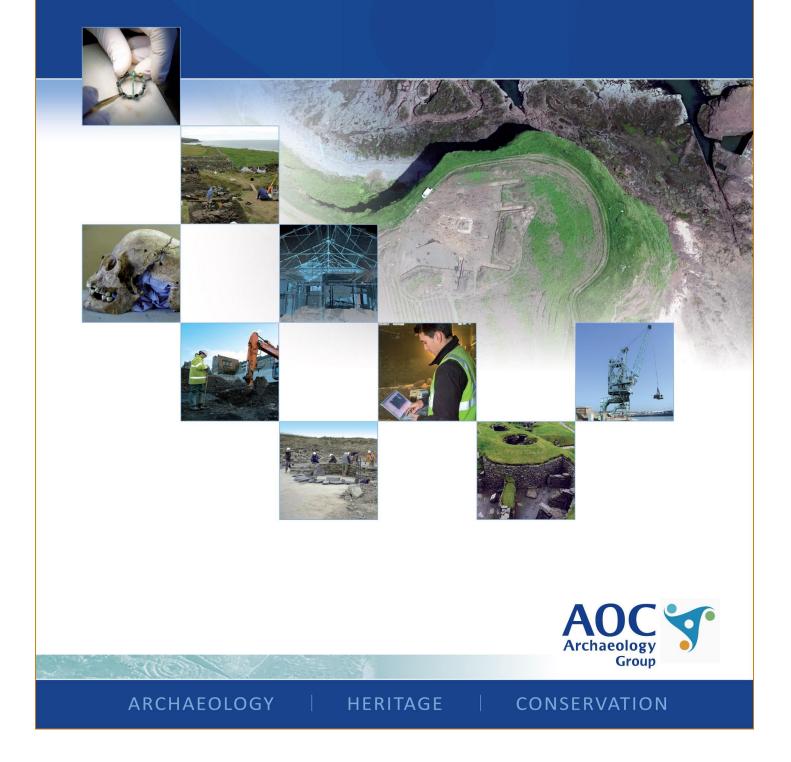
Uppat Hydro Scheme, Brora, Sutherland Archaeological Walkover Survey Report

AOC 70052 8th July 2015



Uppat Hydro Scheme, Brora, Sutherland Archaeological Walkover Survey Report

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Abstract

This report details the results of an archaeological walkover survey of the proposed site for a hydro scheme at Uppat Estate, near Brora, Sutherland. The survey was undertaken on 6th July 2015. 11 archaeological sites were recorded, including clearance cairns, a post-medieval structure, boundary dykes and a platform possibly relating to a previously recorded hut circle.

Mitigation measures have been recommended to ensure these sites are not compromised during development.

Introduction

1. An archaeological desk-based assessment and walkover survey was carried out on behalf of Glen Hydro Development Ltd in advance of the construction of a small hydro scheme located at Carrol on the Uppat Estate, near Brora in Sutherland. The aim of the survey was to identify and assess the nature and extent of any archaeology likely to be directly affected by the proposed development in order to inform recommendations for the protection and management of any sites identified. 11 archaeological sites were recorded along the eastern half of the survey route. While many of the sites are located in close proximity to the proposed access track, only one site is likely to be directly impacted by the proposed pipeline track. Recommendations have been made with regards to these sites.

Project Background

- 2. The proposed access track and pipeline route are located to the west of Loch Brora, northwest of Brora, Sutherland, between NC 8484 0704 to the east and NC 8316 0721 to the west (Figure 1). The proposed access track follows the line of an existing track, which is to be upgraded, from the farm at the east end. The pipeline route runs above the hillside to the north of the Allt a Chairn burn, the water course that the proposed development will be utilising. The present survey was undertaken to identify any archaeological sites that would be directly affected by the proposed hydro scheme and development works.
- 3. A desk-based study of the surrounding landscape was undertaken to identify any known archaeological sites within the development area and to assess the archaeological potential of the site. An archaeological walkover survey had been previously conducted to the north and south sides of the hydro scheme location (Lindsay 2010) while significant prehistoric and post-medieval settlement has been recorded around the landscape.

Character of the Study Area

4. The landscape situation of the survey area comprises upland moorland with mature heather, moss and grassy areas. The land rises from agricultural grazing areas to rugged moor upland that has recently been planted with tree saplings (Plate 1). The western half of the survey area falls across land not denoted any agricultural use (Plate 2), but it is not far from traditional rough grazing areas and may have been utilised as such (The Historic Land Use Assessment, RCAHMS 2014). The underlying geology of the area is Badbea Breccio-conglomerate (BGS 2015).



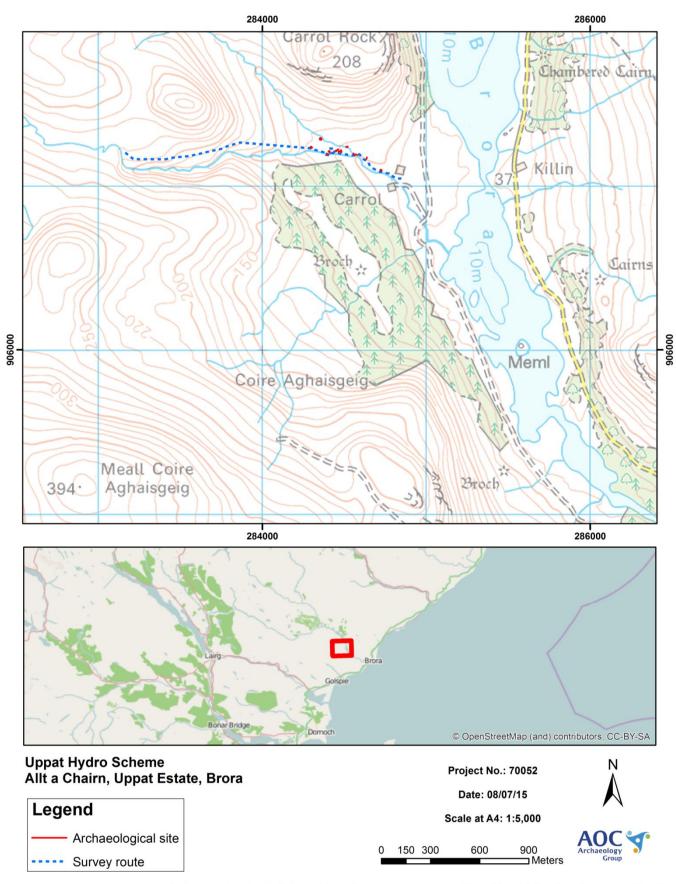
Plate 1 Looking E over the eastern half of the survey area with Loch Brora in background, tree planting visible to left



Plate 2 Looking E over the Allt a Chairn, pipeline location to left

Desk-based Assessment

- 5. A desk-based assessment was conducted prior to commencement of the survey in order to assess the archaeological potential of the area based on previously recorded sites and any historical documentation. A full check of all available historical and archaeological records, aerial photographs and historical maps was conducted using the Highland Historic Environment Record (HHER), the National Monuments Record of Scotland (NMRS), Ordnance Survey Name Books, Historic Scotland databases, the National Library of Scotland, the Royal Commission on the Ancient and Historical Monuments of Scotland databases, statistical accounts and other available records, literary sources or online resources about the site..
- 6. In the New Statistical Account (1834-45) it is noted that ±his parish [Clyne] is not remarkable for much that deserves the notice of the antiquarian, and the few scattered remnants that can be traced are greatly dilapidated+. However, Sutherland is well-known for its archaeological richness and the area around Loch Brora has a plethora of sites from prehistory to the modern era.
- 7. The Old Statistical Account for Clyne (1791-99) remarks on the antiquities in the area of Loch Brora. Particular mention is made of a drystone structure on an artificial island in the middle of the loch and Craig Bar, a hill fortified by a ditch, on the south side of the loch. It is stated that there were several Pictish buildings on each side of the loch. In addition, any uncultivated areas are full of tumuli containing human bones.
- 8. To the south of Carrol, close to the *Allt Coire Aghaisgeig*, are, for example, a broch (MHG10834), enclosure (MHG10833) and a hut circle settlement (MHG10801). Amongst these remains is evidence of later settlement (e.g. MHG14634 and MHG14633).



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Figure 1 Location of the proposed hydro scheme

Cartographic Sources

- 9. Historical maps were consulted at the National Library of Scotland (2015) online.
 - a) First Edition 6-inch-to-the-mile Ordnance Survey map: Sutherland, Sheet XCVII (includes: Clyne; Golspie) Survey date: 1872 Publication date: 1879 This map shows the pipeline route along the *Allt Coire a' Choire* as rough heathland. A township is depicted at *Carrol* at the east end of the burn; there are eight roofed and one unroofed buildings, five enclosures and a head dyke depicted on the north side of the *Carrol Burn*. On the south side of the burn is one roofed building and four enclosures together with a head dyke. There is a foot bridge to connect the single building with the township.
 - b) Second Edition 6-inch-to-the-mile Ordnance Survey map: Sutherland Sheet XCVII (includes: Clyne; Golspie) Publication date: 1907 Revised: 1904
 By the time of the 2nd edition map, the township to the north of the *Carrol Burn* has been reduced to two roofed and two unroofed buildings, four enclosures and a head dyke. To the south of the burn, the original building is no longer depicted, although two further buildings have been constructed closer to the foot bridge. There are two enclosures and a head dyke.
 - c) Sir John Murray and Laurence Pullar Bathymetrical Survey of Fresh-Water Lochs, 1897-1909 Loch Brora (Vol.5, Plate 1) Surveyed: 1902 Published: 1908 This map, although not detailing field boundaries or enclosures, depicts four buildings at Carrol.

Aerial Imagery

- 10. Aerial photographs were consulted at the RCAHMS National Collection of Aerial Photography (2015) online.
 - a) NCAP-000-000-147-517, 19 May 1989 This image shows the majority of the pipeline route from east to west. There was nothing of archaeological interest noted.
 - b) Google (2015) 50m satellite imagery was also inspected. There are several possible structures noted in the grass-covered areas west of Carrol near the survey route. Remains of buildings and walls were noted at Carrol farm.

Historic Environment Sources

- 11. A full search of the Royal Commission on the Ancient and Historical Monuments of Scotlandos National Sites and Monuments Record (Canmore) revealed no previously recorded sites directly in-line with the proposed access and pipeline routes. The following sites in the vicinity of the routes:
 - a) MHG53866 NC 8434 0729 Gilbert's Hill, hut circle This is a hut circle, set at the SW edge of Carrol Burn and slightly eroded by it. Its stone walls, partly covered by short heather and grass, are spread to 2m wide and stand 0.7m high, most prominently on its northwest, upper side. The site is located approximately 50m north of the proposed pipeline route.

- b) MHG53867 NC 8425 0730 Gilbert's Hill, cairn A cairn of football sized boulders, set on top of a short heather-covered, natural knoll in an uncleared area. This would appear to have some significance compared with other clearance cairns situated locally.
- c) MHG53868 NC 8410 0730 Gilbert's Hill, clearance cairns Approximately a dozen heather-covered clearance cairns, approximately 4m in diameter, with occasional stone visible, set on an east-facing moderate slope of grass and heather. It is very poor ground and there are still many large boulders present.

d) MHG53869 NC 8427 0736 Gilbert's Hill, track and pit

A trackway is visible on modern aerial photography. The track leads from Carrol to part way up the valley between Gilbertos Hill and Carrol Rock, allowing access on to the hill for sporting parties. A small borrow pit was recorded at NC 84164 07426 on the northeast side of the estate track, cut a small glacial knoll. The pit measures approximately 4m x 3m and is 1.3 m deep.

e) MHG53870 NC 8414 0755 Gilbert's Hill, clearance cairn This is a single heather-covered clearance cairn on the NE side of Carol Burn. It measures 3m in diameter and is 1m high. Occasional stone is visible beneath the vegetation cover.

f) MHG19558 NC 8480 0710 Carrol, township

A township comprising eight roofed and one unroofed building, five enclosures, and a head-dyke is depicted on the 1st edition of the OS 6-inch map (Sutherland 1879, sheet xcvii). One roofed and one unroofed building, four enclosures, some sheep pens and part of a head-dyke are shown on the current edition of the OS 1:10560 map (1969).

g) MHG10825 NC 8474 0693 Carrol, hut circle

This is a denuded hut circle measuring 12.0m overall diameter. The wall core has been robbed of stones, and little else survives except the outer wall face defined by an almost continuous ring of boulders on edge. The entrance is in the E. No associated cultivation is apparent.

h) MHG10826 NC 8400 0700 Carrol, possible fort

In the late 18th and 19th centuries it was reported that Craig Bar, 664ft high, on the S side of Loch Brora above Carrol, is fortified with a ditch. It is a steep, rocky precipice only accessible by a narrow neck of land between it and the neighbouring hill. It contains about 8 acres and could not be easily defended. In 1964 and 1975, the OS reported that enquiries at Carrol could not connect the name 'Craig Bar' with any feature in the area. From the description given, Carrol Rock (NC 845 078) seems to be the only possible location, although it may well apply to the known fort on Duchary Rock (NC80SE 3). Perambulation of Carrol Rock revealed no obvious signs of fortifications, the only ditches seen on top being old broken drainage ditches.

Aims of the Survey

12. The overall aim of this desk-based assessment and archaeological walkover survey was to identify and record any unknown archaeological sites or features that might be directly affected by the construction of the access track and pipeline route and to assess the potential for buried archaeology to be affected during site construction. This would enable informed mitigation measures and recommendations to be proposed to ensure that the value of any cultural heritage sites would not be compromised.

Survey Methodology

- 13. The development site was walked over and surveyed on 6th July 2015. The weather for the survey was sunny and calm with excellent archaeological visibility. The ground conditions were fair across the eastern half of the route and rough and slightly wet underfoot across the western half of the route due to the presence of mature heather and recent tree sapling planting. The survey was carried out by Mary Peteranna and Sam Williamson.
- 14. The route was systematically walked by the two archaeologists, always within visual contact with one another. Archaeological sites were recorded using high-resolution digital photography. Individual site locations were recorded, using ArcPad GIS software on a handheld Windows Mobile-based Archer Field PC capable of sub-metre accuracy.
- 15. Survey and recording methods recommended by the Royal Commission on the Ancient and Historical Monuments of Scotland (2004) were employed and all work was conducted in strict adherence to the *Chartered Institute for Archaeologists (CIfA) Code of Conduct* (2014).

Results

- 16. The walkover survey identified 11 archaeological sites (Figure 2), of which 10 were previously unrecorded. While the majority of the sites relate to remnants from settlement of an unknown period, at least two of the sites are probably prehistoric in origin. The Gazetteer of Archaeological Sites (Appendix 1) provides the full details of the sites identified and recorded during the survey.
- 17. Near the eastern end of the access track, past the enclosures and farm buildings at Carrol, Site 1 was recorded. It comprises the footings of a suboval boulder/stone building (Plate 3) situated immediately adjacent to the north side of the track. It had not been previously surveyed, nor is it shown on the First or Second Editions of Ordnance Survey (OS) historical mapping.
- 18. Four sites recorded pertain to the two burns. Where the Carrol Burn joins the Allt a Chairn, the site of the ford for the track (Site 3) and a stone-filled channel (Site 4; Plate 4) were recorded. The channel contained compact stone fill with large boulders blocking the east end of it. Another small channel running eastward from Carrol Burn appeared also to have been blocked at the east end of Site 5, a small enclosure bank. A small, slab-built weir, Site 9 (Plate 5), was recorded over the Allt a Chairn at the proposed location for the outfall.
- 19. Five other sites form the degraded remains of boundary dykes (Sites 2, 5, 7 and 8) or enclosures and field clearance (Sites 6a-6d; Plate 6), associated with post-medieval or earlier settlement. None of these sites are shown on the First or Second Editions of OS historical mapping, suggesting they predate this period.
- 20. A hut circle (Site 10; Plate 7), which had been previously recorded (MHG53866), comprised the circular heather- and grass-covered footings of a stone-built bank with probable boulder/stone inner and outer faces and a rubble core. Located on the south side of Carrol Burn, it may have had an entrance in the southeast. Recent tree planting on the site had clearly marked out the location of the site for protection. On the same terrace to the southeast of the hut circle was a stony, circular platform (Site 11; Plate 8) with large stones visible around the edges. It appeared to form the remains of another structure, a possible hut circle, associated with Site 10. The condition was too degraded to be conclusive about the interpretation.

21. The sites recorded have shown that the scattered and fragmentary remnants of settlement remains survive on the land at the base of the hills and river valleys above Loch Brora. They represent significant and continued occupation of the site since prehistory.

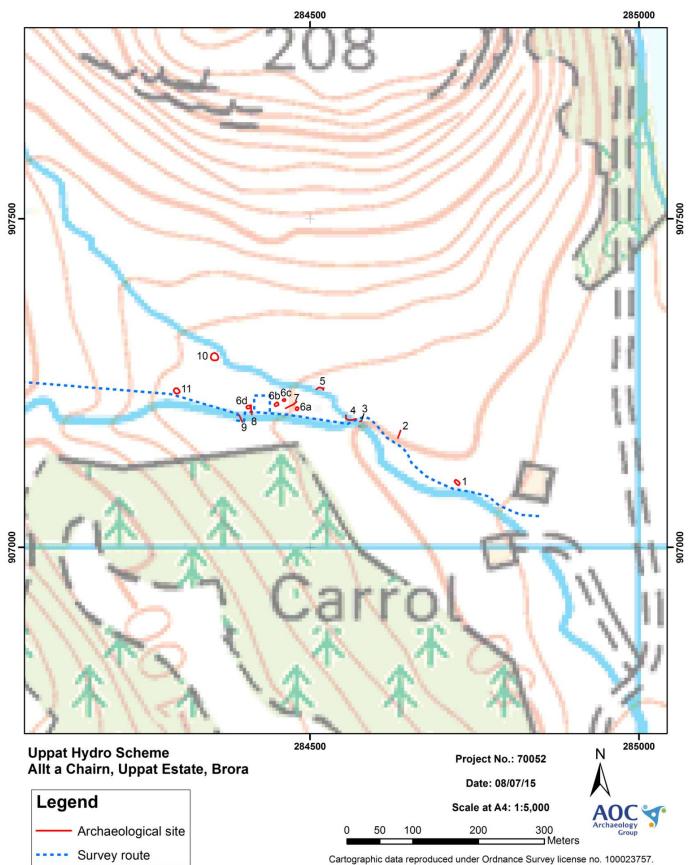


Figure 2 Location of archaeological sites

Recommendations

- 22. The recommended buffer zones for protection of the archaeological sites are shown in Figure 3. The following mitigation recommendations are made:
 - Sites 1 and 11 should be marked out with highly visible mesh fencing and Sites 6-8 should be flagged prior to construction
 - A buffer of 10m is recommended around Sites 1, 10 and 11
 - A buffer of 5m is recommended around Sites 2, 6, 7 and 8.
 - The proposed route should be kept to the south of Sites 1, 6, 7 and 11; the laydown area should be kept between cairns 6b and 6d with the buffer zones maintained
 - If the buffer zones cannot be maintained, an archaeological watching brief is recommended whilst digging in the area between Sites 1-11
- 23. Site 10 is located well away from the proposed development route and should not be a concern. Sites 3, 4 and 9 do not require a buffer given the type of sites they form, while Site 5 is also located well away from the development and is not a concern. However, several of the sites do lie within close proximity to the proposed access track.
- 24. The proposed route and laydown area lies close to building Site 1, a possible prehistoric structure Site 11, clearance cairns Sites 6a-6d and boundary dykes Sites 7-8. Given that Site 11 is likely to be a hut circle and that ±learanceq cairns commonly turn out to be more significant monuments (ie burials), it is imperative to ensure they are not damaged or destroyed. If, however, this is unavoidable, excavation and recording of the sites to be breached is recommended in advance of development.
- 25. As per the current layout, it appears that the track will clip the south end of boundary dyke Site 8. While any damage to it should be kept to a minimum, the site is already mostly degraded condition and recording of it is unlikely to be worthwhile.

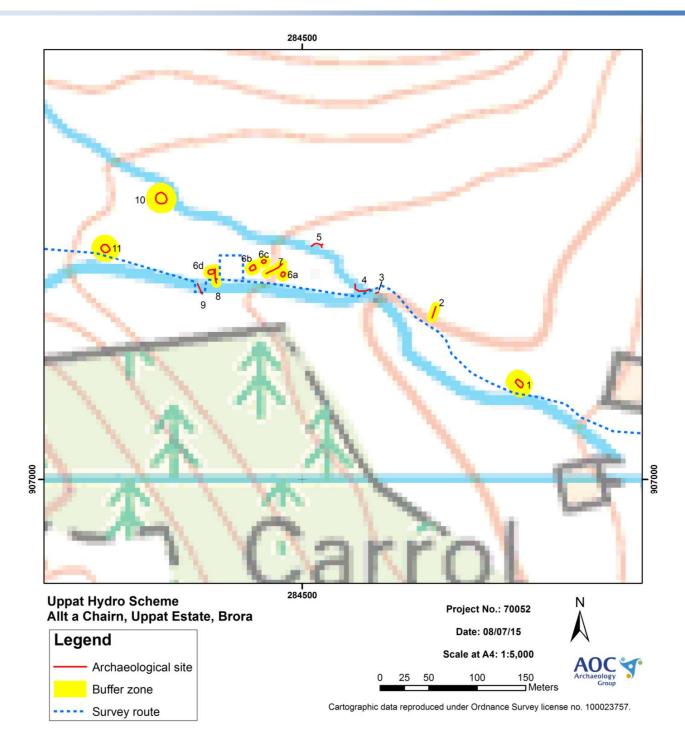


Figure 3 Recommended buffer zones



Plate 3 Looking SE over Site 1, a boulder/stone-built structure adjacent to the access track

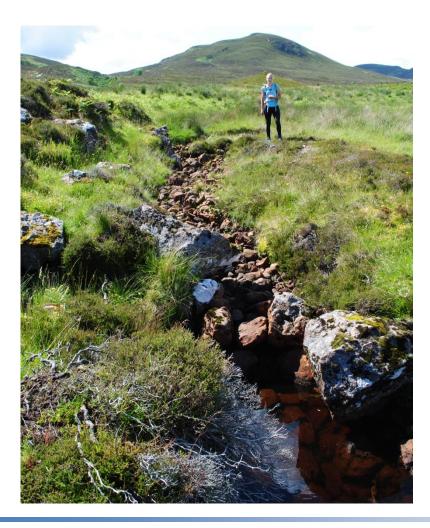


Plate 4 Looking WNW over Site 4, a blocked-up stream channel



Plate 5 Looking SSW over Site 8, an existing weir built into the Allt a Chairn



Plate 6 Looking E over Site 6b, a cairn, in centre right and dyke Site 7 to left of archaeologist



Plate 7 Looking SE over Site 10, the remains of a hut circle located N of the proposed route



Plate 8 Looking NE over Site 11, a subcircular platform forming the remains of a possible site next to the proposed track

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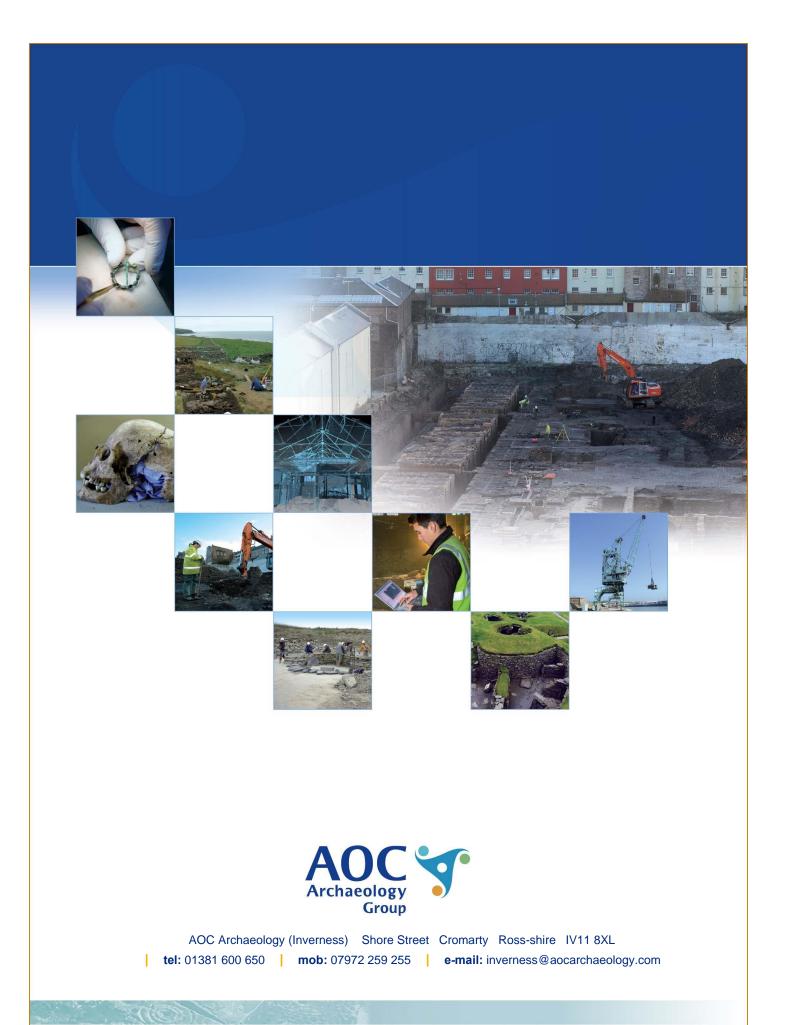
Appendix 1Gazetteer of Archaeological Sites

Site No.	Site Name	Site Type	Description	Alignment	Condition	Period	Ht OD (m)	Easting	Northing	HHER No.
1	Allt a Chairn	Building	Built at the base of a SSW-facing hill are the remains of a grass-covered suboval structure. It comprises boulder/stone walls measuring 8.5m NW-SE by 5m over walls spread to 1.2m wide and up to1m high. Possible building or pen.	NW-SE	Degraded	Post Medieval	55	284727	907097	-
2	Allt a Chairn	Dyke	The grass-covered remains of a boulder and turf dyke are spread up to 1m wide. It has been mostly robbed away.	N-S	N-S Very Post degraded Medieval		55	284636	907172	-
3	Allt a Chairn	Ford	This is the location of a simple ford across stream, forms part of the existing access track.	E-W	E-W Very Post 55 degraded Medieval 55		55	284577	907192	-
4	Allt a Chairn	Blocked channel	A spread of stones inside a stream channel 1- 1.2m wide with an alignment of boulders at the SE end has been built up for the purpose of diverting the stream course.	NW-SE	Degraded	Post Medieval	55	284559	907194	-
5	Allt a Chairn	Enclosure	A U-shaped stone-built bank comprising a single course of boulders encloses an area 10m wide E-W on the N side of the burn. It has been partially eroded on south side. An Alignment of stones/boulders has blocked a small channel next to the burn.	E-W	Very degraded	Unknown	55	284515	907243	-
5	Allt a Chairn	Enclosure	A U-shaped stone-built bank comprising a single course of boulders encloses an area 10m wide E-W on the N side of the burn. It has been partially eroded on south side. An Alignment of stones/boulders has blocked a small channel next to the burn.	E-W	Very degraded	Unknown	55	284520	907242	-
6a	Allt a Chairn	Clearance cairn	A grass-covered clearance cairn measures 6m long E-W by 5m, up to 0.4m high.	E-W	Very degraded	Post Medieval	65	284482	907211	-
6b	Allt a Chairn	Clearance cairn	A grass-covered clearance cairn measures 6m long E-W by 5m, up to 0.8m high.	E-W	Very degraded	Post Medieval	65	284447	907218	-
6c	Allt a Chairn	Clearance cairn	A grass-covered clearance cairn measures 6m long E-W by 5m, up to 0.4m high.	E-W	Very degraded	Post Medieval	65	284463	907225	-

Site No.	Site Name	Site Type	Description	Alignment	Condition	Period	Ht OD (m)	Easting	Northing	HHER No.
6d	Allt a Chairn	Clearance cairn	A grass-covered clearance cairn measures 6m long E-W by 5m, up to 0.6m high.	E-W	Degraded	Post Medieval	65	284404	907211	-
7	Allt a Chairn	Dyke	A heather and moss-covered boulder / stone dyke with possible clearance material at west end comprise a bank spread up to 1.3m wide and up to 0.6m high.	ENE- WSW	Degraded	Post Medieval	65	284472	907216	-
8	Allt a Chairn	Dyke	The mostly degraded remains of a heather and moss-covered boulder / stone dyke with possible clearance material at the north end; comprises a bank spread up to 1m wide and up to 0.3m high.	N-S	Very degraded	Post Medieval	65	284410	907209	-
9	Allt a Chairn	Weir	A concrete slab-built weir across the burn has been built onto bedrock either side. The slabs measure c.10cm wide.	NW-SE	Degraded	Post Medieval	65	284395	907196	-
10	Allt a Chairn	Hut circle	Under heather and grass is a hut circle with possible boulder kerbs. The internal diameter is 8m, with walls spread 1.3-1.8m wide and 0.4 - 0.6m high. It has been partially eroded on NE side by the stream and may have an entrance on the SE side.	-	Very degraded	Prehistoric	65	284350	907287	MHG53866
11	Allt a Chairn	Platform	A circular platform under moss and heather measures 9m in diameter. Spread of stone is visible over the surface with boulders and possible kerb stones around the edges. It is a possible hut circle or other unknown structure.	-	Very degraded	Unknown	75	284300	907234	-

Appendix 2 List of Survey Photographs

Photo No.	Direction Facing	Site	Description	Taken By	Date
1	Е	1	Grass-covered boulder and stone wall forming remnants of rectangular structure built on SSW-facing slope of hill.	MKP	06/07/2015
2	SE	1	Grass-covered boulder and stone wall remnants of rectangular structure built on SSW-facing slope of hill.	MKP	06/07/2015
3	S	2	Remnants of boundary dyke (below archaeologist) and general area	SW	06/07/2015
4	SSE	3	Ford across stream	SW	06/07/2015
5	SSW	4	Blocked stream course	SW	06/07/2015
6	WNW	4	E end of the blocked stream course	SW	06/07/2015
7	NNW	5	Boulder enclosure in centre left of image, with side stream running down right side of frame to join main stream below	SW	06/07/2015
8	E	6b, 7	Cairn 6b in foreground and archaeologist beside boundary dyke 7	SW	06/07/2015
9	SSW	9	Concrete slab-built weir	SW	06/07/2015
10	SE	10	Grass and moss-covered hut circle in centre of image to right of the archaeologist	SW	06/07/2015
11	E	-	General view across landscape	SW	06/07/2015
12	NE	11	Subcircular platform, possible site (centre of image)	SW	06/07/2015
13	ENE	-	Looking over the landscape at the E end of the survey area, tree planting to right	MKP	06/07/2015
14	Е	-	General landscape panorama showing tree planting to left	MKP	06/07/2015
15	E	-	General landscape shot, stream through ravine	MKP	06/07/2015



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