

Achkeepster, Caithness
Location of Proposed Windfarm
An Archaeological Assessment

by

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on behalf of

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1.0 Executive Summary

This report presents the aims and results of an archaeological desk-based assessment and walkover survey commissioned by Innes Miller Mediations and undertaken in advance of the proposed windfarm to be located on the lands of Achkeepster, Spittal, Caithness.

The archaeological assessment comprised a desk-top study and a walkover survey. All the previously recorded archaeological sites were visited and their present condition assessed. An attempt was made to locate all features depicted on earlier maps - particularly field boundaries, sheep shelters and stells - on the ground. In addition, a number of unrecorded archaeological remains, including five hut circles and a possible burnt mound, were identified. In total, thirty-seven groups of archaeological remains were identified, either on the ground or in the documentary record. A picture of a densely occupied landscape, inhabited from prehistoric times onwards, was revealed through the known and unknown features.

2.0 Introduction

The archaeological assessment was commissioned by Innes Miller Mediations in advance of the planning of a proposed windfarm at Achkeepster, Spittal, Caithness. The intended windfarm involves the erection of thirty-eight wind turbines spread out over the northern and western part of the proposal area, plus the insertion of the linking access roads (fig. 1). The aim of the archaeological assessment was to establish the presence or absence of already recorded archaeological sites in the area, to prospect for further undiscovered archaeological remains and to propose appropriate mitigation measures if archaeological remains were identified within the proposal area.

The proposal area comprises a 800ha area, extending south and westwards from the farm at Achkeepster (ND 1690 5168), bounded by the Thurso river to the west (ND 1390 5080), the Little River to the south (ND 1465 4905) and the main Latheron-Thurso road (the A9), across the Causeymire, to the east (ND 1700 4748). On the north-west, the boundary is formed by the southern limit of the Dale Moss and, on the north-east, by the fence between the lands of Achkeepster and Mybster. A variety of distinct landscape units are encompassed within this area. Of most significance in terms of human occupation and utilisation are the areas where deep drift deposits of boulder clay form fertile soils overlying the Wick and Thurso Flagstone Groups of the Middle Old Red Sandstone, although this fertility is somewhat dependent on whether these soils are freely or imperfectly drained (BGS 1913, Sheet 116, Solid and Drift; Macaulay 1982, Soils, Sheet 3; Macaulay 1983, Land Use Capability, Sheet 3). Alluvial soils occur in a narrow strip on either side of the Thurso and Little Rivers, fringed by the boulder clay, which also reaches in a narrow tongue eastwards from Tormsdale, and in a wider band around Achkeepster, extending westwards to the Black Burn and then northwards to its confluence with the Achlachan Burn. Most of the settlement occurs on the alluvial soils on the first and second terraces above the rivers. Much of the rest of the area comprises a large basin covered in blanket peat. Over much of the lower ground, such as that lying between Achkeepster and Bad a'Cheo, the area between the Black Burn and the Allt an Dobhrain and the area south of the Allt Aikergill, this can be utilised as rough grazing and has been intensively drained in the more recent past. Most of the most prominent drains were dug in around 1950 (Innes Miller, pers. comm.) The area between the Allt Aikergill and the Little River has been subjected to commercial peat extraction since 1987 (Innes Miller, pers. comm.), while there are two forestry plantations near maturity in date (the small triangular one, south of Achkeepster itself, planted in 1949, and the larger one, further to the south, planted in 1966 (Innes Miller, pers. comm.)). On the highest ground, south of Bad a'Cheo, a network of small pools make this reminiscent of the main areas of the flow country to the west. The altitude ranges from 60m OD, along the Thurso River, to 100m OD immediately north of the farm at Achkeepster.

This report offers the results of this assessment, alongside general recommendations for the mitigation of the affect of the proposed windfarm on the archaeological remains identified in each of the development areas.

3.0 Aims and Objectives

This survey was intended to identify the presence or absence of archaeological features in the proposal area and assess the likely impact of the development upon them.

The objectives of this study were as follows:

- to collate any known archaeological information on the proposal area
- to identify any previously unknown archaeological sites through inspection of the aerial photographic record and the available cartographic evidence
- to evaluate the archaeological significance of the area through field inspection
- to assess the potential impact of development in this area and to suggest appropriate mitigation measures where these might be necessary

4.0 Methodology

An initial desk-top study involved consultation of the National Monument Record for Scotland (NMRS), held by The Royal Commission on Ancient and Historical Monuments of Scotland (RCAHMS) in Edinburgh, and the local Sites and Monument Record (SMR) for Highland, held by the Highland Council Archaeology Unit in Inverness. All the cartographic sources held by the National Map Library in Edinburgh were examined. Particular emphasis was placed on the First and Second Edition Ordnance Survey maps (Appendix 9.1.1; figs. 2-4). The vertical stereo aerial photographic record, also held by the RCAHMS, was examined for any sites of potential archaeological interest which might be visible as soil or vegetation marks. Three series of photographs, taken in 1946, 1987 and 1988, were available for consultation (Appendix 9.1.2). A brief search was conducted of the material contained in the National Archives of Scotland, with particular emphasis placed on estate plans and landholding records. Readily available secondary material for the area was also consulted (Appendix 9.1.3). Finally, Mr. Innes Miller, owner of the lands at Achkeepster, provided freely of his detailed local knowledge of the area and allowed access to early estate plans.

A walkover survey was conducted of the areas selected for the locations of the proposed wind turbines and the three roads to provide access to them. Neither the three conifer plantations, the areas of very wet peat bog or the areas which have been subjected to commercial stripping for peat, were examined. Each of the archaeological sites identified was described, photographed and plotted on the 1:25000 map (fig. 1), as appropriate.

5.0 Results

5.1 Documentary sources

Consultation of both the SMR and NMRS revealed a number of known archaeological sites within the proposal area. These range from stone rows and broch mounds to much more recent crofting settlements. The details of individual sites have been fully described in the site gazetteer (see below); however, a brief characterisation can be made for the occupation of this area from the prehistoric period onwards.

As over much of Caithness, the lands of Achkeepster and their immediate environs are rich in upstanding archaeological remains. The earliest recorded monument and potentially the most important site lying within the proposal area is the series of stone rows, lying just to the south of Tormsdale and east of the Thurso River (NMRS/SMR no. ND14NW16; ND 1483 4974). This is probably the least obvious of all the archaeological remains in the proposal area and was only discovered in 1982, although it has since been surveyed in detail (Myatt 1984). Such fan-shaped arrangements of small stones aligned in multiple rows are unique to Caithness and Sutherland. Over twenty sites are now known, the best known example being the 'Hill o' Many Stanes', near Mid Clyth. A further example can be seen at Dirlot NMRS/SMR no. ND14NW6; ND 1228 4856), just under two miles to the south-west, where the rows appear to radiate out from two small cairns. In addition to the stone rows, a group of three standing stones and another isolated stone are located to the south of the crossroads at Mybster and just outside the proposal area (Clach Ghlaise, NMRS/SMR no. ND15SE9, ND 1678 5269; Well of Mybster, NMRS/SMR no. ND15SE10, ND 168 519). There are a further two standing stones at Halsary (NMRS/SMR no. ND14NE2, ND 1680 5158; NMRS/SMR no. ND14NE3, 1764 4923), to the east of the proposal area. These stones form part of a distinct pattern of isolated stones running north along the lower ground from Latheron to Mybster, where it meets another line of stones heading east towards Backlass; a further line joins the Latheron-Mybster alignment at Rangag (Myatt 1989, 41). Although no contemporary settlement evidence has been discovered in association with these presumably ritual and ceremonial monuments, their design suggests that they were built within a fairly open and well utilised landscape. It is possible that the recovery of a carved stone ball from Dale Moss, Westerdale (NMRS no. ND15SW38; SMR no. ND15SW33, ND 130 510) implies that peat had already started to form in these areas by the Neolithic period and provides a further indication of the density of occupation in this period.

Two large broch mounds lie along the Thurso river (Tulach Beag, NMRS/SMR no. ND14NW1, ND 1459 4980; Tulach Mor, NMRS/SMR no. ND14NW2, ND 1485 1940), while a third probable broch mound at Achkeepster was destroyed in the nineteenth century (NMRS/SMR no. ND15SE11, ND 1680 5158). During its removal, human remains were recorded (OS Name Book No. 4, 177). In addition to these, the spectacular broch of Cairn na Maig (NMRS/SMR no. ND15SW22, ND 1331 5103), lies just beyond the north-western boundary of Achkeepster, whilst there are a considerable number of other broch mounds located close by. Like Tulach Mor and Tulach Beag, many of these have not received much attention in the past and appear simply as large grassy mounds, often with very little stone apparent. Several have been severely damaged by agricultural activities. Nonetheless, the Name Book does record several interesting finds from brochs in the vicinity of the proposal area. In addition to the human remains recovered from the broch at Achkeepster, similar activities at the broch at Achies East resulted in the recovery of human bones in 1850, while - during its demolition in 1841, a sculptured stone was removed by "a gentleman residing at Thurso Castle" from the broch at Sibster. The nature of broch architecture and their still quite considerable presence in the landscape suggests a highly stratified society. The presence of an encircling village, so clearly visible at excavated brochs such as those at Keiss and at Yarrows, may be present within the ditch at Tulach Mor. Further, the presence of the possible hut-circle at Tormsdale indicates the potential for unenclosed settlement (NMRS/SMR no. ND14SW24; ND 1424 5044). Hut circles are also known from the Dale and Achlachan Mosses (NMRS no. ND15SW64, SMR no. ND15SW0069, ND 1470 5220; NMRS/SMR no. ND15SW10, ND 1459 5262) and from Corner Cottage, Dale (NMRS/SMR no. ND15SW31; ND 1350 5203), while a cluster of five were identified during the current survey (Sites 15-19). The brochs and hut circles need not be contemporary, but both attest to the fact that this has always been a densely occupied landscape.

Continuity of occupation in the area is indicated by the nineteenth century discovery of a long cist discovered close to Mybster Inn (NMRS/SMR no. ND15SE7; ND 1644 5292), plus another four recovered from close by the Spittal farm broch (NMRS/SMR no. ND15SE6; ND 1755 5439). These seem to indicate continued use of sites such as brochs into the early medieval period. Dale House, the focus of the medieval and later estate of Dale and Toftingall (see below), overlies the remains of a broch, from which human remains were recovered during its removal (NMRS/SMR no. ND15SW16; ND 1297 5227); in the Norse period, it was probably also the home of the Moddan of Dale, who is

mentioned in the Orkneyinga Saga (Palsson and Edwards 1978, 53). The apparent importance of the Mybster crossroads is confirmed later in the medieval period by the presence of St. Magnus's hospital, just to the north-east of the village of Spittal (NMRS/SMR no. ND15SE1; ND 1588 5487). This was an important resting place for pilgrims on their way to the shrine of St. Magnus in Orkney, while the hospital's chapel also acted as the parish church and later as a Clan Gunn burial place. The prominence of this area within Caithness as a whole is highlighted by Spittal Hill, the traditional gathering place for its inhabitants (NMRS/SMR no. ND15NE7; ND 167 556). Significantly, perhaps, the earliest surviving map of Caithness available for consultation, that of Robert Gordon dating to 1642, confirms the spelling of the current name, Toftingall, for the farm below Spittal Hill, as Tochnagal, 'the place of strangers'. Spittal Hill was the site of the Georgemas fair, one of the major markets in Caithness, up until the early nineteenth century when the site shifted to Sordale Hill (Omand 1989, 139). The name 'Causeymire' is also attested on the earliest maps of Caithness and in some of the earliest written accounts of the parish (Gordon 1642; Macfarlane 1726, 163), implying that by the seventeenth century there was indeed a built road here; it is traditionally thought to have been built by Cromwell's soldiers, but the cartographic evidence would seem to predate this (Watson 1989, 180). Bishop Forbes, on his travels through Caithness in 1762, was recommended to take a guide, and described "the Causay Mire, one continued piece of mossy Ground for about two miles at least, full of Sloughs and Quagmires, directly across the road to Thurso; but why it is called by such a name I could not conceive, as to the smallest vestige of [a] Causway we could not discover in the whole. However, at Thurso, they told me that a Causway had been there of old, but that it had sunk down out of sight by the Ruines of Time" (Craven 1886, 192). It was fairly soon after this, that Sir John Sinclair began his campaign of road building, exploiting the statute labour of the county (Watson 1989, 181).

After his crossing of the Causeymire, Bishop Forbes 'halted at Auchateebst, an Inn and took a Dram on Horseback' (Craven 1886, 193). The inn at Achkeepster, located in the vicinity of the present shepherd's cottage (NMRS no. ND15SE11.1; SMR no. ND15SE0018; ND 168 515), and its later replacement at Mybster, situated right on the junction of the main north-south and east-west routes (Sinclair 1988, 15), are in some respects the successors of the hospital at Spittal. Only one 'licensed tavern' was listed as operating in the parish in the 1790's (Cameron 1791, 80); Forbes' visit certainly confirms that Achkeepster was in existence by this date, so it is possible that Cameron was referring to it, although it seems unlikely that Halkirk had no such establishment at this time. In contrast, a total of seven inns are noted in 1840 (Munro 1840, 83); an envelope, addressed to Mrs Greys, Achkeepster Inn, in the possession of Innes Miller, attests to the fact that it was still operational in 1853. Drovers seem to have converged on this area, before moving south (Omand 1972a, 136); the enclosures on the other side of the road to Achkeepster were used as holding pens (Innes Miller, pers. comm.; NMRS/SMR no. ND15SE18; ND 169 515).

Within the proposal area, the present landscape is dominated by the remains of much more recent settlements in the form of abandoned crofts - of which there are nine separate clusters - and their attendant fields. Most of these appear to be permanent settlements. Interestingly, the name Achkeepster, which in its role as an inn, must have been one of the most important settlements in the area, appears to be made up of the elements *achadh* and *bolstadr* (Watson nd). Since the Gaelic *achadh*, while it literally means field, can also mean a small farm, reflecting a gradual development from cultivated fields into a permanent farming settlement (Waugh 1989, 145, 149), is here linked with *bolstadr*, the Norse version of the same word, it may reinforce the significance of this place as one of the earliest settlements in the area. The element 'keep', may be a personal name. Mybster, again formed from the element *bolstadr*, means moor farm and appears to provide confirmation of the fact that the formation of the peat had taken place before it came into existence.

Following the murder of Bishop Adam of Caithness in 1222, the lands of Dale and the cruives (salmon netting) on the river Thurso, were appropriated to the church as recompense for this act (Miller nd., 2). Little is heard of these lands during the rest of the medieval period. In 1559, the Bishop of Caithness alienated Tormsdale (NMRS no. ND14NW23; SMR no. ND14NW24; ND 143 499, along with Westerdale and Easterdale) to John, earl of Sutherland and his wife, Helen, the

countess of Arrol (OPS, Vol. II.2, 760). In 1564, Alexander, son of Earl John, was made hereditary tenant and in 1601, the lands were annexed to the earldom of Sutherland (*ibid.*). The position of Achkeepster is unclear; since it - as well as Tormsdale, Westerdale and Easterdale - were part of the estate of Toftingall, held by the Budge family, from about the end of the sixteenth century (Innes Miller *nd.*, 2), this might have been the case at an earlier date. Certainly the 1751 valuation roll for Caithness confirms that the Budge family held Achatibster (Achkeepster), although Easterdale is the only other farm noted in the roll, which is mentioned in the earlier grants to the earl of Sutherland (Timperley 1976, 91). The Budges apparently received the estate in return for helping Catholic priests after the Reformation; the house built by them is of eighteenth century date, but it may have replaced the earlier house, shown on Gordon's map of 1642 and probably associated with the doocot, which - on architectural grounds - predates the existing building by about a century (Miller *nd.*, 2-3). The last of the Budges, Grizzel, died in 1800 and the estate passed to her second cousin, Patrick Murray Thriepland of Fingask in 1800 (*ibid.*, 3-4). Their tenant, Sinclair Gunn, was responsible for the introduction of commercial sheep farming (*ibid.*, 4).

None of the other settlements noted by the Ordnance Survey in the late nineteenth century and recorded during this survey are mentioned in either the Valuation Roll or in an estate rental book of later date in the possession of Innes Miller; their non-appearance suggests that the rent for them was paid by sub-tenants of the people mentioned in the rental book. This is perhaps confirmed by the author of the OSA, who lamented the number of small farms in the 1790's; these were too small to be viable, the problems of their tenants compounded by the servitudes imposed by the landlords, the need to sell the majority of the crops they did grow to raise cash, the amount of time spent harvesting and carrying peat to Thurso, also sold to raise money (Cameron 1791, 115ff). The tenants did not help their lot by converting most of their bere into whisky, ostensibly again for sale, although, like the peat, it did not provide enough of a return to make it viable (*ibid.*). According to the Name Book, all the tenants had the right to cut peats in Achkeepster Moss (Book 4, 180), a right confirmed by the author of the NSA in his statement that every farmer was allowed to cut as many peats on his landlord's property as he required (Munro 1840, 83). The service road, recorded in the estate rental book, as being constructed out into the moss in 1884, might have been to facilitate access to these peat cuttings (Innes Miller, *pers. comm.*).

It is noted in the NSA that much more grain was being grown in the early nineteenth century than had been the case at the end of the eighteenth century (Munro 1840, 83). This would seem to be attested by the presence of three possible kilns at Tormsdale south (NMRS no. ND14NW23; SMR no. ND14NW0024; ND 144 500), Bognagee south (NMRS no. ND14NW5&20; SMR no. ND14NW004&23; ND 154 485) and Alltduin (NMRS no. ND14NE21; SMR no. ND 14NE0024; ND 157 477). However, most of these farms must have placed most of their emphasis on stock. In the OSA, the minister notes his belief that there was a third over capacity of cattle in the parish, with the consequent use of the moorland pasturage for animals resulting in the lack of enclosure so visible on the OS maps a century later (Cameron 1791, 60, 86-7). The name, Inshag (Site 021), appears to derive from the Gaelic word, *innis*, for cattle pasture, with the diminutive, *-ag*, affixed (Omand 1972b, 226). The presence of a possible shieling hut to the south of Bad a' Cheo (NMRS no. ND14NE18; SMR no. ND14NE0017; ND 1680 4850), with further probable huts on the west side of the river from Bog na Gaoithe (NMRS/SMR no. ND14NW12; ND 1412 4893) is, however, the only tangible evidence of the importance of animals in the economy of the area. The place-name, Halsary, immediately to the east of the Causeymire road, appears to mean the 'ridge of the shieling', *hals* + *airigh* (Watson *nd.*), adding further weight to this hypothesis. Many of these farmsteads were clearly in decline by the time the OS First edition was compiled (only two were completely abandoned by this date (Tormsdale north and Inshag); Alltduin and Baledavist do not appear at all), yet the last only seems to have been abandoned after 1918 (Innes Miller, *pers. comm.*). The main reason given was their inaccessibility. Around the now abandoned farmsteads lie the stells and sheep shelters which succeeded them. This seems to be in spite of the fact that, in the 1790's, sheep were believed not to do well in the parish, although the same author did go on to state that 'proper' sheep farms would be successful (Cameron 1791, 88-9). By the time the Name Book was compiled, Achkeepster was described as a former farm, now converted into a shepherd's dwelling attached to Dale, with all its

land converted to sheep pasture (Book 4, 180). The estate rental book records the erection of a shepherd's house at Achkeepster, presumably a replacement for this one and referring to the extant cottage, now abandoned in its turn, in 1901-2 (Innes Miller, pers. comm.).

Bearing in mind the nature of the past land use of this area (particularly the extensive drainage and peat cutting which has occurred), the aerial photographic coverage tends to produce a number of distinct, very regularly shaped, features which dissolve into nothing more than peat cuttings or drains on the ground. What they do highlight is the presence of formerly cultivated ground, probably giving a fairly accurate picture of, at least, its nineteenth century extent. The proposal area is covered by three series of vertical air photographs taken by the RAF immediately after World War II. All are at a scale of 1:9300 and, although the quality of the prints is quite poor, they provide a useful picture of the area, only forty years after the final abandonment of the settlements along the Thurso river. Essentially, they confirm the picture presented by the OS First and Second edition maps. The details of individual sites, where they fall within the proposal area, have been described in the site gazetteer (see below), so only an overview is presented here. Although somewhat dominated by the presumably more recent drainage pattern, these photographs give a clear sense of the sheer amount of peat extraction which had taken place by this date. Peat cuttings appear to cover more or less all of the more low-lying areas, occurring often in close proximity to the settlements above the Thurso river. Equally dramatic is the amount of rig visible, particularly in the fields of Baledavist and Achkeepster, around Tormsdale, and, further south, around Bognagee north. Much of this appears to be aligned with the extant field boundaries, although this need not imply contemporaneity. Very little of it seems to have the distinct reversed s-curve which could imply an early date; all of it seems to be wide and straight, as though the result of mechanised ploughing. On the ground, this rig is now largely obscured by sedge, although it can still be felt. Unfortunately no photographs were taken between 1946 and 1987. However, the 1987 set are at a scale of 1:12000 and much sharper than RAF photos, so they provide a clear picture of the obvious archaeological remains, plus the forestry plantations and the extent of commercial peat extraction. Although useful in gaining a sense of the settlement layout, they provide few additional details. The final set of photographs, taken in 1988, are at too small a scale (1:24000) to do anything more than confirm again that no major changes had taken place.

The majority of the early maps show little detail which is of use in interpreting the remains encountered in the survey and their geography tends to be somewhat askew (e.g. Arrowsmith 1807; Thomson 1832). Gordon's *Cathenesia* (1642) simply names the 'Myre Calsay', but it does, however, indicate the presence of woodland on the higher ground south of Toftingall. This is interesting because it supports the place-name *Druim a' Choille*, 'hill of the wood', recorded on the OS First edition map as lying south of the Little River, to the south-east of Alltduin. The Name Book records that *Druim a' Choille* was partly covered in the remains of decayed bushes (Book 4, 184). This seems to confirm the survival of what was presumably only scrub woodland into the nineteenth century and, alongside a couple of rowan trees (now also dead) noted during the survey in the enclosures of Achvidigo and Bognagee north, suggests that the appearance of the landscape may once have been very different; Sinclair in 1890, although referring to events which took place at a much earlier date, describes Strathbeag, in the vicinity of Tacher (just beyond the southern boundary of the Achkeepster lands) as well wooded. Roy's map of the middle of the eighteenth century, while very detailed, unfortunately misses out Achkeepster and details of the eastern side of the proposal area due to the junction between map sheets 37/2 and 38/1. This may be the result of the fact that the main road used to run further to the east than its present line (which runs almost due north from Achkeepster and Mybster) towards Toftingall (c.f. Reid 1801); Roy does not show the road at all, which seems rather surprising. Along the Thurso river, a number of clusters of buildings, each surrounded by rig, are depicted. These correspond well with the locations of the clusters present today, although not all of them are named. No buildings are associated with the large amount of cultivation shown in the area of Bognagee north and Inshag. In the southern part of the area, however, the two names which are given - *Achideyag* and *Achary* - cannot be directly linked to known settlements. Reid's estate plan of 1800 presents a very similar picture, although here the names correspond with those recorded by the OS later in the century; this suggests that the discrepancies between this plan and that of Roy may be due to the former's lack of intimate knowledge of the area. The Ordnance Survey maps (1872 and 1905),

dating to the latter half of the nineteenth century, simply corroborate this picture, one which is also confirmed by an estate plan of around 1861, compiled by James McKay and in the possession of Innes Miller, although this simply names each settlement and does not show buildings. Whilst it is difficult to be precise, the layout of the buildings on the OS map seems to be remarkably consistent with those visible today, while each is surrounded by a small area of improved ground. The sheep shelters and stells were also in existence by this date. A number of gravel pits along the side of the Causeymire attest to a considerable amount road-building. As with the aerial photographs, details of individual sites shown on the maps are described in the site gazetteer (see below).

5.2 Field Inspection

The proposal area was examined on the 19th and 20th February, 2001. The weather was generally good, being particularly bright and sunny on the first day. However, the afternoon of the second day was marred by heavy rain, which reduced visibility considerably. The boulder clay areas have clearly been intensively used for agricultural purposes in the past, although the re-colonisation of much of the formerly improved ground by sedges, ensures that the visibility of any features of potential archaeological significance is variable. Most of the more low-lying areas are covered in rank vegetation, which makes it equally difficult to identify features. Low mounds, which superficially appear to be clearance cairns, but are most likely to be formed solely from peat, further complicate the situation. It was decided to avoid the higher land, where the ground surface was dominated by numerous peat pools, as well as those areas which had undergone commercial stripping for peat. In spite of this, it was felt that a fairly accurate picture of the topography and any potential surface remains was obtained.

All the archaeological sites identified, whether from earlier maps or on the ground, have been given a unique number. Each is listed and described below and has been plotted on fig. 1. Their NMRS number and SMR numbers, where applicable, are also included in the gazetteer.

Site 001	Hut circle?	NMRS/SMR no. ND15SW24	ND 1424 5044
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Just outside the improved ground belonging to the farmstead of Tormsdale and located on a low knoll, above more marshy ground to the west, is a circular enclosure formed from a low earthen bank, c. 0.2m high. Its internal diameter measures c. 9m, over banks spread to between 1m and 1.5m. The enclosure was thought to be a possible sheepfold by the OS surveyor in 1981, presumably because of its close proximity to the later settlement of Tormsdale. However, it has an entrance in the SE quadrant (possibly exacerbated by recent vehicle tracks) and is perhaps more likely to be a hut circle.

Site 002	Burnt mound?	NMRS/SMR no. N/A	ND 1428 5031
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A very distinct crescentic mound, located - like Site 001 - on the edge of Tormsdale's fields. It stands out from the surrounding flat ground, as much drier and therefore grassier than the adjacent sedge-dominated fields. The mound rises to a height of 0.6m and has an overall diameter of c. 8m, with the central hollow measuring c. 1-1.5m in diameter. These dimensions make it of comparable size to the known burnt mound near Dalemore on the other side of the Thurso river (NMRS/SMR no. ND14NW3; ND 1446 4891), although no stone, burnt or otherwise, is apparent. The mouth of the hollow lies to the west.

Sites 003-007 Tormsdale

Although Tormsdale now consists of three distinct clusters (see Sites 3, 4 and 6), Roy shows a single cluster of around five buildings, surrounded by rig. Reid's plan of 1801 shows two distinct groups of buildings. The northern one comprises three buildings, one of which is attached to a square enclosure. The southern one has four buildings, two of which form two sides of an enclosure. In the Name Book (Book 15, 33), the remains at Tormsdale are described as a shepherd's house and a farmsteading; this

would seem to equate quite well with the northern and southern clusters respectively. On the OS First edition (1875), only the southern cluster is shown as roofed (fig. 2). The only feature on this map which was not located on the ground is the extension of the track from Westerdale where it crosses the Tormsdale fields to the north of the building clusters.

Site 003 Farmstead NMRS no. ND14NW23/SMR no. ND14NW24 ND 1428 5031

A small farmstead consisting of one longhouse, on an east-west alignment, and two smaller buildings along the south side of a square enclosure. The earth-bonded walls of the main longhouse are now in quite a dilapidated condition, in spite of the fact that they are neatly built from small, squarish stones with larger stones forming the quoins; the east gable stands to 1.5m in height, but both are beginning to collapse. The rest of the walls are no more than a few courses high. The internal dimensions of the building are 27m (E-W) by 4m (N-S). The building is divided roughly into half, with the eastern half, further separated into two, producing two compartments, 5.5m (west) and 3.5m (east) long. A single entrance on the south side gives access to the eastern half of the building, with the partition wall coming along the eastern side of the doorway. A gap between this and the southern wall allows access to the easternmost compartment. The eastern half of the building was clearly the living space, as the east gable contains a fireplace, while there is a probable window in the northern wall. Access to the western half of the structure is through a central doorway and also through a gap between the south wall and the western wall of the central compartment. The western half of the structure appears to be differentiated and may have been for livestock. This is confirmed by the presence of a gap in the centre of the west wall, through which a drain appears to run.

A smaller building, on a NW-SE alignment and measuring 14.5m (NW-SE) by 3m (NE-SW), lies at the south-east end of the longhouse. Although constructed from much larger stones than the main building, the walls only stand to 0.4m in height and are almost entirely grass-covered. The building seems to be divided into three. The central compartment is the largest, measuring 6m in length. The western compartment is 2.5m long and the eastern one, slightly smaller, at 2m long. The preservation of the building means that no certain entrances can be identified; there is a possible one at the north-west end of the SW wall, with a further entrance into the apparently isolated SE compartment, also in its SW wall.

The third building is even more dilapidated, its footings entirely grass-covered. It lies to the east of the other buildings, on a N-S alignment and is linked into the main enclosure. It seems to consist of a single compartment, measuring approximately 4.5m by 2.5m internally. There is no apparent entrance, but it is likely to be at north end of the west wall.

The area in front (south) of the buildings was covered in water. The chalybeate spring marked on all editions of the OS map must be partly responsible for this, since all the water is iron-stained. The spring, itself, must be the large sedge tussock at the SW corner of the third building.

The enclosure wall stands to about 0.5m high and is 0.5 wide. Where animal poaching has occurred on the north-east side of the enclosure, the structure of the wall is visible, indicating that it was stone faced around an earthen core. Inside the enclosure, the ground is very rushy.

Site 004 Farmstead NMRS no. ND14NW23/SMR no. ND14NW24 ND 1423 5010

Lying to the south-east of the northern cluster, is a small rectangular enclosure annotated as a sheepfold on the OS First edition (fig. 2). To the south of this lie the footings of a building, suggesting that the sheepfold originated as part of a discrete cluster within the main settlement of Tormsdale; this building is not shown on the OS Second edition, though it reappears on the modern maps.

The enclosure wall stands to c. 0.5m high, with particularly massive foundation stones at the corners. The interior, measuring 23m by 14m internally, is largely overgrown with sedge and the entrance is in the south-west corner. Immediately to the south of this enclosure and separated from it by wet ground, are the footings of a single building on a NE-SW alignment. Its level grassy interior appears to be slightly raised above the surrounding ground surface. Few stones are apparent in the walls and, in particular, the line of the eastern wall is difficult to distinguish. The building appears to measure 14m (NE-SW) by 3m (NW-SE), over walls only 0.3m high. A further 6m to the south is a roughly rectangular grass-covered area, measuring approximately 7m by 4m overall, around which there are

slight suggestions of banking. This may be the result of the fact that surface of the rectangular area lies slightly above the surrounding marshy ground, but it is equally possible that this represents the stance of an earlier building; if this is the case then it might be the small building shown in roughly the same location on the OS First edition (fig. 2). A large clearance cairn, almost 1m high and with a diameter of approximately 7m, lies to the south. The track along the river bank which must have once linked all these settlements is visible just to the west.

Site 005 Building NMRS no. ND14NW23/SMR no. ND14NW24 ND 1455 5005

Lying at right angles to the head-dyke (Site 008) and to the east of the main Tormsdale clusters, are the very amorphous footings of a two compartment building, aligned NE-SW. The footings are turf-covered and there is no apparent entrance. The building measures approximately 12.5m (NE-SW) by 5m (NW-SE), with each compartment measuring roughly 6m (SW) and 3m (NE) long by 3m wide internally. The precise relationship of this structure to the adjacent head-dyke could not be determined, but it is likely that they would be contemporary.

Site 006 Farmstead NMRS no. ND14NW23/SMR no. ND14NW24 ND 144 500

The southern cluster at Tormsdale comprises three buildings, centred on a substantial longhouse and associated with two large enclosures, one to the north and one to the south of the buildings. The main longhouse is much better preserved than that in the northern cluster and displays a number of internal features. Although earth bonded, the eastern gable stands to 3m in height, the western gable to 2m, while the southern wall stands to between 1 and 2m in height; the other walls are, however, less well-preserved and display little evidence for tumble. The building, measuring approximately 37m (NE-SW) by 5.5m (NW-SE) overall, is divided into five compartments of varying size, each with an internal width of 4.5m. The most easterly compartment (6m NE-SW) contains a small fireplace with a square lintel in the east gable and a splayed window in the south-east corner. There is a doorway in the south-west corner, against the western partition wall; outside this and running along the south wall to the east end of the building is a distinct platform, perhaps used to create a drier area in front of the house. Access to the next compartment is possible through this partition wall. This measures 7m long (NE-SW) and again has a central fireplace in the east gable. A single cruck slot is visible in the south wall, towards the west end of the compartment. The central compartment is the smallest, measuring only 4m (NE-SW). Access is through its eastern wall, with the lintel still remaining in place over the doorway. The capstones of the wall remain in place on either side of this doorway. The south wall contains two small, square cupboards and another cruck slot, while two flagstones, presumably forming animal stalls, are still in place against the east wall. The next compartment to the west is 6.5m long (NE-SW). There is evidence for a doorway in the centre of the south wall, although access can also be obtained from the rest of the house through a doorway in the eastern partition. Another stall remains in place against the eastern wall. The final compartment is much less well-preserved than the others, the walls only surviving to 0.3m in height; the large quoins at what would have been the north-east corner suggest the length of this compartment was approximately 8.5m (NE-SW). To the south of the longhouse is a small square building, with internal dimensions of 2m by 2m. The southern wall stands to 0.5m in height, but the north and west walls are very dilapidated. No sign of an entrance is recognisable. A possible kiln, also linked in to the enclosure wall, lies to the south-east. Certainly the rounded eastern end of the structure with the suggestion of an internal bowl would seem to indicate a kiln, particularly as the eastern end is mounded up externally to about 1m in height. It is however rather close to the main dwelling. The structure is not clearly delimited on its western side. To the south-west of the possible kiln is a further rectangular building; its eastern gable is formed by the west wall of the attached enclosure. The footings survive to no more than a few courses in height (c. 0.4m), but distinct faces are visible in places. The interior of the building is grass-covered. The building is divided into two; the western compartment measures 4.25m (E-W) by 3m (N-S) and the eastern one, 3.5m (E-W) by 3m (N-S). The floor of the western compartment is much lower than the surrounding ground level. No entrance is apparent into either compartment. A small outshot, only 1.75m wide and open on the north side, facing the main longhouse, appears to be attached to the western end of the building. The two enclosures associated with Tormsdale south are of similar

character to the one to the north of Tormsdale north, but are of less regular shape. The small building shown on the modern OS map (and on the OS First edition map, when it is shown unroofed (fig. 2)) as attached to the south wall of the more southerly enclosure was not noted during the survey.

Site 007 Stell NMRS/SMR no. N/A ND 149 502

This sheep stell, which is shown on the OS First edition map (fig. 2), is apparent as a circular patch of sedge high up on the grassy west-facing slopes above the Thurso river. The better quality of the ground around the stell is indicated by the more closely-cropped grass. It is perhaps possible that this area originally formed the Tormsdale shieling ground. A few stones are apparent on the in the south-west quadrant, but none are definitely structural. Overall, the boundary of the sedge, produces a diameter of 18m for the stell.

Site 008 Turf dykes NMRS/SMR no. N/A ND 145 503 - ND 154 490

A low turf bank, only 0.2m high and spread to about 2m in width appears to demarcate the improved grounds of the farmsteads along the Thurso river from the open moorland to the east. The general trend of this bank would suggest that it could be a head-dyke; if so, the fact that it is not marked on the OS First edition map might indicate that it is of earlier date, prior to the separation of these settlements into the seemingly discrete farmsteads shown on the OS maps. Occasional stone is visible, as though the bank was once faced. At times, particularly east of Tulach Beag (Site 9) and north of Achvidigo (Site 14), it appears to consist of two parallel banks with a 0.8m gap between them. Between Tulach Mor and Tulach Beag (Sites 9 and 13), there are short stretches of curving bank, which - as they run on a more NW-SE alignment - maybe creating smaller divisions within the main head-dyke. While this bank was easy to follow east of Tormsdale, south of this stretches of possibly related bank were encountered in amidst the sedge, but could not always be connected to each other.

Site 009 Broch NMRS/SMR no. ND14NW1 ND 1459 4980

Sitting in a curve of the river, but set back from it slightly, this broch survives as a substantial mound, as described by earlier surveyors. Immediately to the west the ground falls away markedly to the level of the river, with the later track providing access to the farmsteads to the south on this lower ground. Little *in situ* stonework is visible, but a lot of loose stone is visible on the surface. A short stretch of the original double-skin walling is recognisable on the west side. The collapsed chamber and the gap which may represent the entrance on the south side, noted by the RCAHMS and the OS surveyors, are both still visible; another possible chamber is visible as a hollow on the east side. Sheep are clearly causing damage to the remain of the north-western chamber, by loosening the exposed stonework.

Site 010 Stone rows NMRS/SMR no. ND14NW16 ND 1483 4974

Immediately outside the head dyke, the 111 stones, arranged in ten radiating rows, are now very difficult to identify amongst the sedge which has colonised the improved grassland. A few of the larger stones, which form Row K as described by Myatt (1985), are readily apparent. Many of the smaller stones are now almost entirely covered in vegetation, so that each row of stones appears as a long, low mound, with occasional stone visible. The stones are located on a gentle westerly slope, with extensive views to Scaraben and Morvern to the south-west, Ben Dorrery to the north-west and Spittal Hill to the north; the stone rows appear to be at the centre of a vast landscape.

Site 011 Stell NMRS/SMR no. N/A ND 1485 4962

A neat, slab-built circular stell located on a drier patch of ground just outside the head-dyke (Site 008). It first appears on the OS Second edition map. The walls stand to 0.8m in height and the diameter of the stell is approximately 8m. The walls are in relatively good condition, although the crest of the wall seems to be becoming increasingly unstable. The 0.5m wide entrance is on the south-

west side. The interior is filled with sedge, which also occurs as a narrow band around the outside of the enclosure. Peat cuttings surround the site.

Site 012 Broch NMRS/SMR no. ND14NW2 ND 1485 4940

Perched on a rock rising out of the Thurso river, the mound of Tulach Mor presents an even more impressive appearance than Tulach Beag, largely because of its surrounding ditch. This is itself rock-cut and a short stretch of walling is visible at its south-east end, enhancing the outer bank. The natural rock exposure on which the broch sits is clearly the result of a geological fault-line, which can be seen extending across the river as a natural weir. Between the inner crest of the ditch and the base of the broch 'tower', there is a wide terrace which diminishes in width as it reaches the broch tower. Part of a chamber is visible within the thickness of the wall on the west side. The broch presents much the same appearance as that recorded by earlier visitors. In addition to the large amount of quarrying which has occurred into the 'tower' on the east side, further quarrying (presumably at the same date) has taken place on the south side. Some more recent erosion has taken place on the river side, while the stones on the surface of the 'tower's' summit seem to cover large voids.'

Site 013 Farmstead NMRS no. ND14NE17/SMR no. ND14NE18 ND 151 493

The small farmstead of Achvidigo comprises a single large longhouse, with small attached enclosure. This building is described in the Name Book (Book 15, 49) as small cottage, which - with the adjacent ruin - was 'the only remains of a farm steading which once stood there'. On the OS First edition it is the most southerly part of the building which is shown as roofed, while the enclosure is depicted as being under cultivation (fig. 2). By the time the Second edition was compiled, the entire complex appears to have gone out of use.

This picture would seem to be confirmed by the differential survival of the extant remains at Achvidigo. The main part of the longhouse consists of three compartments, with the earth-bonded walls standing to between 0.5m and 1.5m high. The walls are constructed from squared stones, requiring very few pinnings. Interpretation of features in the most easterly compartment, measuring 6.5m (NW-SE) by 3.5m (NE-SW), is difficult. The extent of collapse in discrete areas of the walls suggests that there was a fireplace in the SE gable, a window in the NE wall and a doorway in the SW wall. An opposed pair of cruck slots is visible close to the SE gable. The doorway is located against the partition wall of the central compartment and access to this was obtained through a doorway, subsequently blocked, located at the SW end of this wall. A further three cruck-slots are visible in this compartment, two in the north wall and one in the south. The NW face of the partition wall contains four cupboards. This compartment is more or less square. A door in the centre of its west gable gives access to the larger NW (measuring 15m NW-SE) compartment. This is much more dilapidated than the others, but one cruck slot is recognisable in the NE wall and an area of collapse in the SW wall may represent a doorway. Attached to the west end of the longhouse are the slight, turf-covered footings of a further compartment, measuring 8m (NW-SE) by 5m (NE-SW). The square enclosure is distinguished by the greenness of its interior and the, now dead, rowan tree in the SW corner. This appears to be incorporated by a larger square enclosure formed from low turf banks.

[The NGR for this site used by the RCAHMS appears to be wrong; the one given here equates with the location of the site on the OS map].

Site 014 Mound NMRS/SMR no. N/A ND 1506 4914

To the south of Achvidigo, a distinct grassy mound stands out from the surrounding peat cuttings because of the greenness of its vegetation. On its summit is a circular depression, which, while it is only 0.2m deep, is very regular in shape. The surrounding bank is riddled with rabbit holes and no stone is apparent. On the NW side of the knoll, a straight-sided cut suggests that peat cutting at one point extended up onto the mound, but the cut is not as clear and distinct as the one on the summit of the mound. No ready explanation is apparent for this feature.

Site 015-019 Hut circles? NMRS/SMR no. N/A

ND 152 491

A group of five hut-circles were identified during the course of the walkover survey on the west-facing slopes between the farmsteads of Achvidigo and Bognagee north.

Site 015

A circular enclosure, with an internal diameter of approximately 7m, is located on a prominent knoll above a small burn. No stone is apparent in the low earth banks, which are spread to 2m wide and standing only to 0.2m high, although there is a considerable drop on the exterior on all sides. A depression on the south side may have been the entrance. The centre of the enclosure is slightly raised.

Site 016

Immediately to the south-east of 015, but on lower, wetter ground, is a very similar enclosure to that already described. The vegetation differences are not so marked as in the first example, but heather is concentrated around the banks on the south and west sides. The enclosure again has an internal diameter of c. 7m, with an entrance in the southern quadrant.

Site 017

10m to the south of 016 and on slightly higher ground is another turf-banked enclosure of similar dimensions. The interior of this example is overgrown with sedge, but the possible entrance is apparent in the SE. A burn, now straightened, runs close to the southern side of the hut circle.

Site 018

On the other side of this burn and immediately to the SW of 017 is another probable hut circle, although this is less distinct than the first three, if only because it is distinguished primarily by the rougher vegetation in the interior. The internal diameter is 6m and the banks are spread to 2m wide. The entrance is in the SW quadrant. The hut circle is located on drier ground, with another burn immediately to the SW.

Site 019

This hut circle displays a similar level of preservation to 018. It is slightly isolated from the other four, as it lies 50m to the SE of 019. It stands out from the surrounding heather moorland, primarily for the greenness of the grass in its interior and the fact that it is slightly drier. The possible entrance lies on the SW side. The internal diameter of the hut circle is c. 5m, making it smaller than the other examples. The very slight turf bank running between Achvidigo and Bognagee north seems to run straight up to this hut circle, but is not apparent on its other side; the bank clearly delimits the division between improved and unimproved ground in this area.

Site 020 Farmstead NMRS no. ND14NE19/SMR no. ND14NE22 ND 1528 4894

The remains of the most northerly of the two farmsteads on the lands of Bog na Gaoithe, it comprises two buildings ranged around a small courtyard. On Roy's map, no buildings are shown in this part of Bognagee, although there is a large patch of cultivation depicted in its vicinity. On Reid's estate plan of 1801, a cluster of three buildings and two small enclosures are located between the two extant clusters; no remains were found in this area during the survey. Both the buildings at Bognagee north are shown as roofed on the OS First edition map (fig. 4), with the more easterly enclosure under cultivation. On the Second edition, the longhouse and only a small part of the second building were still in occupation; a well is shown to the south-east.

A small enclosure is attached to the west side of what appears to be the earlier of the two buildings, while a much larger enclosure extends SE towards the Black Mire. On the NE and SE sides, the boundary of this field is formed by a flagstone fence, with a wide ditch on the outside; interestingly these two sides of the enclosure are shown as far more definite on the OS First edition map (fig. 4). The main longhouse runs on an E-W alignment and consists of five compartments. As with the earlier examples, the more easterly of these seem to provide accommodation for people, while the animals lived in the west end. The walls are again earth bonded, but the gables stand to around 4m in height and most of the other walls still stand to their full height, although the north wall is quite dilapidated. Around the east and south sides of the longhouse, neat flagging is visible. The south wall is fronted by a small square enclosure containing an almost dead rowan tree in its SW corner. The 7m by 4m eastern compartment has a doorway in the south wall, against the line of the western partition wall. There is a central window in both north and south walls. The fireplace in the eastern gable is very neatly constructed, having three relieving stones above it; an iron hook can still be seen above these flags. The next compartment to the west is of similar size. It, too, has a fireplace in the eastern gable, although this one only has two relieving stones above it. There is a window towards the east end of the south wall and a blocked doorway (with a small square window inserted into this blocking) at the west end. The central compartment measures 4m (E-W) by 4m (N-S). A fireplace with a single massive lintel stone is located in the centre of the west wall, while there is a window in both the north and south walls. A butt joint, in line with the eastern partition wall, is visible in the exterior of the north wall; this may imply that the better preserved eastern end of the longhouse is later in date or, at least, has been rebuilt. Further weight to this hypothesis is given by the fact that cruck slots (one of which has been blocked) are present in the walls to the west of this joint. The next compartment to the west measures 5m (E-W) by 4m (N-S) and has a central doorway, with a large flag forming its threshold. There is a small square window in the north wall, while one of the three cruck slots in this same wall, still contains a much weathered cruck; the capstones of the wall are still in place above it. Collapsed flagstones suggest the presence of stalls against the north wall. A horseshoe (three with attached chains) has been stuck into each of its four walls, just above ground level. The most westerly compartment is the largest (9m long), but has no apparent entrance. The western gable is formed from large, thick slabs placed upright. There are two cruck slots in the south wall, but the other walls are too dilapidated to see if additional features were once present.

The second building, consisting of four compartments, lies at right angles to the first and is far less well-preserved. It is constructed from much larger, squarer stones, placed on top of massive boulder footings, than the longhouse. Nowhere do the walls stand to more than 1m in height and the west wall, in particular, looks as though it may have been rebuilt on at least one occasion. The northernmost gable abuts the SW of the main longhouse, while the west wall of the house forms one side of the adjacent enclosure. The northern compartment is divided into two, producing two equal-sized rooms, each 2m (N-S) by 1m (E-W). The amount of tumble within these small spaces means no further details are apparent, beyond the door in the NE corner. The next room to the south measures 5m (N-S) by 3.5m (E-W) and has a central doorway. The central compartment, measuring 8m (N-S) does display some internal features. It also has a central doorway in the east wall, with a corresponding one in the west wall, now blocked; this suggests that it could originally have been a barn. A probable cruck slot is visible on either side of the blocked doorway. The next room to the south clearly abuts the possible barn; it is 3m long (N-S), contains animal stalls and a pair of opposed cruck slots in the centre of the wall. To the south of this is a large platform (2.5m N-S), composed of massive stones placed on end; its appearance would suggest that it functioned as a peat stack.

Site 021 Farmstead NMRS no. ND14NW24/SMR no. ND14NW23 ND 148 488

On Roy's map, a cluster of four buildings is shown at Inshag, although by the time the estate plan was drawn up in 1801, only three buildings, one attached to an enclosure, are depicted at *Inshick*. It is possible that the single building, by that date unroofed, and attached enclosure shown on the OS First edition are the same as the complex shown seventy years earlier (fig. 2). If this is the case, then this is also the building which still survives today. A track is depicted to the south of the settlement, but this was not noted during the survey.

Both these features are still visible as low footings, largely grass grown, lying within a curve of the Little River, surrounded by old peat cuttings.

The building is on an east-west alignment and consists of two compartments. As it lies on more or less level - and quite low-lying - ground, a drainage channel has been cut along the length of the north wall. The east gable stands to a height of about 0.5m, but the rest of the walls are less substantial. There is little tumble around them, suggesting that the upper parts of the walls may have been constructed from turf. The eastern compartment measures 5m (E-W) by 3m (N-S) and has a probable doorway in the centre of its south wall. The 4.5m long second room appears to have a doorway, again in the south wall, against the central dividing wall. There is no access between the two compartments.

Site 022 Hollowway NMRS/SMR no. N/A ND 1548 4862

A short stretch of trackway linking the two clusters at Bognagee is visible running for about 50m around the base of steep slope just to the north of Bognagee south; it peters out in a very marshy area close to north-east corner of the enclosure belonging to this cluster. The track is terraced into the hillside, producing a very distinct hollowed appearance. This track is depicted on the OS First edition map, where it continues southwards along the eastern side of the enclosure (fig. 4).

Site 023 Farmstead NMRS no. ND14NW5&20/SMR no. ND14NW4&23 ND 154 485

A group of two or three buildings are shown in approximately this location on Roy's map of the late eighteenth century. By the time the OS First edition was compiled, one unroofed long building and another, partially, roofed, one are depicted, attached to a field (fig. 4).

At Bognagee south, the farmstead appears to consist of a main longhouse, with a less well-preserved building, perhaps earlier in date, lying on the same alignment (E-W) as the more substantially preserved longhouse immediately to the north; this building is not shown on current editions of the OS map. The buildings are linked into enclosures extending north and south. This farmstead lies immediately above the Little River, the west gable of the main building perched right on the edge of its bank.

The main longhouse has clearly been much modified, particularly at the eastern end. Originally it seems to have been more or less equally divided into three compartments (although the western end could be a later addition). The building measures 3.5m wide (N-S) internally, with the easternmost compartment being 7m long, the central one 8.5m and the western one 6m. The foundation courses of this building are constructed from massive boulders, but not much of the walls survive above this, except on the north side, where it has been rebuilt. The only clearly recognisable entrance is one towards the west end of the central compartment. Traces of four cruck slots, two of which have been blocked, are visible in the north wall; since this wall shows clear evidence of later rebuilding there may once have been more. At some point late in the life of the building, the eastern compartment has been converted into a self-contained, two roomed cottage with a door in the centre of the south wall. The rooms measure 2m (N-S) by 5m (west) and 2m (east) long respectively. It is this part of the building which is shown as roofed on the OS First edition map (fig. 4); by the time this map had been revised for the Second edition, the cottage was no longer roofed.

Internal measurements are not really possible for the earlier building, but the overall dimensions are 24m by 4m. The east end of the building is dominated by the presence of a large kiln. The rounded external face of the wall stands c. 1m above the surrounding ground surface. The bowl of the kiln is now partially filled in, but the large stone covering the entrance to the flue is clearly visible. The rest of the walls, although only standing to c. 0.4m in height are formed from massive stones, one of which contains evidence for the use of dynamite. There is a distinct drain-like feature running across the N-S axis of the building towards the west end; although it superficially suggests that the west end was a separate building, the fact that there is no break in the south wall, indicates that it might be a drain. There is a large clearance heap in the south-west corner of this building.

Site 024 Farmstead NMRS no. ND14NE6/SMR no. ND14NE5 ND 160 479

Roy names the settlement of Achideyag in the late eighteenth century as comprising a group of four buildings surrounded by rig. This site, which seems to lie on the north side of the Allt Aikergill, cannot be identified on the ground and may simply reflect a mis-location by Roy of the settlement of Achvidigo. This should not preclude the possibility that, at one time, cultivation did extend along the banks of the burn.

Site 025 Farmstead NMRS no. ND14NE21/SMR no. ND14NE24 ND 1565 4778

The 'stream of the hillock or fort' is noted in the Ordnance Survey Name Book (Book 12, 153), as referring to 'A patch of green rough pasture, on or near which a farm of the same name was situated'. The farmstead itself is not indicated on the OS First edition map (nor does it seem to have been noted by later OS surveyors). However, a large, two-roomed building, with a possible attached kiln barn, lies to the south of the Allt Aikergill and just east of its confluence with the Little River, in the area where the name Allt Duin is written on the First edition map (fig. 4). It is situated on low lying ground within a large basin; nonetheless, the presence of tussocky grass implies that there is a considerable amount of drier ground around the buildings and rig can be felt across most of this.

The footings of the main building only stand to 0.4m in height, but appear to be very neatly built, in spite of the fact that they are in large part grass-covered. The building is aligned NW-SE and has a ditch along its south-facing frontage, the necessity for which is indicated by the marshy ground within the western third of the building. The structure is unequally divided into two rooms, the most westerly of which measures 10m long by 3m wide internally. The eastern room again measures 3m, but is only 4m long. A narrow doorway in the partition wall allows access between the two compartments on the south side, while access from the outside is provided for through a doorway in the centre of the south wall of the western compartment.

The kiln barn lies immediately to the NE of the dwelling house. The bowl of the kiln is located at the east end and stands to about 0.5m in height, with the diameter of the bowl being about 1m. The flue is easily distinguishable. Precise measurements for the attached barn are difficult to establish, but it is probably approximately 7m (NW-SE) long by 2m (NE-SW) internally, although the location of the west wall is very difficult to determine. There appears to be a doorway in the south wall, towards the kiln end.

Site 026 Hollowway NMRS/SMR no. N/A ND 145 504 - ND 148 506

A hollowway, subsequently exploited by modern vehicles, runs along the south-eastern edge of the modern forestry plantation in the north of the proposal area. It appears to have stones lining the edge and is quite deeply hollowed. This must be the track to Tormsdale, which is shown on the OS First edition map (figs. 2-3); unfortunately it is not clear where this track goes to, though its north-easterly direction might suggest it was heading for Ballone, rather than Achkeepster (Innes Miller, pers. comm.).

Site 027 Stell NMRS/SMR no. N/A ND 1488 5059

A sheep shelter, lying to the west of the Allt an Dobhrain, is marked on the OS Second edition map as a typical circular stell. On the ground, this stell appears to be a fairly recent structure, still standing to 1.6m high, over walls 1.5m wide, but tapering towards the top. All the coping stones are still in place, as is the lintel over the doorway in the south-west quadrant. The stell is 12m in diameter and lies amidst wet, marshy ground. To the east of it, is a boomerang shaped pile of loose stones, which may be all that remains of an earlier sheep shelter. Each of the arms measures 6m in length and is 1m wide and c. 0.4m high.

Site 028 Sheep shelter NMRS/SMR no. N/A ND 1495 5068

This structure, lying to the east of the Allt an Dobhrain, is depicted on the OS First edition map (fig. 3), but could not be located on the ground. Most of this area is very marshy, so it is possible that the site was missed during the walkover survey.

Site 029 Stell NMRS/SMR no. N/A ND 1660 5095

A circular stell lying on an area of drier ground within a flat marshy area to the south of Achkeepster (fig. 3). This area may have been cultivated in the past, as there is a low, roughly square, clearance cairn 30m to the ENE of the stell. The walls only stand to about 5-6 courses in height, but clearly taper towards the top. The stell is 12m in diameter, over walls 0.5m high, with the entrance in the SW quadrant.

Site 030 Sheep shelter SMR no. ND15SE0055 ND 1683 5043

Two opposed arcs of walling, connected by a short stretch of wall, and annotated as a sheepfold, are visible on the OS First edition map (fig. 3). The walls still stand to 1.5m in height and are in good condition.

Site 031 Mounds NMRS/SMR no. N/A ND 162 512

At least three conical mounds are located in the very marshy area to the south of the triangular plantation. Each is about 10m in diameter and over 1m in height. While they stand out from the surrounding landscape as distinct features, this is largely due to the fact that they represent areas of much drier ground. It is possible that they are simply peat mounds and since they are in an area which has been disturbed by both past and present trackways and extensive drainage operations, they may represent no more than spoil heaps.

Site 032 Stell NMRS/SMR no. N/A ND 1645 5156

This stell, lying to the west of the fields of Achkeepster and Baledavist, is marked on the OS First edition map (fig. 3). On the ground, it - like site 026 - appears to be a well-maintained structure, still standing to 1.6m high, over walls 1.5m wide, but tapering towards the top. All the coping stones are still in place, as is the lintel over the doorway in the south-east quadrant. The stell is 12m in diameter and lies just inside the boundary of the fields belonging to Achkeepster.

Site 033 Sheep shelter NMRS/SMR no. N/A ND 1622 5150

The scanty remains of this sheep shelter, which is marked on the OS First edition map (fig. 3), consists of two opposed arcs of walling, joined in the middle. Little stone is apparent in its structure and it appears simply to be a very regularly shaped patch of sedge within a relatively marshy area. Each limb of the sheep shelter measures 6m long, with the central section measuring 3m in length.

Site 034 Farmstead? Well? NMRS/SMR no. N/A ND 1649 5205

The well of Baledavist is marked on all the OS maps from the First edition onwards (fig. 3). No built structure was discovered during the walkover survey, although a spring is clearly visible towards the north-east corner of the Baledavist fields. It is possible that there never was a built well in the vicinity of the spring, although since these appear to be the most intensively cultivated fields, which, in addition, have been subject to cattle poaching in more recent times, any such feature could since have disappeared. Its presence highlights the probability that there should be a settlement associated with the place-name, Baledavist, since it contains the prefix, *baile*-, meaning township. This is confirmed by Reid's estate plan of 1801, which - at *Bowlavadebist* - shows a long building with an attached enclosure, to the south of which are a further three buildings. Another larger, square enclosure is also

shown, with a square patch of rig in the centre. Since this settlement is not shown on the OS First edition, it is likely to have been cleared away by this date, in order to form the sheep farm of Achkeepster.

Site 035 Turf dykes NMRS/SMR no. N/A ND 168 516

A low turf bank, only 0.3m high and spread to 1m wide, runs WNW from the vicinity of Achkeepster. At least one wall runs off this at right angles towards the present boundary. One large clearance cairn lies just outside (W) of this wall. These banks are far less substantial than the bank forming the present boundary of Achkeepster and Baledavist, so may represent a much earlier phase of enclosure

Site 036 Broch? NMRS no. ND15SE11/SMR no. ND15SE0011/53 ND 1680 5158

The Name Book records the removal of a large Pictish house, containing both human and animal bone, many years before 1871 (Book 4, 177). The stones went into building the outhouses of Achkeepster. The site today survives as a low circular mound, particularly distinct from the air. A certain amount of loose stone is visible on and around the mound, but this may have as much to do with the numerous enclosure walls around the farmsteading as with the broch. The diameter of the mound - about 30m - would seem to confirm the suggestion that this was a broch rather than a cairn.

Site 037 Farmstead/Inn? NMRS no. ND15SE11/SMR no. ND15SE0052 ND 168 515

The settlement of Achkeepster consists of the shepherd's cottage built in 1901 (see above), an extremely long, multi-compartmental building, aligned NE-SW, a well and a series of small enclosures. Allowing for the later construction of the cottage and its adjacent outhouse and the insertion of wire fences, the layout of the enclosures around the buildings seems to reflect that visible on the OS First edition (fig. 3). Reid's estate plan of 1801 shows two separate clusters at *Achatybster*, divided by rig running in a N-S direction. The more westerly consists of a single building, on a N-S alignment, and a small enclosure. To the east, and perhaps on the site of the present buildings, is a long building on a NE-SW alignment, set into the south side of an enclosure. Immediately to the south of the long building, are a further two smaller structures on a N-S alignment.

The long building would need to be subjected to detailed architectural analysis if its layout and development are to be fully understood, something which was not possible within the remit of this survey. However, certain, albeit preliminary, statements can be made. The northern end of the building in particular stands to its original height and part of it is still roofed; the rest of the structure demonstrates more variable levels of survival and quality of construction. A flagged path, separating the structure from a small, square garden, runs along the eastern frontage of this part of the building. The northern gable contains a small fireplace, flanked by a doorway and a long narrow cupboard, suggesting that this room was used as living space. It has a flagged floor, plus a further doorway in the SE corner, allowing access to the next compartment to the south, plus another tall cupboard in the SW corner. The next compartment is still roofed; it has a door and a window in the east wall. There are two flagstones forming animal stalls against the west wall, which, alongside what appears to be a blocked fireplace in the north wall and a blocked doorway in the SW corner, suggests that this room was later adapted for animals. The next compartment in this northern part of the building is much more dilapidated and fewer details are apparent; a fireplace, with two relieving stones above it, is located in the north wall. A particularly low entrance is present in the SE corner. There was probably a central doorway in the east wall, with a single window to the north. There is a considerable drop in slope to the next room in the complex, reinforcing its division into what seem to be two separate halves. This next compartment is much longer than any of the others and has an extremely complex arrangement of cupboards in the southern wall, suggesting this may originally have been the central living space. This half of the building is, however, in a far less good state of repair than the northern half. The north wall is particularly dilapidated and may have contained a central fireplace, since the wall has more or less collapsed in this area. A small cupboard was located to the east of it. Another low entrance is present in the SE corner. The south wall contains five cupboards; the tall one in the SE corner seems to have originated as a doorway, subsequently blocked by a single flag, with further

flags used to create shelves. Within the end compartment, there is an equally complex arrangement of cupboards on the reverse of this wall, some of which have been blocked. Cruck slots are present in the east and west walls. A blocked doorway is present in each corner of the south wall, while there is another large blocked aperture in the centre of this wall, which may have been a cupboard. The SW door gives access to a tiny outshot. The present doorway allowing external access is located in the SE corner. A number of slabs lying on the ground surface may represent stalls or even the roof.

The roofed shepherd's cottage is a fairly standard building of symmetrical form, surrounded by a flagged path, edged with upright stones. The structure is single storey, but has roof lights. A slab-built outhouse is attached to NW side of the cottage. Immediately to the south of the cottage is another free-standing outhouse, with a small ventilation hole in its south wall and a slab-built stand (for a barrel or churn?) against its northern wall.

The well is set into the outside of the former broch mound. It is slab-lined, square in shape and was originally completely roofed. Some of the enclosure walls are slab-built, while others are of drystone construction. Of more significance, perhaps, is the fact that those to the west and south of the long building contain areas of blocking, which suggest the presence of earlier buildings. In particular, the west wall of the long building, where it continues as an enclosure wall, seems to contain a whole series of cruck slots along its entire length. If they are what they seem, this would make this building of exception length.

6.0 Archaeological Sites and their Significance

The archaeology of the proposed windfarm area is classified according to its perceived archaeological significance in relation to the National Planning Policy Guidelines for Scotland and to Schedule 3 of the Environmental Assessment (Scotland) regulations 1988.

The Planning Advice Note, PAN 42, states that important archaeological remains are preferably to be preserved *in situ* (1994, 7). If this is not possible then preservation by record is the preferred option. The National Planning Policy Guideline, NPPG5, assigns three categories of importance to archaeological sites:

- A. Sites of national importance
- B. Sites of regional importance
- C. Sites of local importance

For the purposes of this assessment, the three categories described above are the equivalent of High, Medium or Low in terms of their *sensitivity* value (see below). The results are shown in Table 1.

Table 1: Archaeological sites within the Causeymire windfarm area and their categories

Site Identifier	Name	Nature	NGR	Category
001	Tormsdale	Hut circle?	ND 1424 5044	C
002	Tormsdale	Burnt mound?	ND 1428 5031	C
003	Tormsdale north	Farmstead	ND 144 502	C
004	Tormsdale	Farmstead/stell	ND 1423 5010	C
005	Tormsdale	Building	ND 1455 5005	C
006	Tormsdale south	Farmstead	ND 144 500	B
007	Tormsdale	Stell	ND 149 502	C
008	Tormsdale - Bog na Gaoithe	Turf dykes	ND 145 503 – ND 154 490	C
009	Tulach Beag	Broch	ND 1459 4980	B
010	Tormsdale	Stone rows	ND 1483 4974	A
011	Dalemore Pool	Stell	ND 1485 4962	C
012	Tulach Mor	Broch	ND 1485 4940	B
013	Achvidigo	Farmstead	ND 151 493	C
014	Achvidigo	Mound	ND 1506 4914	C
015 - 019	Bog na Gaoithe	Hut circles?	ND 152 491	C

020	Bognagee north	Farmstead	ND 153 489	B
021	Inshag	Farmstead	ND 148 488	C
022	Black Mire	Hollowway	ND 1548 4862	C
023	Bognagee south	Farmstead	ND 154 485	C
024	Achtideyag	Farmstead?	ND 160 479	C
025	Alltduin	Farmstead	ND 1565 4778	C
026	Tormsdale	Hollowway	ND 145 504 - ND 148 506	C
027	Allt an Dobhrain	Stell	ND 1488 5059	C
028	Allt an Dobhrain	Sheep shelter	ND 1495 5068	C
029	Achkeepster	Stell	ND 1660 5095	C
030	Achkeepster	Enclosures	ND 1683 5043	C
031	Achkeepster	Mounds	ND 162 512	C
032	Baledavist	Stell	ND 1645 5156	C
033	Baledavist	Sheep shelter	ND 1622 5150	C
034	Well of Baledavist	Farmstead? Well?	ND 1649 5205	C
035	Achkeepster	Turf dykes	ND 168 516	C
036	Achkeepster	Broch?	ND 1680 5158	C
037	Achkeepster	Farmstead; Inn	ND 168 515	B

6.1 Effects of the Proposal

The affect of the proposed windfarm on the archaeological resource has been assessed using standardised terminology as identified in Schedule 3 of the Environmental Assessment (Scotland) regulations 1988.

In judging the impact of each issue, the *sensitivity* of the environmental interest affected should be determined. This can be defined as the importance of the individual feature being assessed and is defined as High, Medium or Low.

The magnitude of the impact also required assessment and was determined in accordance with the following criteria:

- | | |
|------------|--|
| High | - Total loss or major alteration to key elements or features of the pre-development conditions, such that its post-development character or composition would be fundamentally changed. |
| Medium | - Loss or alteration of one of the key elements or features of the pre-development conditions such that its post-development character would be partially changed. |
| Low | - Minor shift away from pre-development conditions. Changes arising from the loss or alteration would be discernible, but the underlying character, composition or attributes of its pre-development condition would be similar to pre-development circumstances and patterns. |
| Negligible | - Very slight damage from pre-development condition. Change barely distinguishable, approximating to the 'no change' situation. |

The direct effect which individual turbines and ancillary services would have on the archaeological resource of the Causeymire area is given in Table 2. This has been assessed on the basis of a sketch plan provided by Innes Miller and, since the layout of the turbines and access roads is, as yet, at a very preliminary stage, it has been assumed that every effort will be made to locate them away from archaeologically sensitive areas. If this is not ultimately the case and such areas are forced to undergo ground disturbance, any groundworks necessary during the construction work for the proposed windfarm should be subject to an archaeological watching brief, maintained by an appropriately

qualified field archaeologist and time and resources should be dedicated to the elucidation of any archaeological remains exposed during such works.

There is also the possibility for indirect or potential effects on the archaeological resource. These may include disturbance during the construction phase of the windfarm, and visual intrusion into the setting of a nationally or regionally important monument or groups of monuments when the wind farm is in operation. Visual effects are likely to prove significant for the majority of archaeological sites in the proposal area. The identified indirect or potential effects are detailed in Table 3.

The significance of the direct and indirect or potential effects identified in this study and detailed in Tables 2 and 3, are given in Table 4. The assigned significance is related to the perceived importance of the archaeology involved, and is intended as a guide in the assessment of the impact of the proposed windfarm.

It must be recognised that in light of the depth of peat cover over the entire area and its potential for hiding earlier, possibly prehistoric or medieval remains, the probable effects of the windfarm proposal on the archaeological resource become of even greater concern.

Table 2: Direct Effects of the Proposal on the Archaeological Resource

Site Identifier	Nature	NGR	Category	Effect
001	Hill circle?	ND 1424 5044	C	Negligible effect
002	Burnt mound?	ND 1428 5031	C	Negligible effect
003	Farmstead	ND 144 502	C	Negligible effect
004	Farmstead/stell	ND 1423 5010	C	Negligible effect
005	Building	ND 1455 5005	C	Negligible effect
006	Farmstead	ND 144 500	B	Negligible effect
007	Stell	ND 149 502	C	Negligible effect
008	Turf dykes	ND 145 503 - ND 154 490	C	Negligible effect
009	Broch	ND 1459 4980	B	Negligible effect
010	Stone rows	ND 1483 4974	A	Negligible effect
011	Stell	ND 1485 4962	C	Negligible effect
012	Broch	ND 1485 4940	B	Negligible effect
013	Farmstead	ND 151 493	C	Negligible effect
014	Mound	ND 1506 4914	C	Negligible effect
015 – 019	Hut circles?	ND 152 491	C	Negligible effect
020	Farmstead	ND 153 489	B	Negligible effect
021	Farmstead	ND 148 488	C	Negligible effect
022	Hollowway	ND 1548 4862	C	Negligible effect
023	Farmstead	ND 154 485	C	Negligible effect
024	Farmstead?	ND 160 479	C	Negligible effect
025	Farmstead	ND 1565 4778	C	Negligible effect
026	Hollowway	ND 145 504 - ND 148 506	C	Negligible effect
027	Stell	ND 1488 5059	C	Negligible effect
028	Sheep shelter	ND 1495 5068	C	Negligible effect
029	Stell	ND 1660 5095	C	Negligible effect
030	Enclosures	ND 1683 5043	C	Negligible effect
031	Mounds	ND 162 512	C	Negligible effect
032	Stell	ND 1645 5156	C	Negligible effect
033	Sheep shelter	ND 1622 5150	C	Negligible effect
034	Farmstead? Well?	ND 1649 5205	C	Negligible effect
035	Turf dykes	ND 168 516	C	Negligible effect
036	Broch?	ND 1680 5158	C	Negligible effect
037	Farmstead; Inn	ND 168 515	B	Negligible effect

Table 3: Indirect or Potential Effects of the Proposal on the Archaeological Resource

Site Identifier	Nature	NGR	Category	Effect
001	Hut circle?	ND 1424 5044	C	High visual effect/potential ground disturbance due to access road
002	Burnt mound?	ND 1428 5031	C	High visual effect/potential ground disturbance due to access road
003	Farmstead	ND 144 502	C	High visual effect/potential ground disturbance due to access road
004	Farmstead/stell	ND 1423 5010	C	High visual effect/potential ground disturbance due to access road
005	Building	ND 1455 5005	C	High visual effect/potential ground disturbance due to access road
006	Farmstead	ND 144 500	B	High visual effect/potential ground disturbance due to access road
007	Stell	ND 149 502	C	High visual effect/potential ground disturbance due to access roads and location of turbines
008	Turf dykes	ND 145 503 - ND 154 490	C	High visual effect/potential ground disturbance due to access roads and location of turbines
009	Broch	ND 1459 4980	B	High visual effect
010	Stone rows	ND 1483 4974	A	High visual effect
011	Stell	ND 1485 4962	C	High visual effect
012	Broch	ND 1485 4940	B	High visual effect
013	Farmstead	ND 151 493	C	High visual effect/potential ground disturbance due to access road and location of turbines
014	Mound	ND 1506 4914	C	High visual effect/potential ground disturbance due to access road and location of turbines
015 – 019	Hut circles?	ND 152 491	C	High visual effect/potential ground disturbance due to access roads and location of turbines
020	Farmstead	ND 153 489	B	High visual effect/potential ground disturbance due to access road and location of turbines
021	Farmstead	ND 148 488	C	High visual effect
022	Hollowway	ND 1548 4862	C	High visual effect/potential ground disturbance due to access road and location of turbines
023	Farmstead	ND 154 485	C	High visual effect
024	Farmstead?	ND 160 479	C	High visual effect
025	Farmstead	ND 1565 4778	C	High visual effect
026	Hollowway	ND 145 504 - ND 148 506	C	High visual effect
027	Stell	ND 1488 5059	C	High visual effect
028	Sheep shelter	ND 1495 5068	C	High visual effect
029	Stell	ND 1660 5095	C	High visual effect
030	Sheep shelter	ND 1683 5043	C	High visual effect
031	Mounds	ND 162 512	C	High visual effect/potential ground disturbance due to access road and location of turbines
032	Stell	ND 1645 5156	C	High visual effect
033	Sheep shelter	ND 1622 5150	C	High visual effect
034	Farmstead? Well?	ND 1649 5205	C	High visual effect
035	Turf dykes	ND 168 516	C	High visual effect
036	Broch?	ND 1680 5158	C	High visual effect
037	Farmstead; Inn	ND 168 515	B	High visual effect

Table 4: Significance of the Direct, Indirect and Potential Effects of the Proposal on the Archaeological Resource

Site Identifier	Nature	NGR	Category	Significance (Nature of Effect)
001	Hut circle?	ND 1424 5044	C	Medium significance (indirect and possibly direct)
002	Burnt mound?	ND 1428 5031	C	Medium significance (indirect and possibly direct)
003	Farmstead	ND 144 502	C	Medium significance (indirect and possibly direct)
004	Farmstead/stell	ND 1423 5010	C	Medium significance (indirect and possibly direct)
005	Building	ND 1455 5005	C	Medium significance (indirect and possibly direct)
006	Farmstead	ND 144 500	B	Medium significance (indirect and possibly direct)
007	Stell	ND 149 502	C	Medium significance (indirect and possibly direct)
008	Turf dykes	ND 145 503 - ND 154 490	C	Medium significance (indirect and possibly direct)
009	Broch	ND 1459 4980	B	High significance (indirect)
010	Stone rows	ND 1483 4974	A	High significance (indirect and possibly direct)
011	Stell	ND 1485 4962	C	Low significance (indirect)
012	Broch	ND 1485 4940	B	High significance (indirect)
013	Farmstead	ND 151 493	C	Medium significance (indirect and possibly direct)
014	Mound	ND 1506 4914	C	Medium significance (indirect and possibly direct)
015 – 019	Hut circles?	ND 152 491	C	Medium significance (indirect and possibly direct)
020	Farmstead	ND 153 489	B	Medium significance (indirect and possibly direct)
021	Farmstead	ND 148 488	C	Low significance (indirect)
022	Hollowway	ND 1548 4862	C	Medium significance (indirect and possibly direct)
023	Farmstead	ND 154 485	C	Low significance (indirect)
024	Farmstead?	ND 160 479	C	Low significance (indirect)
025	Farmstead	ND 1565 4778	C	Low significance (indirect)
026	Hollowway	ND 145 504 - ND 148 506	C	Low significance (indirect)
027	Stell	ND 1488 5059	C	Low significance (indirect)
028	Sheep shelter	ND 1495 5068	C	Medium significance (indirect)
029	Stell	ND 1660 5095	C	Low significance (indirect)
030	Sheep shelter	ND 1683 5043	C	Low significance (indirect)
031	Mounds	ND 162 512	C	Medium significance (indirect and possibly direct)
032	Stell	ND 1645 5156	C	Low significance (indirect)
033	Sheep shelter	ND 1622 5150	C	Low significance (indirect)
034	Farmstead? Well?	ND 1649 5205	C	Low significance (indirect)
035	Turf dykes	ND 168 516	C	Low significance (indirect)
036	Broch?	ND 1680 5158	C	Low significance (indirect)
037	Farmstead; Inn	ND 168 515	B	Medium significance (indirect)

6.2 Proposed Mitigation Measures and Recommendations

On the basis of the assessment of the significance of the individual elements of the archaeological resource and the potential impact of the proposed windfarm development, a range of mitigation measures are proposed. Mitigation measures, which refer to specific archaeological sites are dealt with first, followed by a series of general recommendations relating to the proposal areas in general or to specific areas within them which may have archaeological potential.

Site 009 There are only twenty such sites known, all of which are located in Caithness and Sutherland. This ensures that this site is of national importance. In light of this fact, it seems highly desirable to ensure that the integrity and landscape setting of this site is impacted upon as little as possible. The proposed layout of the windfarm makes this unlikely at present.

All the archaeological sites in the proposal area will be subject to a high degree of visual impact, dependant somewhat on the final location of the wind turbines. Many of these sites, particularly the two brochs (Sites 9 and 12) and some of the best-preserved farmsteads (Sites 6 and 20) along the Thurso river, plus the complex of archaeological remains at Achkeepster (Sites 36 and 37), are of enough archaeological significance in their local and regional context for this visual impact to be a concern. Above and beyond this, it must be borne in mind that these sites are part of a wider and relatively well-preserved archaeological landscape, which should, where possible, be viewed as an integrated whole.

If any of the recorded archaeological sites were to be affected by the siting of access roads and other ancillary services associated with the windfarm proposal, their location would have to be taken into account. In all cases where the location of any of the works associated with the development would pass close to an area of identifiable archaeological activity, a 50m exclusion zone should be placed around the periphery of the site. These exclusion zones should be marked out on the ground by unique and readily visible means prior to the commencement of any works.

Large areas of the proposed development area are devoid of 'visible' archaeological remains. While this may indicate a lack of past human activity in these areas, it must be stressed that the presence of blanket peat makes it very difficult to be certain that there are no sub-surface remains present. It is therefore suggested that any groundworks necessary during the construction work for the proposed windfarm would be subject to an archaeological watching brief, maintained by an appropriately qualified field archaeologist and that time and resources would be dedicated to the elucidation of any archaeological remains exposed during such works.

In order to minimise the potential for damage to the archaeological resource outside the immediate area of the wind turbines, associated services and access roads (once these locations are firmly identified), activity during the development of the windfarm should be restricted to the line of the site roads and to the immediate locations of the turbines and associated services. Any other groundworks which are necessary in the construction work - quarries, test pits, site compounds and the like - should be sited so that they do not have a direct impact on the archaeological resource. Again they should be monitored by a suitably qualified field archaeologist in case sub-surface archaeological deposits have been disturbed and sufficient time and resources should be dedicated to the recording and analysis of any such deposits encountered.

It seems possible that significant environmental deposits would be disturbed by groundworks associated with the development. Since these could contain a considerable amount of data (such as pollen or soils) which would help in the understanding of the past land use of the area, some degree of protection or examination of any such deposits encountered may prove necessary and should be taken into account during the planning of the proposed development.

7.0 Conclusions

The presence of an entire archaeological landscape, which is both well-preserved and displays a considerable time depth, seems of particular importance in determining the siting and layout of the present proposal. It would seem preferable to try and avoid locating any of the turbines or service roads within those areas along the Thurso river or in the immediate vicinity of Achkeepster and Baledavist which have undergone intensive occupation in the past. In this case, not only the effect on individual sites, but also that on the entire range of features (including fields and enclosures) which go to make up the inhabited landscape, should be taken into account. These areas - though quite large - appear, from the surface remains, to be relatively easily defined. The size of the proposal area would also seem to suggest that it is possible to take this issue of archaeological sensitivity into account, by fairly minimal changes to the layout in those areas where the archaeological sites are concentrated.

The possibility of sub-surface deposits, masked by the overlying blanket peat, makes it hard to assess the potential significance of the extant archaeological remains and must be of great concern in assessing the archaeological impact of this proposal. The location of both turbines and ancillary services would have to be firmly agreed, as would any necessary archaeological mitigations resulting from the siting of these works, before the proposal could go forward. In addition a watching brief has been proposed in order that sites for which no visible evidence survives and which are revealed during groundworks may be recognised and recorded.

It must be stressed that the recommendations noted here are intended for guidance only and attention is drawn to the fact that all decisions regarding appropriate mitigation strategies rest ultimately and entirely with the local planning authority.

8.0 Acknowledgements

Thanks are extended to Innes Miller for providing access to the estate plans in his possession, and to the staff of the Highland Council Archaeology Unit, the National Monument Record for Scotland, the National Archives of Scotland and the National Map Library for their assistance in making available the resources consulted in this study.

9.0 Appendices

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9.1.1 Cartographic Sources

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10.10.1988	All Scotland Survey, 63788	048-046	1:24000

9.1.3 Documentary Sources

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9.2 Photographic Record

Colour Transparency Film 1

- 8 Tormsdale - from N
- 9 Proposal area - looking SE from Tormsdale
- 10-14 Wasted

- 15 Site 1 - from SW
- 16 Site 1 - from SW
- 17 Site 2 - from W
- 18 Site 2 - from W
- 19 Site 2 - from NW
- 20 Site 3 - enclosure wall from E
- 21 Looking south across Tormsdale (Sites 3-7)
- 22 Site 3 - E compartment of main building from WNW
- 23 Site 4 - building from E
- 24 Site 6 - detail of E compartment of main building from N
- 25 Site 6 - E compartment from NW
- 26 Site 6 - possible kiln from NW
- 27 Site 6 - conjunction of building and field wall - from W
- 28 Site 8 - ?head-dyke from N
- 29 Temporary anemometer mast, with Tulach Beag in background (Site 9) - from E
- 30 Site 8 - ?head-dyke from N, and trenches cut for anemometer stays
- 31 Site 12 (Tulach Mor) - from Tulach Beag (from N)
- 32 Site 9 - damage to NW chamber
- 33 Site 9 - summit of broch mound from SE
- 34 Site 9 - summit of broch mound from SE
- 35 Site 10 - from S
- 36 Site 10 - from SE
- 37 Site 11 - from SE

Colour Transparency Film 1

- 1 Site 8 - from SE
- 2 Site 8 - from NW
- 3 Site 12 - long view from N
- 4 Site 12 - from S
- 5 Site 12 - from S
- 6 Site 12 - quarrying from E
- 7 Site 12 - quarrying from E
- 8 Site 13 - turf footings from S
- 9 Site 13 - detail of central compartment from N
- 10 Site 10 - site 14 from N
- 11 Site 15 - from SW
- 12 Site 15 - from SE
- 13 Site 16 - from S
- 14 Site 16 - from S
- 15 Site 17 - from SE
- 16 Site 17 - from SE
- 17 Site 19 - view S from entrance
- 18 Site 20 - general view of main longhouse from NE
- 19 Site 20 - detail of cruck
- 20 Site 20 - general view of main longhouse from S
- 21 Site 20 - general view of main longhouse from S
- 22 Site 5 - from E
- 23 Site 26 - from W
- 24 Site 20 - detail of slab-built field wall from N
- 25 Site 22 - from S
- 26 Site 23 - detail of E end of building from SW

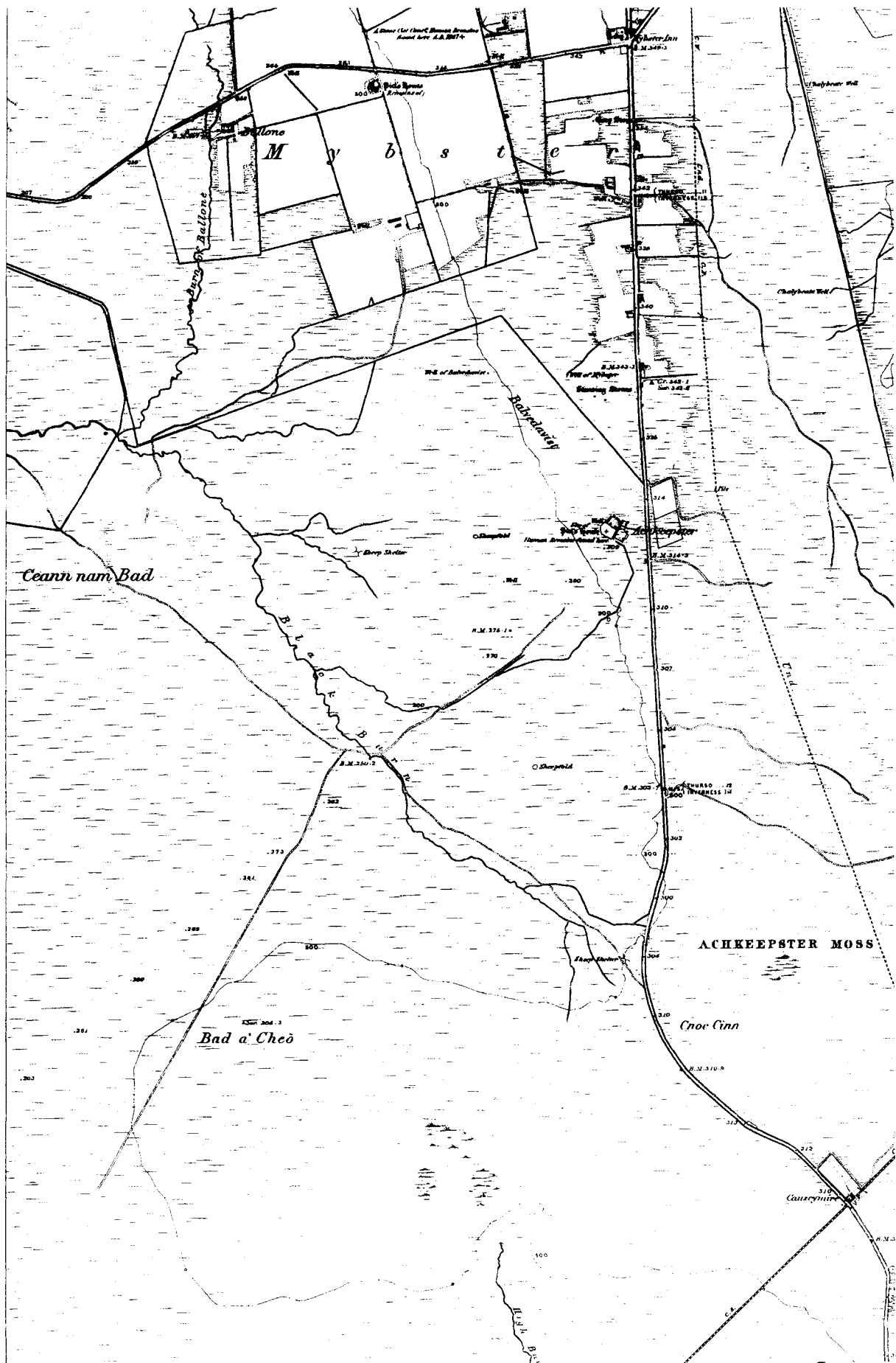


Figure 3 OS First edition, Sheet XXIII (1875) - northern part of proposal area

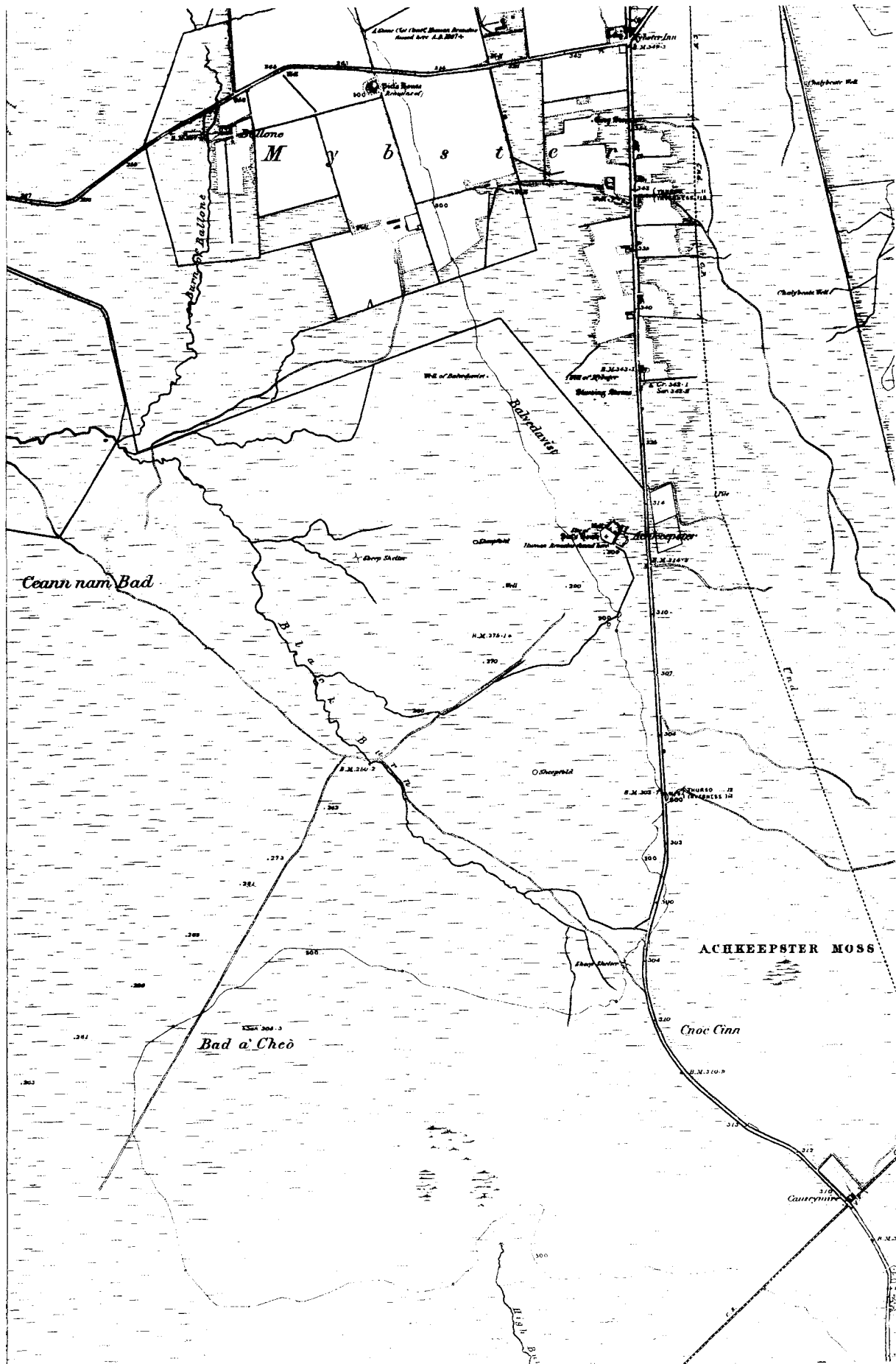


Figure 3 OS First edition, Sheet XXIII (1875) - northern part of proposal area

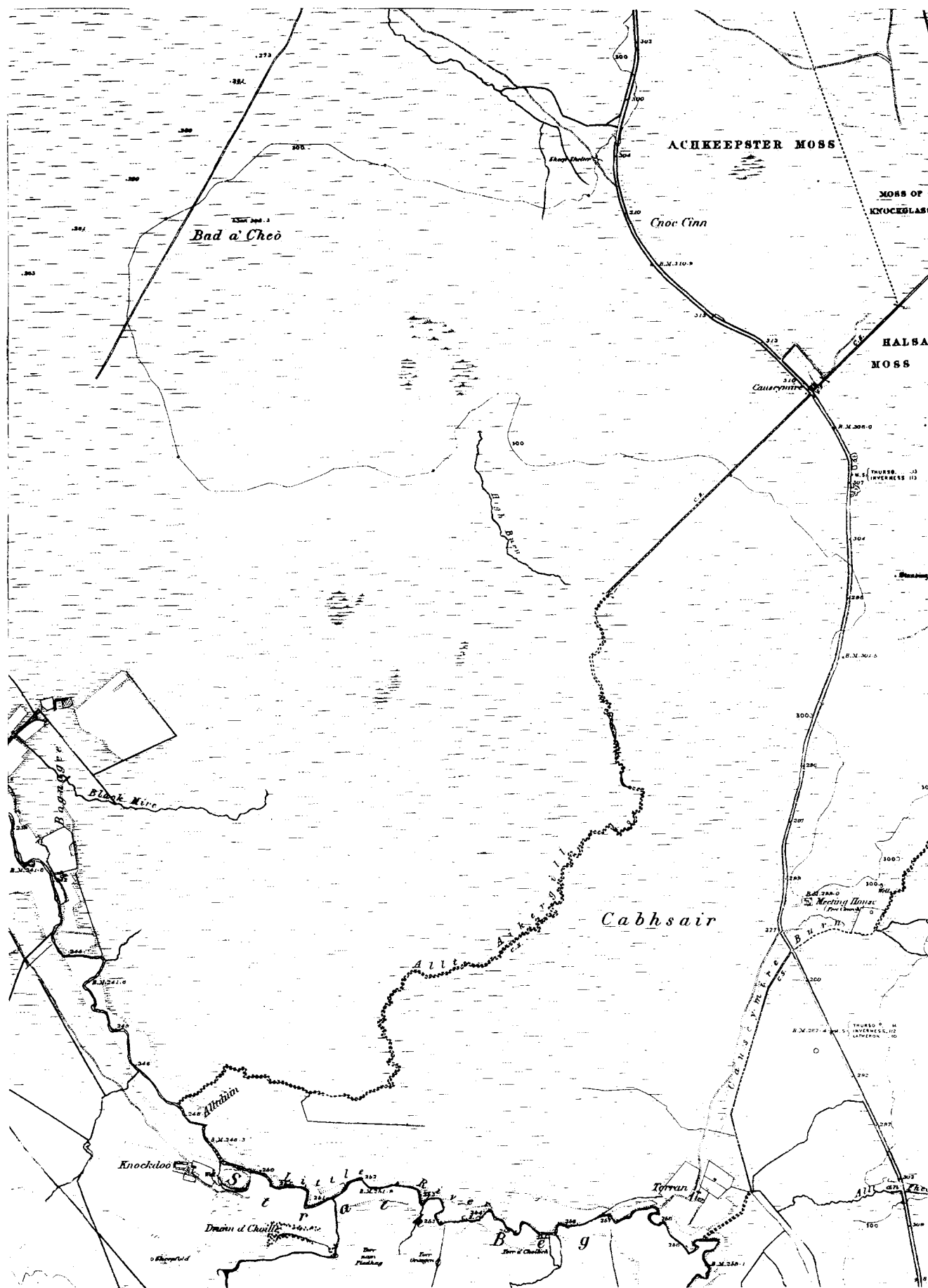


Figure 4 OS First edition, Sheet XXIII (1875) - southern part of proposal area

8.3 Project Specification



HIGHLAND COUNCIL PLANNING AND DEVELOPMENT SERVICE

Archaeology Unit

Brief for:

ARCHAEOLOGICAL DESK BASED ASSESSMENT AND WALK-OVER SURVEY

CAUSEYMIRE WIND FARM

1. Background

This brief has been produced in response to the need for an archaeological evaluation to be carried out prior to work beginning on site. It is for a minimum standard of work; a higher standard may be offered and accepted.

2. Terms of Reference

This brief is for archaeological desk-based assessment and walkover survey prior to works proposed by Innes Miller, who are responsible for all tendering and contractual arrangements.

Any reference to ‘archaeologist’ in this specification is to be taken to mean a qualified and experienced practitioner acceptable to the Senior Archaeologist. This is to ensure that work is carried out to professional standards. The project should be carried out by, or under the immediate direction of, a member of the Institute of Field Archaeologists or an archaeologist of equivalent standing.

If this is for a road or water and sewerage proposal the area to be covered is the entire wayleave except where otherwise indicated.

3. Tendering

Tenders must be accompanied by a project design, statement and evidence of competence, including the CV of the Project Director, and other staff where possible.

4. Objectives

1. *To establish the presence of recorded archaeological remains, and the likelihood of further as yet unrecorded archaeological remains.*
2. *To propose arrangements for the safeguarding where possible and recording where necessary of any archaeological features or finds identified.*
3. *To ensure that the needs for archaeological conservation and recording are met without causing any unnecessary delay or disturbance to the development project.*

5. Method

1. A desk based assessment of the site, to include consultation of at least; *The Highland Council Sites and Monuments Record, The Highland Council Archive, The National Monuments Record, any locally held private archives, Aerial Photographic coverage, RCAHMS, Scottish Record Office, National Map Library.*
2. The desk- based assessment must make full use of all of the resources held in these repositories.
3. A walkover survey will be made of the area in question, to enable identification of any upstanding remains, from any period, including modern. All individual features to be recorded on a 1:2500 plan.
4. No excavation is to take place as part of this work.

6. Monitoring

- I. The Senior Archaeologist will normally monitor fieldwork to ensure that briefs are met.
- II. Monitoring will normally be by unannounced site visit. Alternative or additional monitoring arrangements may be made in individual cases.
- III. Prior notice of fieldwork starting dates, with contact names and local addresses, telephone numbers and directions and other arrangements for access must be given to the Senior Archaeologist.

7. Reporting

7.1. Project report

At least three copies of the project report must be produced.

- I. One paper copy for Innes Miller
- II. One paper copy for the Archaeology Unit, Planning and Development Service, Council Offices, Glenurquhart Road, Inverness IV3 5NX where it will be available for immediate consultation by the public.
- III. One copy for the Highland SMR as above, on a computer *disk*, in a format compatible with Microsoft Office 95 for Windows.

The report must be submitted to the all of the above within 2 weeks of the completion of the field work.

The report must include, as a minimum,

1. Location plan showing the project area and archaeological sites and features affected. The Grid Reference of the site must be included.
2. Circumstances and objectives of this work, including a copy of this brief.
3. Weather and other conditions affecting fieldwork
4. Scale plans, and photographs of archaeological features noted
5. A full index to any records or other material generated by the project including its location
6. An analysis of the project results drawing in comparative data as appropriate, and a statement of the significance of the results for future research. Note that a negative result may itself be significant.
7. The report must propose appropriate arrangements for the safeguarding where possible or recording where necessary of any objects or features identified by this evaluation.
8. A set of colour slides illustrating the project from start to completion

The completed report will be available for immediate public consultation for research purposes at the Highland Sites and Monuments Record. In addition, the Archaeology Unit reserves the right to make the report available for reference and research purposes, either on paper, or electronically. Subject to this, copyright will remain with the author unless specifically transferred in writing, and the Archaeology Unit will assume author's copyright unless advised otherwise. Copyright will be acknowledged in all cases by the Archaeology Unit.

This specification includes arranging a presentation of the project results to the local community within a year of the completion of the fieldwork. Arrangements must be agreed with the Senior Archaeologist.

7.3. Discovery and Excavation in Scotland

A brief summary of the results must be sent to the Council for Scottish Archaeology for inclusion in Discovery and Excavation in Scotland. The cost of this must be included in any tender document.

8. General

1. The archaeologist appointed must be of a professional standing acceptable to the Senior Archaeologist and must carry out the work according to the Code of Conduct, standards and guidelines of the Institute of Field Archaeologists.
2. The main contractor has responsibility for the Health and Safety of any archaeological staff on site.
3. The archaeologist is responsible for taking all necessary measures to conform with the Health and Safety at Work Acts and be covered by all necessary insurances.
4. Any Health and Safety incidents on site involving the archaeologist must be immediately notified to the Health and Safety Executive.
5. The archaeologist must agree a timetable for the work with the client and the Senior Archaeologist
6. The archaeologist appointed will not comment to the press or other media without prior approval from the Senior Archaeologist
7. Proper provision must be made for prevailing weather conditions in northern Scotland
8. The archaeologist agrees by undertaking this work to the terms of this specification.

Dorothy Low
Archaeologist
Tuesday, 23 January 2001

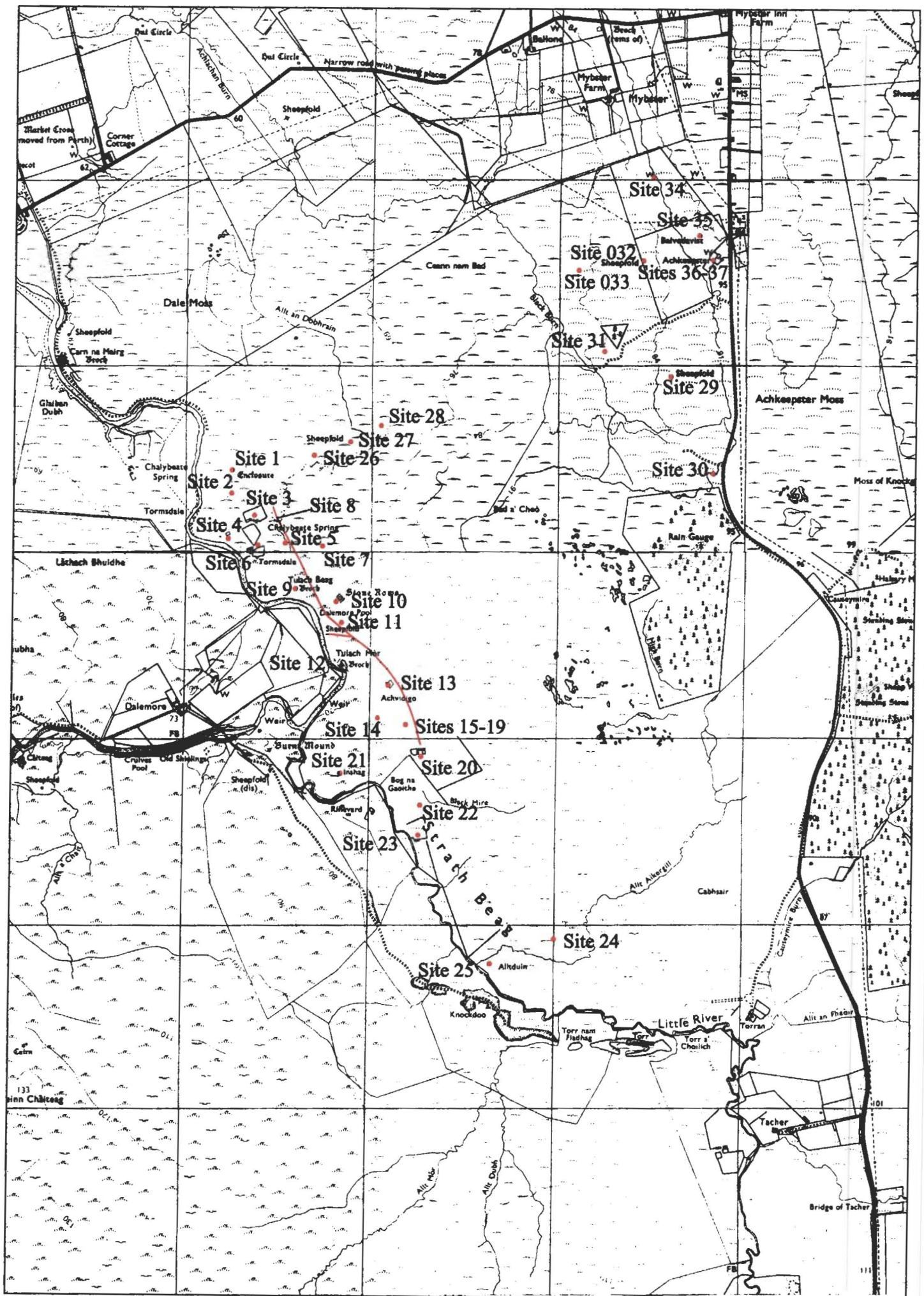


Figure 1 Location of Sites

Innes Miller Mediations
67 Dublin Street
Edinburgh
EH3 6NS

Please ask for: John Wood
Direct Dial: 01463 702502
Email: John.Wood@highland.gov.uk
Your ref:
Our ref:
Date: 07/06/01

Dear Mr. Miller

Achkeepster Wind-Farm proposal, Caithness

I refer to our meeting this morning. Please confirm that this summarises what we agreed.

We established that the south-eastern part of the site is not to be developed at all.

The whole area has been entered for the Rural Stewardship Scheme as it is intended that farming will continue among the windmills.

The core road layout marked in orange is now fairly definite and Janet will submit a proposal to evaluate this as soon as possible. Dorothy's reference to 5% evaluation indicates a *minimum* requirement and the test will be whether it provides a satisfactory assessment of archaeological impacts. The evaluation will be done using trial trenching by Janet armed with a digger and driver. She is not required to indicate in her project design the exact location and extent of every trench but she needs to give an indication of where attention will be concentrated. Her report will include a plan showing the locations of the trenches actually dug, it will identify any issues and constraints that emerge, and it will propose a mitigation strategy. Layout and road-line changes may be needed where archaeology is affected.

Some parts of the road will be floated on geo-textile over the peat, and provided these areas are identified in Janet's project design I accept this as a mitigation strategy subject to a watching brief. These areas where there will be minimal ground disturbance do not therefore need to be trenched.

The southern end of the road crosses an old dyke. We agreed that it would be diverted to run parallel to it instead.

In the north-east a road section runs to the proposed switching house, which is to be adapted from an old cottage close to the possible broch, inn and other buildings. Here we agreed that the line of the new water main where the ground has already been disturbed (already subject to a watching brief by Cathy Dagg would be followed.

The layout of the turbines and service roads / cable lines we discussed are only possible indicative locations at this stage and may be subject to considerable change depending on consultations on noise, birds, landscape and other issues. Rather than carry out a blanket evaluation of the whole area, we have therefore agreed to wait until you have a better idea of the other constraints you face. I have however asked that turbines should not be located between the access road and the river at all unless this is absolutely unavoidable, and then only after a full evaluation of each line and site (see locations 24,25,30-36).

Director of Planning and Development: John Rennilson, Headquarters, Glenurquhart Road, Inverness IV3 5NX
Web: <http://www.higharch.demon.co.uk>

For the other locations, a similar approach will be taken to that adopted for the main access roads - Janet will propose a trial trenching evaluation strategy once the most likely locations have been identified with regard to the other constraints. However it is important to note that as with the main access roads, layout changes will be needed where archaeology is identified.

As we discussed, no evaluation can definitively rule out the possibility of archaeology in an area like this, and a watching brief will also be needed on the construction of the wind-farm itself.

Yours sincerely

A.J.R. Wood
Senior Archaeologist

cc. Janet Hooper, 24 Harrowden Road, Inverness IV3 5QN