

CALL 11/006



CALLIACHAR WIND FARM, PERTH & KINROSS

Archaeological excavation and monitoring

for Calliachar Wind Farm Ltd

07/02617/FUL

October 2012



HEADLAND
ARCHAEOLOGY Ltd



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Project Manager	Chris Lowe
Author	Richard Tuffin
Fieldwork	Magnar Dalland, Laura Scott, Matthew Ginnerver, Stuart Wilson & Richard Tuffin
Graphics	Julia Bastek
Approved by	Chris Lowe – Project Manager

C. E. Lowe

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North East

Headland Archaeology
13 Jane Street
Edinburgh EH6 5HE
0131 467 7705
office@headlandarchaeology.com

www.headlandarchaeology.com

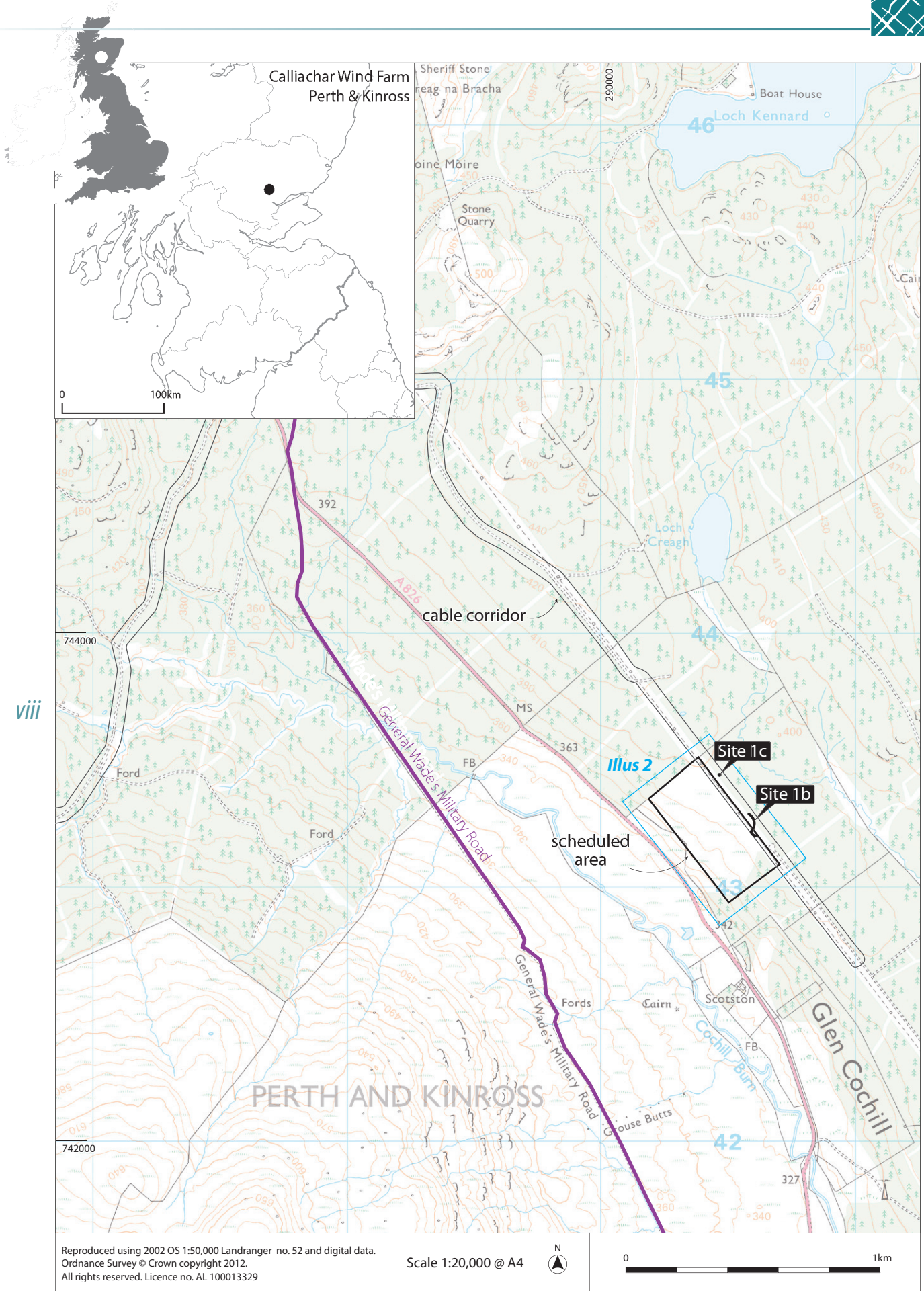


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Scale 1:20,000 @ A4



0 1km

Illus 1
 Site location

CALLIACHAR WIND FARM, PERTH & KINROSS

Archaeological excavation and monitoring

Headland Archaeology Ltd was commissioned by Calliachar Wind Farm Ltd to carry out an archaeological excavation and monitoring prior to the commencement of cable-laying works in an area adjacent to a Scheduled Monument. This report is concerned with the archaeological investigation of two features that would be impacted during the works, as well as the monitored stripping of topsoil for the cable corridor. The features comprised a clearance cairn (Site 1b) and a bank (Site 1c), part of a longer field boundary associated with the nearby Scheduled Monument, Scotston prehistoric settlement and field system.

1. INTRODUCTION

Headland Archaeology Ltd was commissioned by Calliachar Wind Farm Ltd to carry out a programme of archaeological investigation in connection with grid connection works for the wind farm (Illus 1). The construction works entailed the use of a cable plough, allowing the simultaneous ploughing and installation of the cables. Under the terms of the overarching Archaeological Mitigation Plan, the programme of works was undertaken in accordance with a Written Scheme of Investigation (Headland Archaeology 2012) and agreed with Perth and Kinross Heritage Trust (PKHT), as archaeological advisors to the LPA.

This phase of works included excavation of a previously recorded bank (Site 1b) and a previously unrecorded cairn (Site 1c) which was identified during the course of the earlier walkover survey of the grid connection route (Dalland 2012). Both features represent outlying elements of the adjacent Scheduled Monument, Scotston prehistoric settlement and field system (SM-4860) (Illus 2). Due to the proximity of the cable-laying to the scheduled area, topsoil stripping of a 400m long corridor was also archaeologically monitored.

2. ARCHAEOLOGICAL BACKGROUND

The Scotston settlement and field system was surveyed and scheduled by Historic Scotland (SM-4860) in 1990. The listing identified a settlement and field system dating to the late Bronze

Age (1500–500 BC), comprising at least eight circular houses, three unidentified structures, linear banks and roughly 110 field clearance cairns.

In February 2012 Headland Archaeology undertook a walkover survey of the proposed cable route between Griffin and Calliachar wind farms (Dalland 2012). This identified a number of sites, including a cluster of features near the eastern side of the scheduled area. These sites comprised a known hut circle (Site 1a), a sinuous bank (Site 1b), a stone clearance cairn (Site 1c) and three further possible cairns (Sites 1d–1f).

The hut circle (1a), adjacent to an electricity pylon, lay wholly inside the scheduled area; the bank (1b), however, extended outwith the scheduled area. The remaining Sites (1c–1f) lay wholly outside the scheduled area. Only Site 1c and the easternmost end of Site 1b lay within the area that would be at risk of damage from adjacent forestry operations and the cable-laying operation.

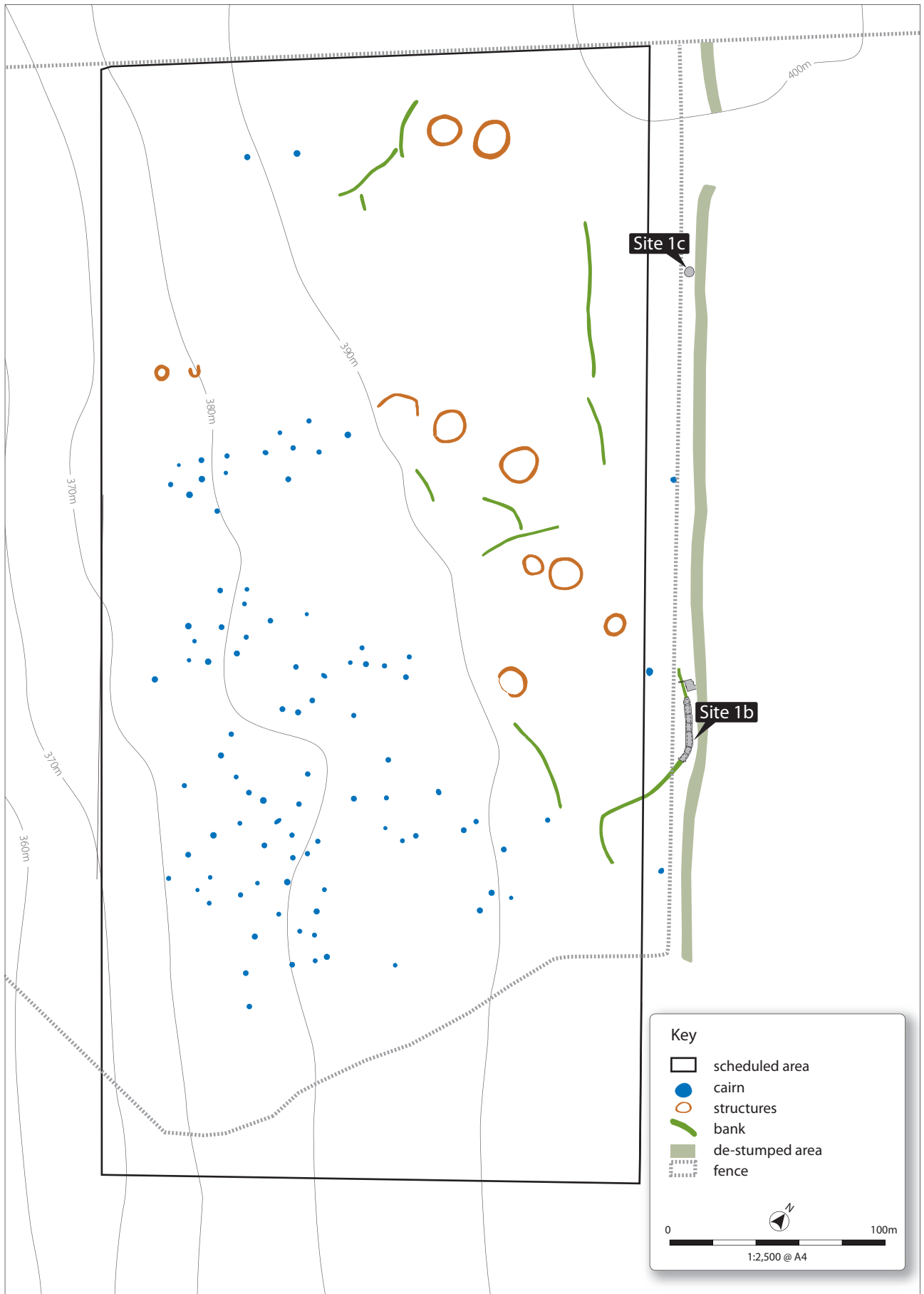
3. OBJECTIVES

The objectives of the excavation were:

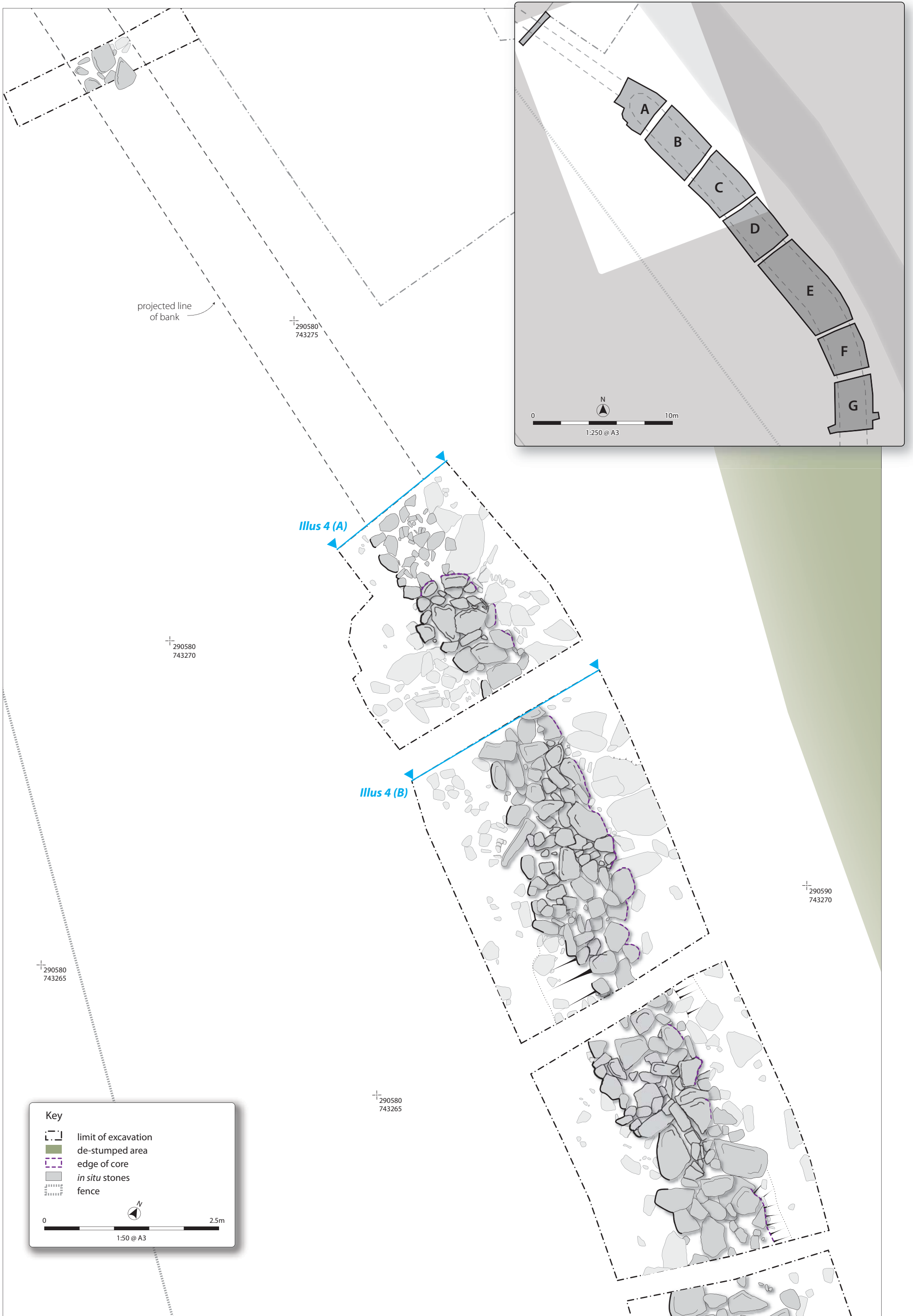
- to preserve by record archaeological remains threatened by the proposed development works;
- to undertake an appropriate level of assessment and reporting to meet the requirements of the Planning Authority.



2



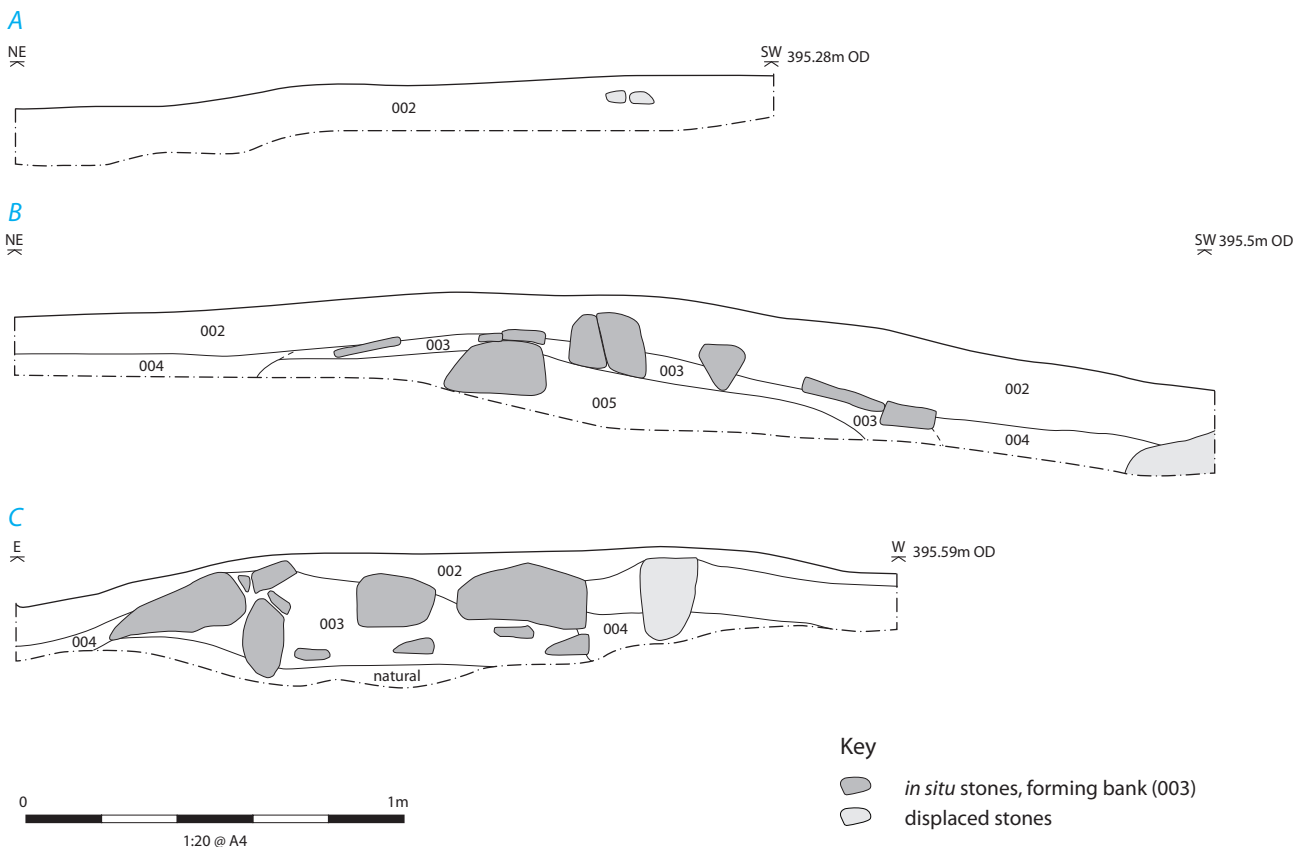
Illus 2
Trench layout



Illus 3a
Site 1b: North sector of excavated bank



Illus 3b
Site 1b: South sector of excavated bank



Illus 4

Site 1b: Sections A, B & C across the bank

4. METHODOLOGY

The cairn and bank were located within the proposed cable corridor and would therefore be affected by both excavation works and ancillary machinery movement. In mitigation, both sites were excavated in advance of the works. In addition to the targeted excavation of the two known sites, a section of forestry plantation adjacent to the scheduled area was felled and the area stripped to natural. The grubbing-up of the stumps and topsoil stripping were archaeologically monitored.

During the excavation, overlying vegetation was first removed by hand to uncover the extent of the working area. Turf and topsoil were then removed to fully expose the archaeological features. All exposed elements and surfaces were hand-cleaned and recorded as per normal practice. The cairn was half-sectioned in order to discern its internal composition. The length of bank within the proposed works area was exposed through a series of trenches, with four smaller slots to natural excavated through the feature in order to determine its construction.

5. RECORDING

All recording was in accordance with the Institute for Archaeologists standards and guidance. All archaeologically relevant deposits and structures were assigned context

numbers and described on *pro forma* context sheets, and their stratigraphic relationships recorded (Appendix 1.1). No small finds were recovered and no environmental samples were taken as the contexts recorded were either stone-built features or natural deposits and accumulations.

The photographic record (Appendix 1.2) was predominantly digital, but black and white print photographs were also taken of key features of publication-type images. A graduated metric scale was placed in record photographs of context. All photographs were recorded by individual print number alongside information on the context and direction of view. Vertical photographs were also taken, where appropriate, using a digital camera mounted on an extendable pole.

An overall site plan was recorded digitally using a PC running CAD software linked to a Total Station theodolite and related to the National Grid. Sections were drawn at a scale of 1:10 and plans were drawn at a scale of 1:20 (Appendix 1.3).

6. RESULTS

Scotston prehistoric settlement, the excavation of whose outlying elements are reported here, is located just below 400m aOD on a slight terrace on the eastern side of Glen Cochill. The underlying geology here comprises metamorphic bedrock (semipelite – a metamorphosed siltstone), overlaid by glacial till deposits. The



excavated features lay in and alongside the edge of a forestry plantation which was established in the 1980s. Interestingly, the curving course of Bank 1b was mirrored in the line of the forestry plantation, suggesting that the feature had been quite visible at the time that the trees were planted. In order that the required cable corridor could be cleared, the first three rows of these trees had been felled, leaving stumps that required removal during the stripping exercise.

6.1 Bank 1b

Prior to the commencement of the excavation the heather was cleared along the extent of the bank. This revealed a pronounced curving bank, approximately 40m long, 2m wide and 0.2–0.3m high (Illus 3a & 3b).

A series of trenches were excavated along the line of the bank, exposing an estimated 30% of the visible extent of the feature. A number of narrow slots were then excavated across the width of the bank (Illus 4). Excavation indicated that the natural horizon below the bank comprised yellow-orange, slightly stony sandy silt. Directly below the line of the bank the natural was overlain by a mottled yellow/orange dump of redeposited subsoil up to 0.15m thick (005), forming the core of the bank.

The most visible part of the bank was marked by a spread of large stones (003), predominantly sub-angular in shape with sides up to 0.8m long, and forming a distinct stony bank 1.8–2m wide (Illus 5). Along the western edge of the feature many of the stones appeared to be in situ facing stones, forming the inner edge of the bank. The eastern edge, however, was not as well defined, with the stones scattered over a more extended area. At the northern end of the bank the nature of the stones changed. An arrangement (006) of flat stones, with sides less than 0.2m long, abutted the north end of the stone bank. These had been placed directly on the natural subsoil.

A stony grey/dark grey loamy silt was situated along the inner and outer edges of the stone bank (004). This deposit was 40–100mm thick and overlay the outer edges of the stones and the underlying core deposit (005). Directly overlying the bank was up to 0.2m of turf and topsoil (002).

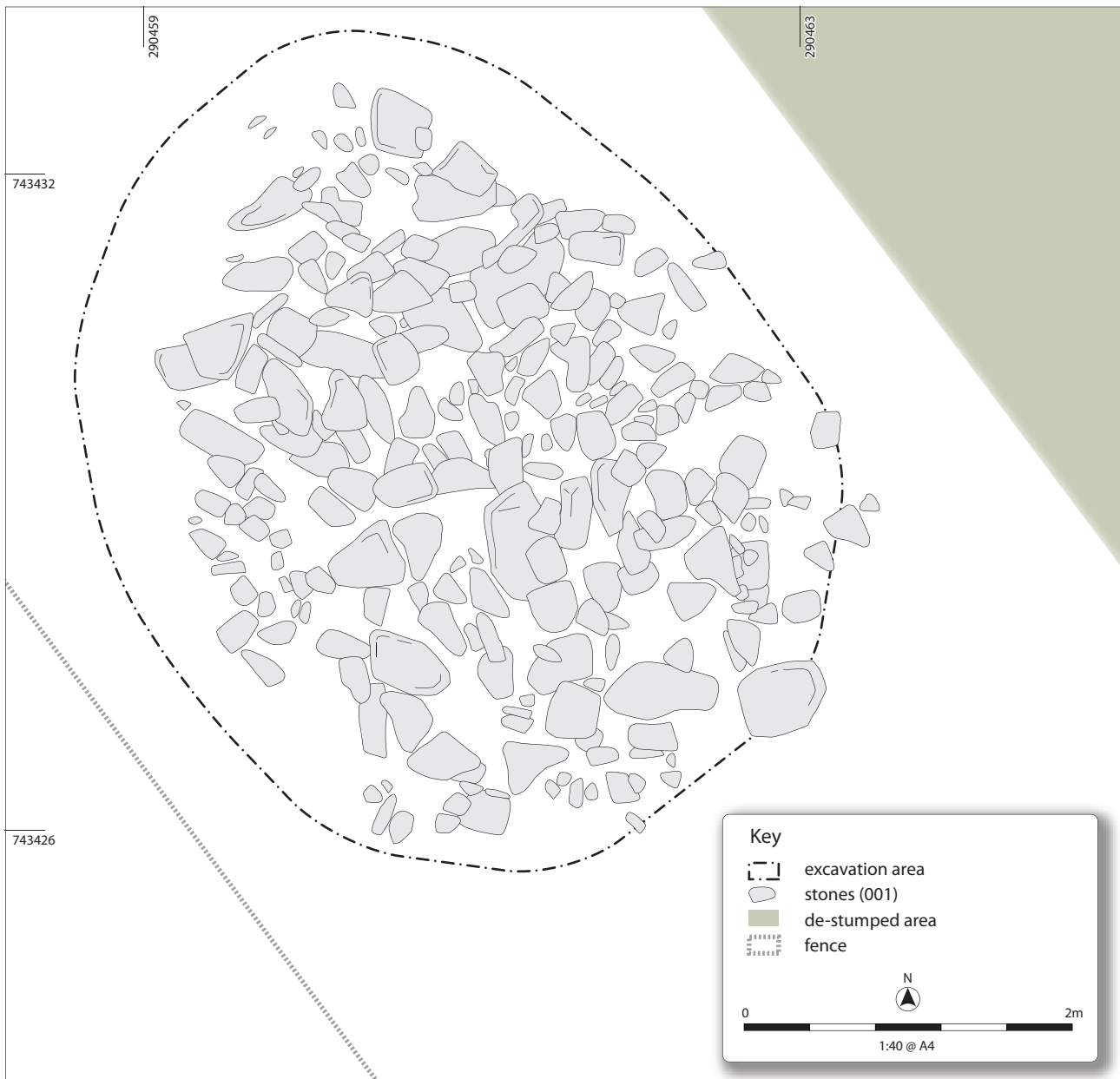
6.2 Cairn 1c

Cairn 1c (Illus 6) was located 200m too the north-west of Bank 1b. It was sub-circular, roughly 5.3m along its longer NW-SE axis, 4.2m transversely and up to 0.45m high (Illus 7). The greater part of the cairn was formed of small to medium stones (001), with sides less than 0.3m long; a number of larger stones, with



Illus 5

Site 1b: Bank viewed from the south-east



Illus 6

Site 1c: Cairn

sides more than 0.5m long, were also present. The larger stones appear to have formed the body of the cairn, with the smaller stones representing secondary deposition.

The stones appear to have been placed directly onto the natural subsoil, a yellow/orange sandy silt. No obvious modification of the natural had taken place and no original ground surfaces could be discerned below the stones. Overlying the cairn was up to 0.2m of turf and topsoil (002).

6.3 Monitored groundworks

All groundworks immediately adjacent to the excavated features and along a corridor, roughly 400m long and up to 6m wide, were archaeologically monitored. Tree stumps and brash were removed; turf and topsoil were then stripped, exposing the

natural subsoil. This comprised orange sandy silt, containing frequent stones and boulders. No features of archaeological interest were encountered during the monitoring exercise.

7. DISCUSSION

7.1 Bank 1b

Excavation revealed a linear bank formed of earth and stone. At the time of its original construction, the ground appears to have been stripped and subsoil redeposited to form the base of the bank (005). The bank had then been built up using unmortared stone (003). Of varying size and shape, it appears likely that the stones had been collected, rather than quarried, from the local area. Some attempt at facing the inner, western side of the bank



Illus 7

Site 1c: Cairn viewed from the south-east

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had been made, potentially creating a more vertical edge on this side than for the outer, eastern face. The base of the bank would have been approximately 1.4–1.6m thick, corresponding to the likely in situ stones and the underlying earth base.

The bank continued into the scheduled area and was part of the site complex surveyed in 1990. Several other banks have also been identified here and their alignment (Illus 2) suggests that the excavated fragment formed part of a 'head dyke' around the core settlement area, as represented by the hut circles. This dyke would have served to separate the 'infield' areas of the settlement from the common grazings. Such an arrangement would have controlled the movement of stock, separating them from the arable ground when it was under crop.

No dating evidence for the bank was forthcoming. Like the chronology suggested in the schedule for the adjacent settlement, a late Bronze Age date is assumed.

7.2 Cairn 1c

The sub-circular stone mound represents a clearance cairn, associated with the adjacent later prehistoric settlement and field system. Although no dating evidence was forthcoming, there is no reason not to assume that the feature will similarly belong with the later prehistoric exploitation of this upland landscape.

8. REFERENCES

- Dalland, M 2012 *Calliachar Wind Farm, Perth & Kinross: Report on Walkover Survey of proposed cable route, road layout and borrow pits*, Headland client report to SSE Renewables, July 2012.
- Headland Archaeology (UK) Ltd 2012 *Calliachar Wind farm, Perth & Kinross Written Scheme of Investigation for a programme of archaeological works in connection with cable-laying in the vicinity of Scotston prehistoric settlement and field system (Scheduled Monument 4860)*, Headland client report to SSE Renewables, April 2012.

9. APPENDICES

Appendix 1 Site register

Appendix 1.1 Context register

Context no.	Area	Description
001	Site 1C	Deposit of medium/large-sized (<0.5m) angular and rounded stones, located directly overlying the natural yellow/orange silt. Deposit is 5.3m (N-S) x 4.2m, with a maximum thickness of 0.43m. Stones are unbonded and uncoursed, stacked up to three stones high in the centre of the feature. Clearance cairn.
002	Site 1B	Slightly stony very dark grey silty loam overlying entirety of stone feature (003). Between 0.05–0.2m thick. Turf and topsoil overburden
003	Site 1B	Linear stony bank, c40m long, 1.4–2m wide, 0.2–0.4m high. Formed from small to large (<0.8m) sub-angular stones. Stones are unbonded and uncoursed, though a number of stones along the western edge of the bank appear to form an in situ facing course. Situated overlying the natural subsoil and (005). Underlay (002) and (004).
004	Site 1B	Grey/dark grey stony loamy silt located either side of the bank (003). Between 0.04–0.1m thick. Situated below (001), above (003), the deposit represents natural accumulation after the bank's construction and likely deterioration.
005	Site 1B	Mottled orange/very light brown/yellow silt located directly below (003). Up to 2m wide and 0.12m thick. Probable redeposited natural material forming mound below bank.
006	Site 1B	Deposit of medium-sized (<0.2m) sub-angular stones located at the north western end of stony bank (003). Up to 1m wide and 0.15m thick, the deposit is formed from a single horizontal course of stones. Probable continuation of bank.

Appendix 1.2 Photographic register

Photo no.	B&W	Digital file	Facing	Description
01		CALL11-006-01	NW	Site 1C. Cairn pre clearance.
02		CALL11-006-02	S	Site 1C. Cairn pre clearance.
03		CALL11-006-03	SW	Site 1C. Cairn pre clearance.
04		CALL11-006-04	N	Site 1C. Cairn pre clearance.
05		CALL11-006-05	NNW	Site 1C. Cairn after removal of heather.
06		CALL11-006-06	SE	Site 1C. Cairn after removal of heather.
07		CALL11-006-07	SW	Site 1C. Cairn after removal of heather.
08		CALL11-006-08	N	Site 1C. Cairn after removal of heather.
09	1	CALL11-006-09	N	Site 1C. Cairn de-turfed.
10	1	CALL11-006-10	S	Site 1C. Cairn de-turfed.
11	1	CALL11-006-11	W	Site 1C. Cairn de-turfed.
12		CALL11-006-12	N	Site 1C. Cairn, pre-excavation clean.
13		CALL11-006-13	NE	Site 1C. Cairn, pre-excavation clean.
14		CALL11-006-14	E	Site 1C. Cairn, pre-excavation clean.
15		CALL11-006-15	SE	Site 1C. Cairn, pre-excavation clean.

Photo no.	B&W	Digital file	Facing	Description
16		CALL11-006-16	S	Site 1C. Cairn, pre-excavation clean.
17		CALL11-006-17	SW	Site 1C. Cairn, pre-excavation clean.
18		CALL11-006-18	W	Site 1C. Cairn, pre-excavation clean.
19		CALL11-006-19	NW	Site 1C. Cairn, pre-excavation clean.
20		CALL11-006-20	NW	Site 1C. Cairn, pre-excavation clean. Pole photo.
21		CALL11-006-21	W	Site 1C. Cairn, half-sectioned.
22		CALL11-006-22	W	Site 1C. Cairn, half-sectioned.
23		CALL11-006-23	NW	Site 1B. Start. Tree/brush clearance.
24		CALL11-006-24	NW	Site 1B. Showing brush and stumps removed.
25		CALL11-006-25a-b	N	Site 1B. Bank with canes showing alignment of bank.
26		CALL11-006-26	NNW	Site 1B. General shot of cable zone stripped.
27		CALL11-006-27	N	Site 1B. Possible platform, pre-excavation.
28		CALL11-006-28	E	Site 1B. Possible platform, pre-excavation.



Photo no.	B&W	Digital file	Facing	Description
29	1	CALL11-006-29	NW	Site 1B. Possible platform, NE quadrant.
30	1	CALL11-006-30	SE	Site 1B. Possible platform, NE quadrant.
31	1	CALL11-006-31	N	Site 1B. Pre-excavation of bank, south end.
32	1	CALL11-006-32	E	Site 1B. Slot through bank, south end.
33	1	CALL11-006-33	NE	Site 1B. Pre-excavation shot of bank, middle section.
34	1	CALL11-006-34	ESE	Site 1B. Pre-excavation show of bank, north end.
35		CALL11-006-35	NW	Site 1B. Bank de-turfed - pole photo.
36		CALL11-006-36a-b	NW	Site 1B. Bank de-turfed - pole photo.
37		CALL11-006-37	NW	Site 1B. Bank de-turfed, south half - pole photo.
38		CALL11-006-38	SE	Site 1B. Bank de-turfed, north half - pole photo.
39		CALL11-006-39	SE	Site 1B. Bank de-turfed - pole photo.
40		CALL11-006-40a-b	SE	Site 1B. Bank de-turfed, north end - pole photo.
41		CALL11-006-41	SE	Site 1B. Bank de-turfed - pole photo.
42	1	CALL11-006-42	SE	Site 1B. Bank de-turfed - Segment A (north end).
43	1	CALL11-006-43	SE	Site 1B. Bank de-turfed - Segment B.
44	1	CALL11-006-44	SE	Site 1B. Bank de-turfed - Segment C.
45		CALL11-006-45	SE	Site 1B. Bank de-turfed - Segment D.
46	1	CALL11-006-46	SE	Site 1B. Bank de-turfed - Segment E.
47	1	CALL11-006-47	S	Site 1B. Bank de-turfed - Segment F.
48	1	CALL11-006-48	S	Site 1B. Bank de-turfed - Segment G (south end).
49	1	CALL11-006-49	NE	Site 1B. Bank de-turfed - Segment G, detail.
50	1	CALL11-006-50	N	Site 1B. Bank de-turfed - Segment E, detail.
51	1	CALL11-006-51	NW	Site 1B. Bank de-turfed - Segment E.
52	1	CALL11-006-52	SE	Site 1B. Working shot.
53	1	CALL11-006-53	NE	Site 1B. Bank de-turfed - Segment A (north end).

Photo no.	B&W	Digital file	Facing	Description
54	1	CALL11-006-54	NE	Site 1B. Bank de-turfed - Segment C, detail.
55	1	CALL11-006-55	SE	Site 1B. Segment H, slot across bank to the NW of Segment A.
56	1	CALL11-006-56	SE	Site 1B. Segment H, slot across bank to the NW of Segment A, detail.
57	1	CALL11-006-57	NW	Site 1B. Bank de-turfed - change in width and height in Segment A (north end).
58	1	CALL11-006-58	W	Site 1B. Slot through bank at south end of Segment G.
59	1	CALL11-006-59	S	Site 1B. North facing Section through bank at south end of Segment G.
60	1	CALL11-006-60	N	Site 1B. South facing Section through bank at south end of Segment G.
61	1	CALL11-006-61	E	Site 1B. Slot through bank at south end of Segment G.
62	1	CALL11-006-62	SE	Site 1B. North-west facing section through bank at north end of Segment A.
63	1	CALL11-006-63	NE	Site 1B. Slot through bank at north end of Segment A.
64	1	CALL11-006-64	NW	Site 1B. South-east facing section through bank at north end of Segment A.
65		CALL11-006-65	E	Site 1B. Working shot.
66	1	CALL11-006-66	SE	Site 1B. North-west facing section through bank at south end of Segment A.
67	1	CALL11-006-67	SE	Site 1B. North-west facing section through bank at south end of Segment B.
68		CALL11-006-68	NW	Site 1B. Post-excavation view of bank seen from Segment D looking north-west.
69		CALL11-006-69	SE	Site 1B. Post-excavation view of bank seen from Segment D looking south-east.

Appendix 1.3 Drawing register

Drawing no.	Scale	Plan/Section	Description
01	1:20	P	Site 1C. Cairn, post turf-removal.
02	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment C.
03	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment F.
04	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment A.
05	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment E.
06	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment B.
07	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment G.
08	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment D.
09	1:20	P	Site 1B. Bank. Plan of exposed stones. Segment H.
10	1:10	S	Site 1B. Section G. North facing.
11	1:10	S	Site 1B. Section A. East facing.
12	1:10	S	Site 1B. Section A. North west facing.
13	1:10	S	Site 1B. Section B. North west facing.



Headland Archaeology (UK) Ltd
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North East

Headland Archaeology
13 Jane Street
Edinburgh EH6 5HE
0131 467 7705
office@headlandarchaeology.com

North West

Headland Archaeology
10 Payne Street
Glasgow G4 0LF
0141 354 8100
glasgowoffice@headlandarchaeology.com

South & East

Headland Archaeology
Technology Centre, Stanbridge Road
Leighton Buzzard LU7 4QH
01525 850878
leighton.buzzard@headlandarchaeology.com

Midlands & West

Headland Archaeology
Unit 1, Premier Business Park, Faraday Road
Hereford HR4 9NZ
01432 364 901
hereford@headlandarchaeology.com

www.headlandarchaeology.com