule 1) contained within ITT Vol.2 (Aberdeen City Council 2013) which set out the framework for the methodologies/requirements of this programme of mitigation excavation
- 2.1.2 CFA Archaeology Ltd follows the Institute for Archaeologists' Code of Conduct, Standards and Guidance for Archaeological Fieldwork.
- 2.1.3 A terrestrial photographic condition survey was undertaken prior to and immediately after the investigation. All equipment and footwear was cleaned and disinfected prior to entry on to any areas of land. An Ecological Clerk of Works conducted walkover surveys prior to any work commencing and consulted regularly to ensure that any ecological matters were dealt with promptly and correctly.

2.2 Surveying

- 2.2.1 The excavation was carried out at the location shown on Fig. 1. The location was accurately surveyed as excavated and tied in with the Ordnance Survey National Grid and Ordnance Datum using a GPS with a survey grade accuracy of ± 10 mm. Any alteration to the pre-agreed trenching plan was carried out with the prior agreement of the Consultant.
- 2.2.2 Precision topographic mapping was achieved through the use of GNSS/GPS systems. The survey achieved real-time GNSS/GPS positioning accurate to 0.01m horizontal and 0.03m vertical, through the use of a Trimble R6 GNSS system with a TSC3 controller running Trimble Access surveying software. This equipment provides centimetre-accurate RTK corrections using the Trimble VRS Now RTK GNSS service to plot / stake-out features etc within Access.
- 2.2.3 Data collection and survey control was integrated with the overall plans for the invasive investigations.
- 2.2.4 Survey data was exported from Trimble Access on the TSC3 controller to dxf format, retaining individual point feature codes and associated attributes, and processed in AutoCAD 2013. Model space in CAD was in metres at 1:1 and standard CFA layers and feature codes were used.

2.3 Hand Excavation and Recording

2.3.1 All of the excavation work was undertaken by hand. No archaeologically significant features or deposits were identified. However, the stratification of the excavated area was recorded and contexts were recorded.

- 2.3.2 Photographic records in digital form were taken of the trench using a camera with a minimum resolution of ten megapixels. Section line locations were surveyed using a GPS with a survey survey-grade accuracy of ±10m (horizontal)/±30mm (vertical).
- 2.3.3 The excavation trench was backfilled by hand at the end of the excavation.

2.4 Archiving

- 2.4.1 The project archive, comprising all CFA record sheets, plans and reports, will be deposited at the RCAHMS and will conform to current guidelines in MoRPHE (English Heritage 2006). The deposition of paper and digital archives with RCAHMS will comply with their current requirements (RCAHMS 1996a, 1996b) and with the Archaeological Archives Forum (Brown 2007), ADS guidelines for digital archives (Richards and Robinson 2001) and the IfA's 'Standard and Guidance for the collection, documentation, conservation and research of archaeological materials' (IfA 2013).
- 2.4.2 A summary statement of the results of this excavation will be submitted for publication in *Discovery and Excavation in Scotland* once all archaeological works are completed (Appendix 3). An *OASIS Scotland* entry will be completed.

3. ARCHAEOLOGICAL RESULTS

3.1 General

- 3.1.1 Numbers in bold refer to contexts, a full list of which is contained in Appendix 2.
- 3.1.2 The possible cairn site (Fig. 1) was located to the south-east of Greens of Crynoch and to the north-east of Stranog Hill. The land use was unimproved, open moorland with some gorse, on a gentle north-facing slope at about 135m above Ordnance Datum (AOD). The possible cairn was located on a relatively flat natural terrace. A ditched watercourse curved around the north-western, western and southern sides of the cairn and an overhead cable lay to the north.
- 3.1.3 The possible cairn was roughly oval in plan, measuring 29m in maximum length and 16m in maximum width, and up to 1.9m in height. The long axis of the possible cairn was E-W. It was heavily grass-covered with occasional protruding sub-angular stones.
- 3.1.4 The overall topography of the possible cairn indicated two peaks; a larger peak on the east and a smaller peak on the west. Part of the western end, measuring 11m by 8.5m, was covered in gorse. The ground slopes away more steeply to the north, resulting in the possible cairn appearing much higher from that side.

3.2 Archaeological Results

- 3.2.1 It was agreed with the Consultant that excavation of the south-eastern quadrant of the possible cairn would be sufficient to establish the construction methods and the presence of any deposits or features preserved either beneath it or within it. The trench was intended to measure 16m by 9m at maximum.
- 3.2.2 During the course of the excavation it became evident that the body of the possible cairn was not composed of stone. Therefore, a reduced area measuring 3m by 2.5m was excavated down to natural, to a maximum depth of 0.7m (Fig. 3), to establish the composition and nature of the feature.
- 3.2.3 The deposits consisted of between 0.4m and 0.6m of black/dark grey sandy silt topsoil (001) overlying the weathered surface of platy slabs of bedrock (002) (Fig. 3).
- 3.2.4 This trench illustrated that the feature was a mound formed over a bedrock outcrop. After consultation with the Consultant it was agreed that no further excavation was required.
- 3.2.5 No finds were recovered and no soil samples were retained. The feature has no archaeological value.

4. CONCLUSIONS

- 4.1 The excavation of the possible cairn FL/006 at Stranog Hill identified that the feature was a natural mound of topsoil overlying a bedrock outcrop and was not archaeological in origin.
- 4.2 The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the National Monuments Record of Scotland (NMRS) and copies of reports will be lodged with the Aberdeenshire Council Sites and Monuments Record.
- 4.3 A summary statement will be submitted for publication in *Discovery and Excavation in Scotland* (See Appendix 3) and the investigation will be reported through *OASIS Scotland*.
- 4.4 No further work or reporting is required in relation to site FL/006.

5. **REFERENCES**

Aberdeen City Council 2013, *Aberdeen Western Peripheral Route/Balmedie-Tipperty. Competition for Invasive Archaeological Investigations Contract. Lot 4 – Fastlink.* Volume 2. Tender Document. March 2013.

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Headland Archaeology 2012c Aberdeen Western Peripheral Route Package (Fastlink): Topographic Surveys, Unpublished data structure report carried out for Aberdeen City Council.

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APPENDIX 1: Digital Photograph Register

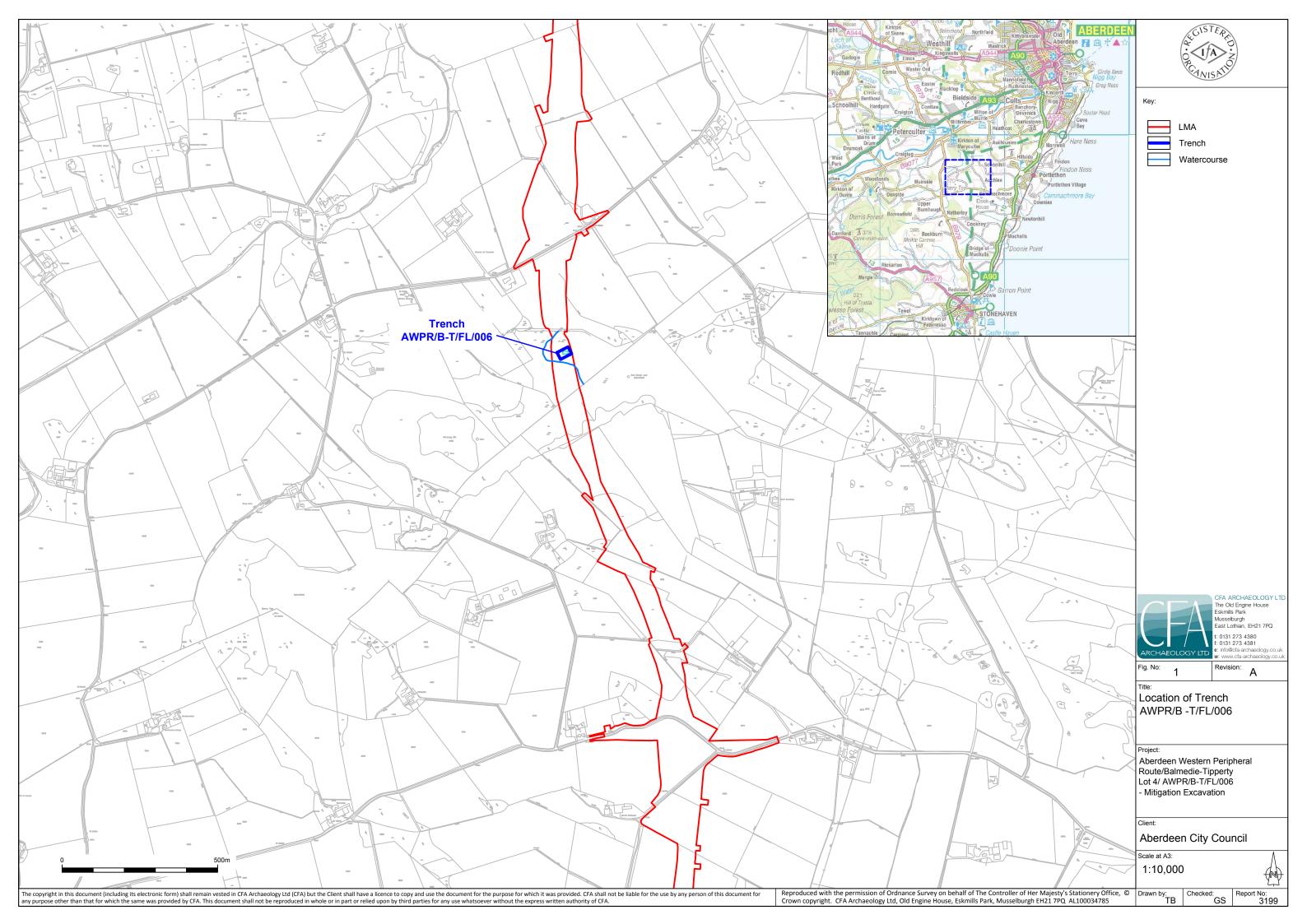
Photo No.	Contexts/description	Taken from	Conditions
1-2	South-facing section of FL006	S	Overcast
3-4	East-facing section of FL006	Е	Overcast

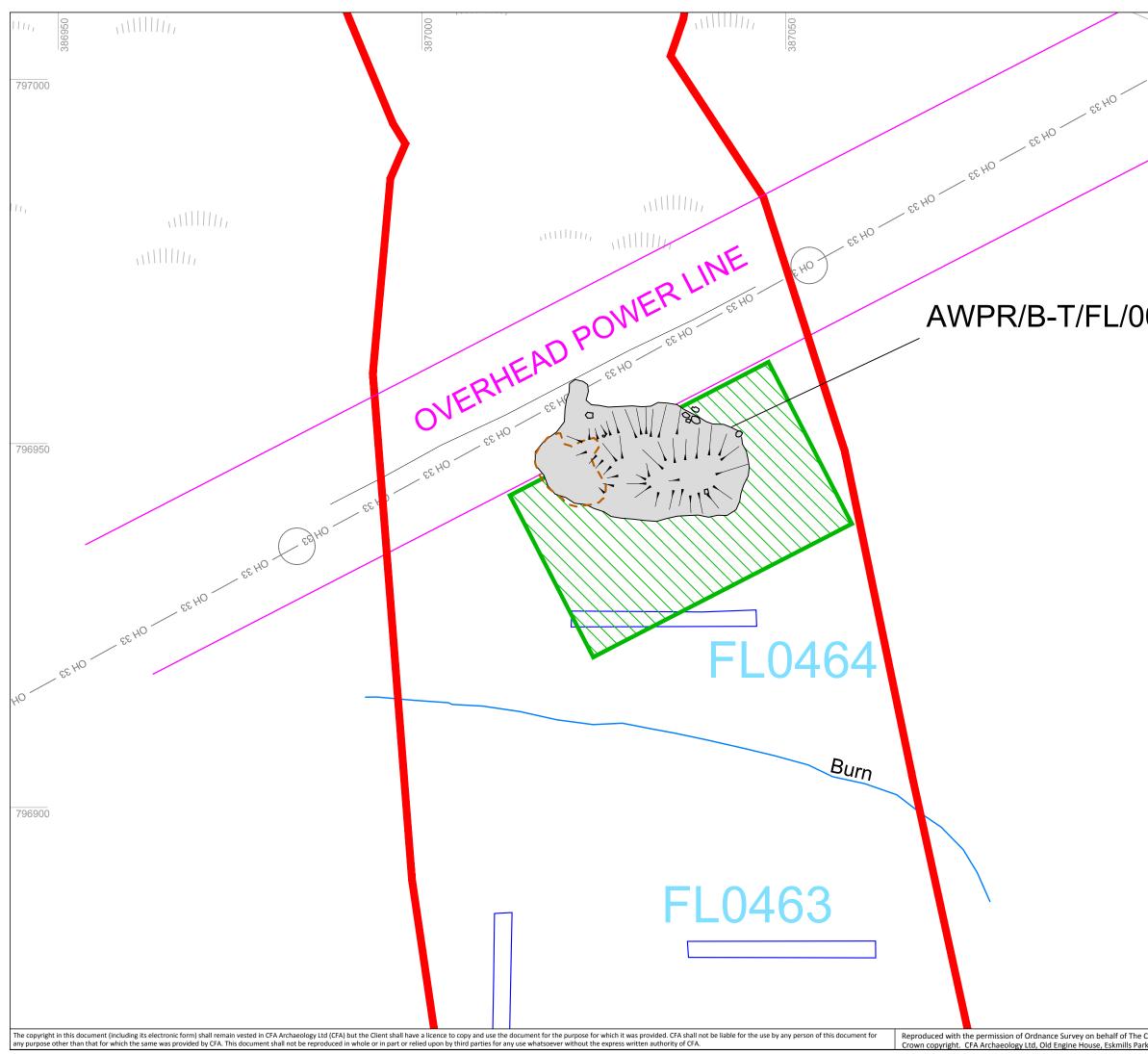
APPENDIX 2: Context Register

Context	Fill of	Description
001		Black/dark grey silt with numerous granules of quartz and mica
002		Natural bedrock

APPENDIX 3: Discovery and Excavation in Scotland Entry

LOCAL AUTHORITY:	Aberdeenshire
PROJECT TITLE/SITE NAME:	Aberdeen Western Peripheral Route/Balmedie-Tipperty, Lot 4 – Fastlink, Invasive Archaeological Investigations
PROJECT CODE:	FAST
PARISH:	Fetteresso
NAME OF CONTRIBUTOR:	Gary Savory
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Partial excavation
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	N/A
SIGNIFICANT FINDS:	N/A
NGR (2 letters, 8 or 10 figures)	NO 87012 96942
START DATE (this season)	July 2014
END DATE (this season)	July 2014
PREVIOUS WORK (incl. <i>DES</i> ref.)	N/A
MAIN (NARRATIVE) DESCRIPTION:	As part of a programme of mitigation investigations along the Fastlink section of the Aberdeen Western Peripheral Route/Balmedie-Tipperty (AWPR/B-T) the south-east quadrant of a possible cairn at Stranog Hill, Site AWPR/B-T/FL/006, was excavated. The quadrant was excavated to a maximum depth of 0.7m at which point it became evident the mound was not archaeological in origin and the excavation was halted.
PROPOSED FUTURE WORK:	N/A
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Aberdeen City Council
ADDRESS OF MAIN CONTRIBUTOR:	CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ
EMAIL ADDRESS:	cfa@cfa-arcaheology.co.uk
ARCHIVE LOCATION (intended/deposited)	Royal Commission on the Ancient and Historical Monuments of Scotland
	Aberdeenshire Council Sites & Monuments Record





56 HO 55 HO	CANISATIO				
	Key:				
	Evaluation Trenches				
	Archaeological Features				
	Rig and Furrow				
	Field Drains				
	СРО				
	Plot Boundaries				
006	Areas for vegetation clearance and topographic survey				
	Extent of Cairn				
	Stones				
	Gorse				
	Fig. No: 2				
	Title: Topographic survey of site AWPR/B-T/FL/006				
	Project: Aberdeen Western Peripheral Route/Balmedie-Tipperty Lot 4/ AWPR/B-T/FL/006 - Mitigation Excavation				
	^{Client:} Aberdeen City Council				
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e Controller of Her Majesty's Stationery Office, © ark, Musselburgh EH21 7PQ AL100034785	Drawn by: Checked: Report No: KH MJ 3199				

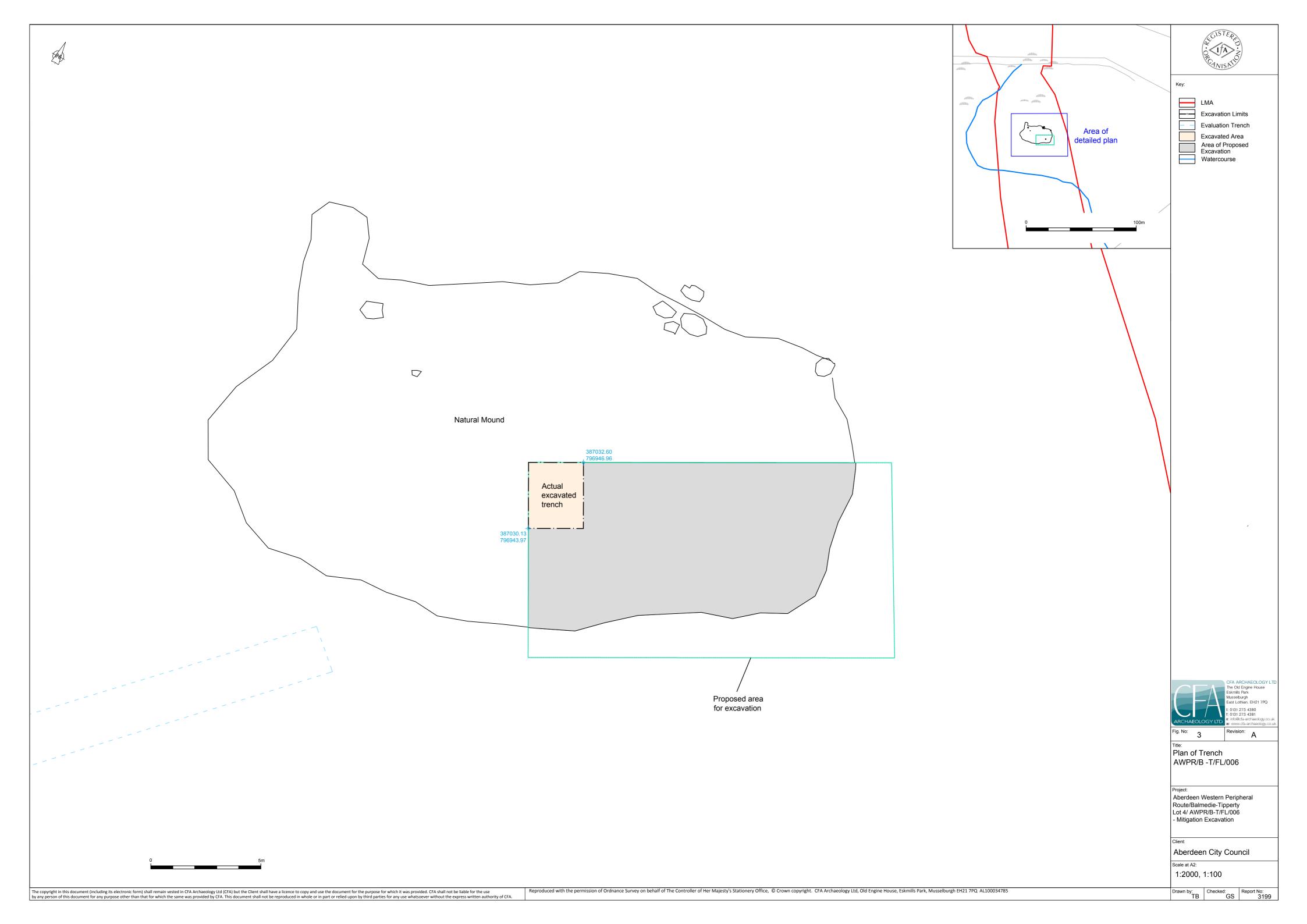




Fig. 4 - South-facing section of FL/006

	CFA ARCHAEOLOGY LTD Old Engine House	Title: Selected Photo	Fig. 4	Report: 3199	Drawn: TB	CKD: G	S Date	[:] 21/11/14
	Eskmills Park Musselburgh East Lothian, EH21 7PQ		Client: Aberde	een City Co	uncil			
ARCHAEOLOGY LTD	T: 0131 273 4380 F: 0131 273 4381 info@cfa-archaeology.co.uk www.cfa-archaeology.co.uk	Project: Aberdeen Western Peripheral Route/Balmedie-Tipperty Lot 4/ AWPR/B-T/FL/006 - Mitigation Excavation	Scale:					CANISNIL
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