

Scotia Archaeology

**REPORT TO
ACHOMER ENERGY LTD
AND
UISGE HOLDINGS LTD**

**ARDTALNAIG
HYDRO-ELECTRIC SCHEME**

**ARCHAEOLOGICAL
WALK-OVER SURVEYS
FEBRUARY 2015**

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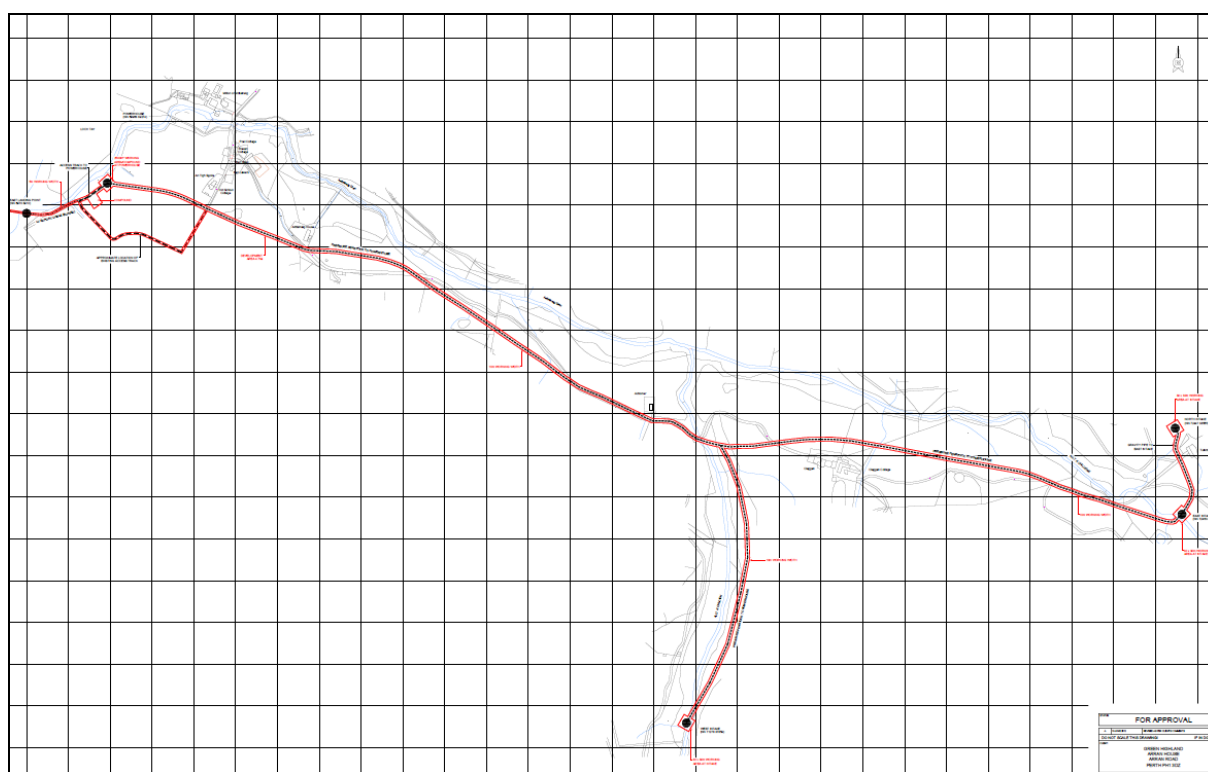
INTRODUCTION

In July 2012 Perth & Kinross Council granted planning consent to construct a new run-of-river hydro-electric scheme on the Ardtalnaig Burn, on the east side of Loch Tay, Perthshire (Planning Application number 2012/01113/FLL). Consent was granted subject to several conditions, one being that a programme of archaeological works would be required before and, if necessary, during the construction process. Scotia Archaeology was commissioned by Robert Smith, on behalf of Uisge Holdings Ltd, to undertake this work.

A Written Scheme of Investigation (WSI) was produced, setting out proposals for a walk-over survey of the site to identify any sites of archaeological or historical significance that might lie within that area. The document also outlined any mitigation strategies that might need to be implemented thereafter. The contents of the WSI were approved by the council and its archaeological advisors, Perth & Kinross Heritage Trust (PKHT), before the survey commenced.

The walk-over survey was preceded by a desk study of readily available source material which revealed several sites close to the development area. These sites are described below.

THE SITE



Illus 1: map showing the location of the hydro scheme

There are to be three intake points for this scheme. The north intake will be on the Allt Aonaich, at NN 72447 38565, from where the penstock will run southwards as far as the east intake on the Allt Coire Othaisg, at NN 72463 38359. The west intake will be on the Allt a' Chloide, at NN 71278 37859, its penstock meeting the main one at approximately NN 71360

38530. The combined pipe route will continue westwards as far as a power house to be sited near the south side of the Ardtalnaig Burn, at approximately NN 69870 39160.

The overall length of the penstock, including its west arm, will be approximately 4km. From the power house an underground export cable will be taken across Loch Tay to a power kiosk at Lawers, the east and west landing points being at NN 69700 39100 and NN 68290 39299, respectively. A new access track, some 150m long, will connect the west landing point to the power kiosk.

Maps showing the areas of development were supplied by the client. Since the original site map (Illus 1) was produced, the proposed route of a new access road to the power house has been changed (see Illus 7).

DESK STUDY

A desk study of readily available source material undertaken prior to the commencement of fieldwork revealed several known sites of archaeological or historical significance along or close to the route of the proposed pipeline. Those described below are listed according to the numbers allocated by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS), for example NN73NW 12, or by PKHT, for example MPK15818.

1 NN73NW 12 Farmstead

The first edition Ordnance Survey (OS) map of 1867 (Perthshire, sheet 70) depicts Tomflour farmstead comprising two part-roofed and two unroofed buildings at NN 7250 3863. The 1978 OS 1:10,000 map shows three unroofed buildings at this location.

2 NN73NW 17 Farmstead

The farmstead of Tullichglass, comprising three roofed, one part-roofed and three unroofed buildings and three enclosures are shown at NN 7248 3850 on the first edition OS map of 1867 (Perthshire, sheet 70). Current maps show one roofed building and five enclosures at the same location.

3 MPK15818 Sheepfold

The first edition OS map of 1867 (Perthshire, sheet 70) shows a sheepfold at NN 71925 38448.

4 MPK15817 Farmstead

The farmstead of Claggan is depicted on the first edition OS map of 1867 (Perthshire, sheet 70) at NN 71652 38483.

5 NN73NW 2 Well

Claggan well is reputed to be located in the vicinity of NN 71 38.

6 NN73NW 18 Farmstead

The farmstead of Achomer is shown on the first edition OS map of 1867 (Perthshire, sheet 69) at NN 7119 3861 and consisting of four roofed buildings ranged around a courtyard together with one detached, unroofed building. The 1978 OS 1:10,000 map shows two roofed buildings at this location.

7 MPK16164 Farmstead

The first edition OS map of 1867 (Perthshire, sheet 69) shows one roofed building and an enclosure at NN 70795 38819.

8 MPK16165 Farmstead

A single roofed building and an attached enclosure are shown on the first edition OS map of 1867 (Perthshire, sheet 69) at NN 70554 38895.

9 MPK16166 Farmstead

The first edition OS map of 1867 (Perthshire, sheet 69) depicts a roofed building and an attached enclosure at NN 70451 38915.

10 MPK15823 Farmstead

The first edition OS map of 1867 (Perthshire, sheet 69) shows a farmstead comprising six roofed buildings, one of them very long, and at least two enclosures straddling the road that runs through the glen. This extensive settlement was centred on NN 70360 39010.

11 Farmstead

A farmstead comprising three roofed buildings, an enclosure and a well are shown on the first edition OS map of 1867 (Perthshire, sheet 69) at NN 70246 39120.

12 MPK15820 Cemetery

A cemetery located at NN 70179 39164 is shown on the edition OS map of 1867 (Perthshire, sheet 69) and still appears to be in use.

13 NN73NW 25 Farmstead

The first edition OS map of 1867 (Perthshire, sheet 69) depicts two roofed buildings, an enclosure and a lime kiln at NN 70005 39006. Current maps show three buildings of the still occupied Kindrochit Farm.

14 NN73NW 3 ?Castle

According to local tradition, a castle (perhaps a hunting lodge) once stood near what is now the farm of Milton of Ardtalnaig, at approximately NN 701 393, although no trace of such a structure is now visible above ground.

15 NN73NW 19 Mill

A ruined 19th-century mill stands near Milton of Ardtalnaig, at NN 7009 3930.

16 NN73NW 1 Carn Ban

A mound of stones, 17m in diameter and 2.5m high, located at NN 7003 3941 has been interpreted as a probable Bronze Age burial mound. It is a Scheduled Ancient Monument (SAM6238)

17 NN63NE 42 Old Lawers village

The extensive remains of the deserted village of Lawers are centred on approximately NN 6835 3940 and include several substantial stone buildings dating from the early 17th century or earlier. Among these structures are the House of Lawers, built over the remains of an earlier structure in 1645, Lawers Church (1669), two mills and several more modest structures. Old Lawers village is a Scheduled Ancient Monument (SAM6280).

WALK-OVER SURVEYS

From Loch Tay the ground rises towards the east and in early February 2015 much of the ground was still covered with snow. As a consequence, it was decided to undertake the survey in two parts. The lower part of the development area, in the vicinity of the proposed site of the power house, together with the short stretch at Lawers were surveyed on 6 February 2015. The remainder of the area was investigated on 16 February 2015, when the snow had melted. The report produced after the initial survey is superseded by this one.

Most of the penstock route was surveyed on 16 February 2015, a dry, occasionally sunny day. For convenience, the route has been divided between three maps, the east, middle and west sections.

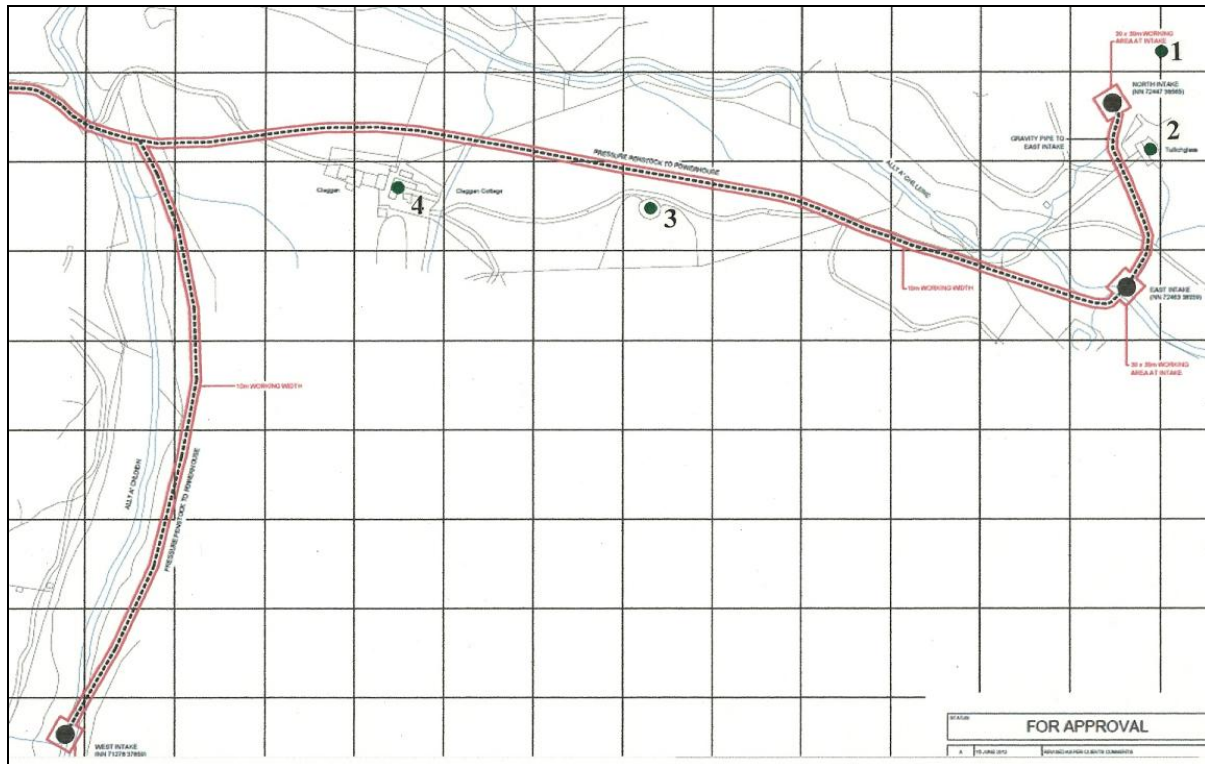
East section (Illus 2, 3)

This section runs from the three intakes to the point where the two branches of the penstock meet to the west of Claggan Farm. From the north intake to that point the route crosses pasture fields, most of them well drained. However, the branch from the west intake runs along the steeply sloping east side of the Allt a' Chloide valley, through coarse grass, some heather and a small birch wood.

The only impact that the proposed development might have on known archaeological or historical features is at Tullichglass, close to the north intake where the penstock will run close to an enclosure on the south side of the abandoned farm (Illus 3). The other monuments identified in this area, a sheepfold (Site 3) and Claggan Farm (Site 4) comprise clearly visible, upstanding structures, the latter still inhabited.

The location (NN 71 38) ascribed to Claggan well (Site 5), is very vague and was not identified during the walk-over survey.

Nothing of archaeological interest was encountered along the stretch running alongside the Allt a' Chloide.

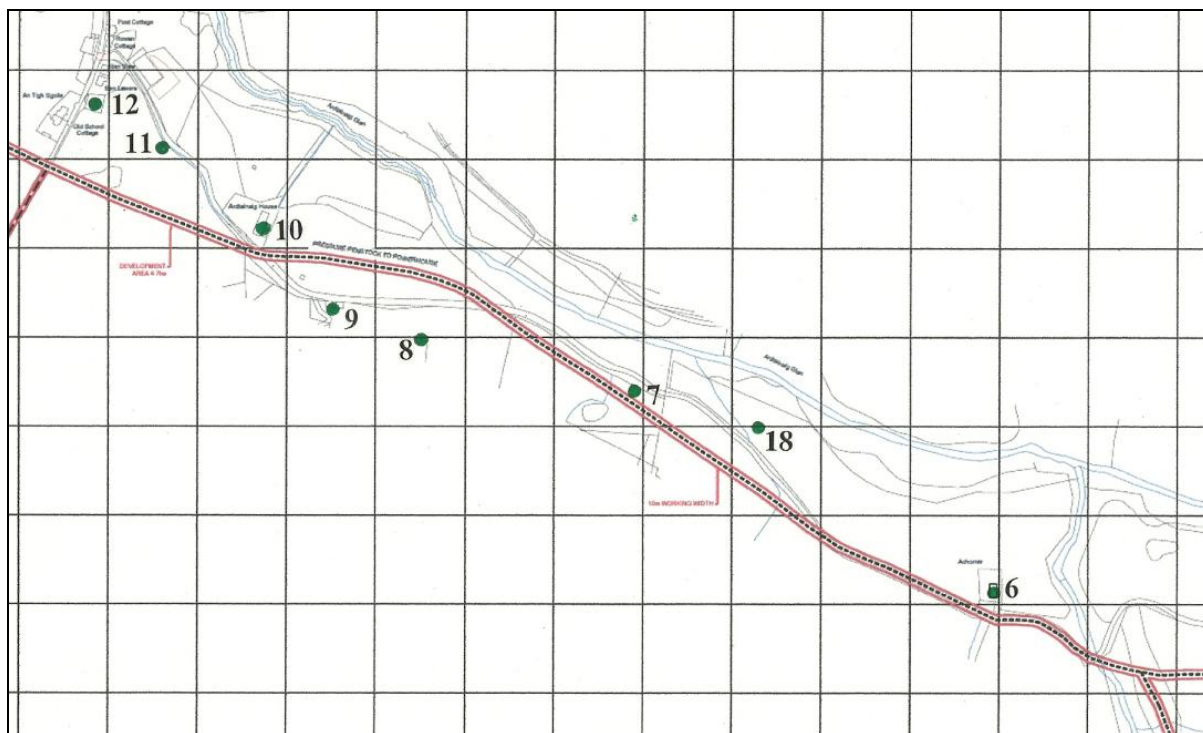


Illus 2: map of east section of penstock



Illus 3: enclosure on the south side of Tullichglass

Middle section (Illus 4-6)



Illus 4: map of middle section of penstock

Extending from the point where the two arms of the penstock meet as far as Ardtalnaig village, this section crossed several fields, nearly all of them of improved pasture.

Several sites were identified in the desk study although few, if any, are likely to be affected by the construction of the hydro scheme. Sites 6 (Achomer) and 10 (Ardtalnaig House) are still occupied and the cemetery (Site 12) is still in use while the farmsteads of Sites 8, 9 and 11 are sufficiently far from the proposed route of the penstock to be undisturbed by the development.

Site 7 is located to the immediate south of the tarmac road that connects Claggan to the village and survives as the scant ruins of a bicameral building, now almost obscured by brash and other debris. There is no clear evidence of the enclosure shown on the first edition OS map although its remains may simply be buried beneath debris. The building is separated from the penstock route by a post and wire fence, beyond which there are no visible features that might be associated with this settlement.



Illus 5: Site 7 viewed from the south

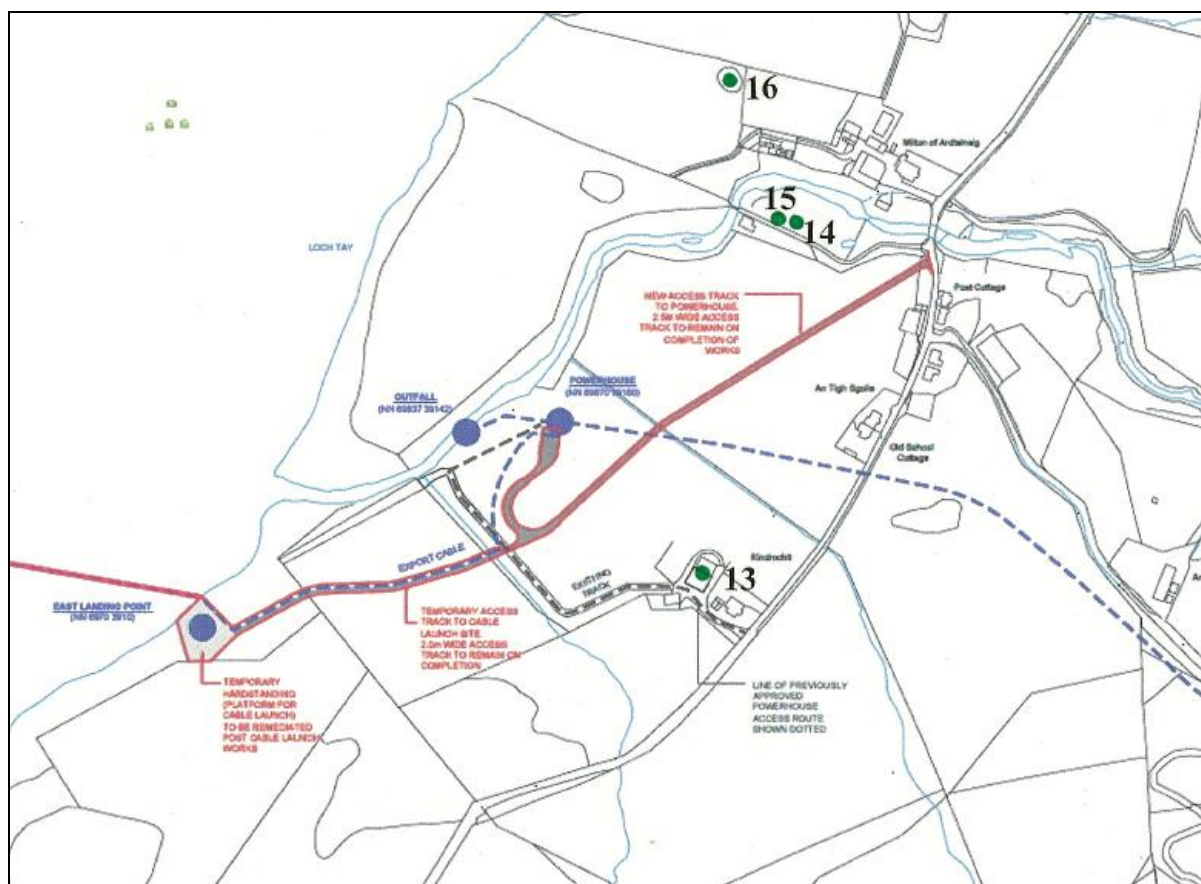
The walk-over survey identified a structure (Site 18) at NN 70935 38774 (see Illus 4) which is not shown on the first or second editions of the OS 6-inch map although it does appear on modern maps. It consists of the remains of a building measuring approximately 14m by 5m with walls of drystone rubble, 0.9m wide and standing to a maximum of three courses. These remains have been used in recent times as a depository for field clearance boulders. The site is sufficiently far from the penstock route as to be unaffected by its construction.



Illus 6: Site 18 viewed from the north with Achomer beyond

West section (Illus 7)

The map showing this part of the development area replaces that depicted on the original site map. The newer map shows the penstock route unchanged whereas the access road to the power house has been realigned considerably, running to the east, rather than the west, of Kindrochit. No sites or monuments of archaeological significance were observed in these fields which slope down gently from Ardtalnaig village towards Loch Tay.

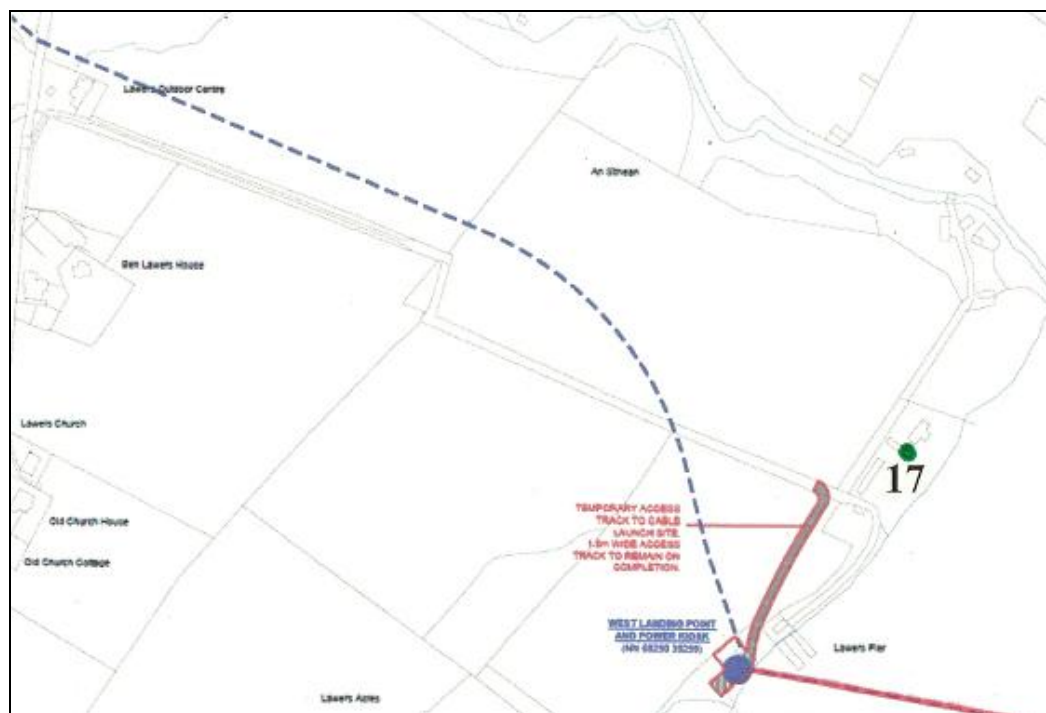


Illus 7: power house, access road and east landing point

Kindrochit Farm (Site 13) is still occupied and will not be affected directly by the development, nor should the remains of the mill (Site 15) which are located some distance from the new access road. The location of the putative castle (Site 14) is the subject of speculation and could be anywhere within or close to Ardtalnaig. Carn Ban (Site 16) is situated a short distance west of Milton, on the north side of the Ardtalnaig Burn and some 200m from the new access road.

Lawers (Illus 8)

The cable will come ashore on the west side of Loch Tay at NN 68290 39299, to the west of an old pier from where it will cross a level pasture field to approximately NN 68193 39425 before running uphill towards the A827 public road. A new access road will also be constructed across the field, from the landing point to approximately NN 68304 39379. No features were noted in that field although both the cable trench and the new access road will run very close to upstanding remains of the old village of Lawers (Site 17).



Illus 8: Lawers, showing west landing point, cable route and access road

CONCLUSIONS AND RECOMMENDATIONS

The most obvious dangers to archaeological structures and features on a hydro scheme is the excavation of the pipe trench and the construction of a power house and access roads. However, other activities can also pose problems to the survival of the archaeological record, including the deposition and retrieval of spoil, the temporary storage of pipes and other materials and the movement of plant and other machinery.

On the evidence of the maps supplied by the client, the archaeological record is unlikely to be affected by excavations along the pipe trench. However, it is possible that the construction of access roads on both sides of the loch, as well as the excavation of the cable trench at Lawers, could impinge on any surviving buried archaeology. Should the route of the penstock or the access roads be changed, then those changes may impact further on the archaeological record.

Ardtalnaig

The exact location of the putative castle (Site 14) is unknown: indeed, it is not certain whether this monument actually existed. Nevertheless, its nominal location is close to the proposed new access road at Ardtalnaig and, as a measure of caution, it is recommended that the removal of vegetation and topsoil for the construction of the road should be monitored archaeologically.

This recommendation is reinforced by the proximity of the prehistoric burial cairn of Carn Ban. Although the burial itself would not be affected by the development, it appears that the area around Ardtalnaig was occupied in prehistory, further suggesting that a watching brief be undertaken during excavations in the fields between the public road and the loch.

Lawers

The new access road and cable trench on the west side of the loch will be located very close to some of the standing structures that belonged to the old village of Lawers (Site 17). It is thought possible that remnants of earlier structures and features may lie buried in the vicinity of this monument and it is recommended that a watching brief be undertaken during excavations in that area.

Archaeological monitoring (watching briefs)

The findings from the watching briefs would be recorded using standard archaeological methods: photography; written descriptions; and, where appropriate, measured drawings.

Should significant discoveries be made during the watching brief, they will be reported to PKHT. Should any human remains be uncovered they will be left in situ and their presence will be notified as soon as practicable to the police, the client and PKHT.

If appropriate, bulk samples of features and deposits of archaeological or palaeo-environmental importance will be taken for analysis. All finds will be retrieved and treated according to the directions of the Scottish Archaeological Finds Allocation Panel (SAFAP).

REPORTING

Within four weeks of the completion of the watching briefs, an illustrated Data Structure Report will be produced describing the results of the investigations and their relevance. Copies of the report will be forwarded to the client, PKHT and for archive to the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS).

A summary account of the project findings will be produced for publication in *Discovery & Excavation in Scotland*, the annual journal of Archaeology Scotland. In addition, the site data, including reports, will be uploaded onto the OASIS on-line archaeological resource site. Should significant discoveries be made during any phase of the investigation, it may prove necessary to carry out post-excavation analysis and to publish the results of the investigations in a recognised, peer-reviewed archaeological journal in order to fully implement the requirements of the archaeological planning condition. Prior to the commencement of post-excavation analysis, a post-excavation research design would be submitted to PKHT within three months of PKHT agreeing to the content of the Data Structure Report. The results of the investigations would be forwarded to an approved archaeological journal within one year of such an agreement. The client would be expected to fund such work to the satisfaction of the planning authority.

On completion of all site work and post-excavation analysis, the project archive will be deposited with RCAHMS. Any finds retrieved during fieldwork will be allocated on the direction of SAFAP.