

## **Strathan Hydro Scheme, Attadale Estate, Lochcarron, Wester Ross.**

### **Report on Archaeological Survey and Mitigation Recommendations for Gilkes Energy Ltd.**

**by Fiona Baker, Firat Archaeological Services Ltd. 4 December 2015.**

#### ***Introduction***

Five hydro schemes have been proposed on the Attadale Estate and all have been subjected to archaeological desk study and walk over survey. See Robertson J and Dagg C *An Archaeological Survey for the Attadale Hydro Scheme, Attadale Estate, Lochcarron, Wester Ross, Highland for Hydroplan UK, April 2012*. The Achintee Scheme is no longer being developed. This report supplements the Robertson and Dagg report.

The four remaining schemes are being developed by Gilkes Energy Ltd who asked Fiona Baker, Firat Archaeological Services Ltd (FAS), to undertake a review of the archaeological report and scheme layouts including new tracks, pipe laydown areas, borrow pits and construction areas and planning conditions in advance of development. Following this review of 29 October 2015 Gilkes asked FAS to undertake a walk over survey of the new access track, private wire route, construction compound area and borrow pits for the Strathan scheme and to mark off the two sites identified by Robertson and Dagg's earlier survey.

#### ***Planning Background***

**Strathan Hydro Scheme** (Scheme 3) Planning Ref: 12/04686/FUL Granted 28 August 2013.

Planning Condition 17

*17: A digital copy of the Archaeological Report which informs the Environmental Statement must be provided to the Planning Authority prior to the commencement of development within three months of the date of this consent.*

**Reason:** *To comply with the Highland Council Standards for Archaeological Work.*

The report was supplied in digital format (see correspondence dated 7 May 2015 from Andrew Puls (Highland Council Historic Environment Team (HET)) to David Tomb (Gilkes)). The planning condition was discharged in an email from Andrew Puls to David Tomb dated 3 November 2015.

No further archaeological work was required by the planning condition.

Robertson and Dagg's archaeological survey report recommends:

- **Site 5 (NB now re-numbered as Site 1)** (building at NG 94267 37757) is fenced off, further evaluation (field inspection) and possibly excavation if it cannot be avoided. The report also notes that there may be further building remains which were obscured by bracken (November 2011). Roy's map (c.1750) records a settlement on the N side of the confluence of the rivers and Robertson and Dagg suggest this structure may be part of it, also that the site may represent a mill.

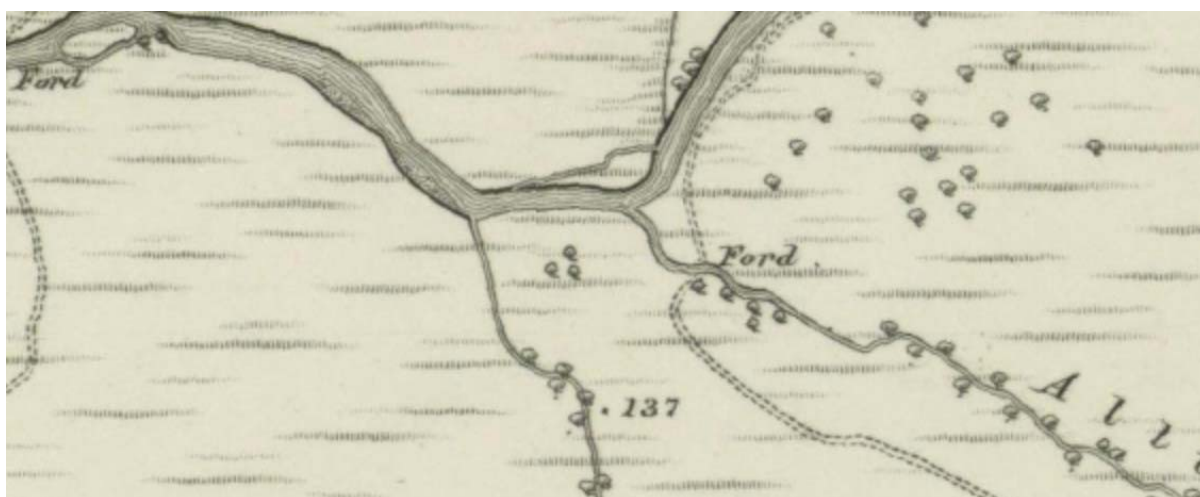
- Site 6 (NB now re-numbered as Site 2) (turf and rubble dyke at NG 94200 37830 (NW end) to NG 94263 37723 (SE end) interpreted as associated with animal management is likely to be removed by construction of the powerhouse and tailrace. A watching brief is recommended and avoidance as much as possible.

### *Map Evidence*



#### **General Wiliam Roy 1747-55 Military Survey of Scotland.**

The small settlement of four buildings shown on the S bank of the River Attadale just above the 'i' of Balnacraig probably represents the settlement remains of Sites 1, 7, 8, 9, 10, 11 and 12.



#### **Ordnance Survey First Edition 1875 Ross and Cromartyshire (Mainland) Sheet CX1, 6 inches to 1 mile**

The Ordnance Survey map shows no structures at the Site 1 area at the confluence of the Allt a'Ghiubhais, Allt Odhar and River Attadale.



### **Ordnance Survey Second Edition 1902 Ross and Cromartyshire Sheet CX1, 6 inches to 1 mile**

The Ordnance Survey map shows no structures at the Site 1 area at the confluence of the Allt a'Ghiubhais, Allt Odhar and River Attadale.

### ***Field Survey***

An archaeological walk over survey of the route of the new access track and private wire route for the hydro scheme at Strathan (pronounced Strachan), Attadale Estate was carried out in generally poor conditions under very overcast skies in poor light and heavy rain on 26, 27 and 28 November 2015 by Fiona Baker and Scott Coulter of Firat Archaeological Services (see Gilkes drawing Strathan Hydro Scheme Site Layout Drawing No. STR/GEL/002 Status TEN below.). The location of borrow pit BP1 and a smaller borrow pit to the E adjacent to the Estate track, the construction are CA3-1 and pipe laydown area PL3-1 were also assessed by the field survey.

The previous survey carried out by Catherine Dagg and Jennifer Robertson for Hydroplan in November 2011 did not assess the new access track along the N bank of the River Attadale (see site plan below). (See Robertson J and Dagg C *An Archaeological Survey for the Attadale Hydro Scheme, Attadale Estate, Lochcarron, Wester Ross, Highland for Hydroplan UK, April 2012*)

Ten new sites were recorded by the November 2105 survey. The full details of all sites recorded on the Strathan scheme is given below followed by a summary table detailing the impact of development and mitigation recommendations. It is noted that there is no planning condition requiring further archaeological work. However, it is Gilkes's policy to protect historic environment assets and the mitigation recommendations given in this table will be implemented.

### ***Field Survey Results***

The new access track along the N bank of the River Attadale skirts along the fence line and does not encroach into the fields. The new access track route was walked from NG 92561 38688 at its W end to the construction compound at approximately NG 93820 37877. Accordingly features such as the sheep fank at NG 93435 38484 and settlement remains at Strathan were not recorded as these are avoided and will not be affected by the development.

All archaeological sites have been marked by red and white striped flagging on canes.

All hand held GPS grid references are +/- 5m accuracy.

The fields in the strath, a classic flat bottomed glacial valley, have been improved and also show signs of pre-improvement cultivation. A large moraine dump is present in the large field where the construction compound is located (Site 3). This is clearly visible on satellite imagery. It is noted that this field is no longer subdivided by fences. The drystone walls to the E of the construction compound and along the Estate road have been constructed of cobbles and small boulders no doubt quarried from this moraine. The moraine dump showed signs of quarrying added clearance stones and a few small sub-circular platforms interpreted as haystack stances have been constructed on it. While no archaeological mitigation is recommended for this natural feature given that it has been utilised for quarrying and affected by cultivation related activities it is recommended that the machine operator keeps an eye out for any unusual features within the moraine which might suggest structures.

The ground was generally saturated after significant rainfall compounded by water run-off from the hill (Cnoc an t-Stratha) on the N side of the glen. In the field containing the sheepfank a major canalised channel formalises and controls the natural watercourse off the hill. This canalised watercourse has been maintained over a long period of time and has a track of moraine cobbles along its E side. More recent major drainage ditches feed into this watercourse. A wooden barrel lid was observed in erosion just under the turf in the edge of one of the recent drains located on the E side of the major canalised burn and to the S of the sheep fank.

It was not possible to cross the Allt a'Ghiubhais or River Attadale during the survey due to high and fast water levels. Accordingly the short section of new access track and private wire route between the powerhouse and new bridge BR1 has not been surveyed. A wall was observed on the S bank of the River Attadale opposite the construction compound at c. NG 93842 37843 and this will be disturbed by the new bridge. This wall may be a continuation of Site 2 and represents a stock control / flood defence boundary along the river bank. Damage should be kept to a minimum but there is no need for a watching brief. This short stretch of track route on the S bank of the River Attadale should be walked by an archaeologist before development.



***Borrow Pits***

No archaeological remains were located at the borrow pit locations. (See Gilkes drawing Strathan Hydro Scheme Site Layout Drawing No. STR/GEL/002 Status TEN)

***Private Wire***

The route of the private wire where it crosses from the Estate road into the fields to the N of the construction compound will cut through two drystone walls. Existing gaps should be used if possible. There is a gate in the NW-SE drystone field boundary wall (which runs from NG 93827 38058 NW end at the Estate road to NG 93955 37945 SE end where it returns to the SW to c. NG 93797 37860) that could be utilised and the Gilkes map suggests this is the chosen route. Once the private wire trench crosses into the construction compound field it should avoid the higher and drier ground immediately to the W of the wall. This area at NG 93835 38028 is paler green, shorter grass and relatively better drained. It shows signs of previous cultivation and clearance cairns. A watching brief is not required but this small knoll and the higher ground, including the managed crescent shaped watercourse, westwards towards Strathan shows sign of previous occupation. Any access over this area should be restricted to the existing track.

***Extract from Robertson J and Dagg C An Archaeological Survey for the Attadale Hydro Scheme, Attadale Estate, Lochcarron, Wester Ross, Highland for Hydroplan UK, April 2012.***

Note Sites g-i are:

g – Attadale House at NG 92590 39043 HER Ref: MHG16390

h – Attadale House Gardens at NG 92551 39010 HER Ref: MHG 43981

i – Strathan enclosure at NG 93950 37940 HER Ref: MHG 22536

Robertson and Dagg used a continuous run of site numbers across all five survey areas. Only Site 5 and Site 6 are on the Strathan scheme. For clarity, and rather than wondering why Sites 1 to 4 are missing, the sites have been renumbered from Strathan Site 1

Site 5 has been renumbered as Site 1

Site 6 has been renumbered as Site 2

### Scheme 3 Strathan

None of the three previously recorded sites, g-i, will be directly affected by the scheme. For potential indirect impacts on Attadale House and gardens, see section 7.0, below

#### Site 5: Building. (Photos 4, 5)

NGR NG 94267 37757



Within an area of thick bracken to the east of the confluence of the Allt a'Ghuibhais and the River Attadale, walling standing to a height of 800mm of a small building aligned NE-SW. Further building remains may be obscured by the bracken. This is most likely a part of the small un-named settlement recorded on Roy's military survey at the head of the strath and likely to have been cleared around 1840. The channelling of water through this area is suggestive of a lade and offers the

possibility that this building or another in this area was a mill.

Photo 4 above: Drystone walling of building, from ESE. PH3 and River Attadale are behind to right.

**Significance: regional.**

**Impact Assessment:** This site is situated close to the bridge, immediately East of the Power House.

**Mitigation:** The site could be avoided if the new access road to the new bridge curves round to the South. Further evaluation is recommended prior to construction and, if the site cannot be avoided, excavation may be required.

#### Site 6: Turf and rubble dyke.

NGR NW end NG 94200 37830  
SE end NG 94263 37723

(Photo 6)

Sections of rubble or turf and rubble walling follow the west bank of the stream and river to a point where the topography provides a natural barrier. This is interpreted as an animal management feature preventing livestock from crossing the shallow water.

**Significance: local.**

**Impact Assessment:** The greater part of this feature is likely to be removed during construction of the power house and tailrace.

**Mitigation:** Keep damage to a minimum. A watching brief is recommended during removal of this feature.



Photo 6: Site 6, Turf and rubble walling, following bank of Allt a' Ghuibhais and River Attadale, from N.

## Site 1      Building

### NG 94267 37757 / NG 94260 37756

Previously recorded as Site 5 by Robertson and Dagg

At the confluence of the Allt a'Ghiubhais (flowing S to N into the River Attadale), Allt Odhar (flowing E to W into the River Attadale) and River Attadale are the remains of an un-named settlement recorded on Roy's map of c. 1750.

The area is as recorded by Robertson and Dagg but also includes enclosure dykes and other structural elements (Sites 7,8,9,10,11 and 12) suggesting a small fermtoun or clachan. Survey conditions are extremely poor and the area is covered by dense bracken which hampered identification and interpretation of the whole site. Robertson and Dagg commented on the channelled water suggesting a lade and thereby a mill on the site. This is possible and aerial photographs do suggest a managed watercourse. On the ground the western watercourse had clearly been managed and the cutting through the dyke Site 8 at its outflow was quite formal and deliberate rather than eroded. However, Baker and Coulter did not conclusively identify this watercourse as a lade. It is clear that the area was enclosed by earth and stone dykes (Site 8 and 9) and a probable small corn drying kiln (Site 10) is present. The remains of a convincing second building was located (Site 11) some further possible walling and a further possible structure at Site 12. However, the area is a moraine dump so probing for stones that might form wall lines was not entirely convincing. The line of the old river bank is present along the N and W sides of the site and with the exception of the building Site 7 the settlement remains appear to be restricted to the higher land and small plateau island created by the moraine dump.

Site 1 is substantial rectangular structure with square corners measuring 9m x 4m overall over walls 0.80m thick. It is aligned NE-SW at 40° and has double skin with rubble core construction and is drystone with no visible mortar. There is an entrance centrally located in the NW wall which is 0.65m wide. The walls stand to a maximum height of 1m at the S corner which has five courses of stonework. The dyke Site 8 appears to curve around to the N wall of the building. On its W side the dyke Site 9 along the edge of the plateau separates it from the Allt a'Ghiubhais. The building, interpreted as a house, is completely overgrown with bracken. Our handheld GPS grid reference +/- 5m is NG 94260 37756.

**Impact of development:** The new bridge BR2, access track and private wire route will probably disturb Site 1 and will in general disturb the settlement area. There is a high risk of disturbing previously unrecognised archaeological features masked by the bracken cover if the route crosses the settlement area. This would potentially cause delay and additional costs for archaeological excavation. If settlement remains are disturbed they would require full excavation before destruction.

**Mitigation:** Site 1 is quite obvious once you have located its S corner and can be avoided by micro-siting. If it cannot be avoided excavation in advance will be required. A watching brief of the whole settlement area is required. All identified elements should be fenced off with orange plastic fencing (to replace the flagging on canes) which would not only protect the identified sites but increase the visibility and aid interpretation of the overall layout of the settlement. It is recommended that the route of the access track and private wire moves further to the S to avoid the settlement remains. The dense bracken makes site identification very difficult in this area and it is unlikely additional field survey will locate further clear structural remains unless the bracken is cleared or squashed down by heavy snow, though even then the



dense nature of the bracken would still probably conceal elements of the settlement. The best approach is to avoid the structural elements that have been located and for a flexible approach to the final location of the track determined by an archaeological watching brief. It would perhaps be easier to avoid the settlement remains if the track ran S on the W bank of the Allt a'Ghiubhais and the new bridge was located at the confluence of the two burns.



**Site 1 rectangular building with Scott in the centre of the interior, view to the N.**

## **Site 2 Turf and stone dyke**

**NG 94200 37830 (NW end) to NG 94263 37723 (SE end)**

Previously recorded as Site 6 by Robertson and Dagg

Turf and rubble dyke forming a stock barrier / flood defence along the W bank of the Allt a'Ghiubhais.

**Impact of development:** This site will be disturbed by the construction of the powerhouse, new bridge and access track.

**Mitigation:** Avoid as much as possible. A watching brief is not required.

## **Site 3 Glacial moraine dump and wall line**

**NG 93744 37861 to NG 93570 37964**

A large glacial moraine dump clearly visible on aerial photographs is present in the S part of this large field beside the River Attadale. The moraine dump is largely overgrown by turf but



there are exposed areas of lichen covered cobbles and a number of hollows and undulations suggest quarrying activities and the addition of clearance stone (which would really have been fruitless considering the nature of the ground). The undulations also suggest the characteristic 'braided river' effect of glacial melt. The drystone walls on the E side of this field and along the Estate road were probably built with stones quarried from this moraine. Along the fence line on the river bank is a linear concentration of cobbles c. 1m wide and extending for approximately 40m E-W. This probably represent the remains of a wall but it is now very denuded and of exactly the same material as the extensive moraine deposit. Three or four small sub-circular platforms on average 1.2m diameter and standing up to 0.20m high were noted in this area and these are interpreted as haystack stances.

Further very stony patches were noted at various points along the route of the new access track and recent drainage works and canalisation of water courses (e.g. at the sheep fank) indicate the strath is entirely glacial moraine as would be expected. The ponds in the field to the E of the construction compound may also be glacial features or quarry pits into the moraine which have no filled with water.

**Impact of development:** The moraine and possible wall line will be disturbed by the new access track.

**Mitigation:** No archaeological mitigation is required. However, the machine operator should keep an eye out for any unusual features which might suggest structural remains within the moraine.

## Site 4      Boundary

### **From NG 93598 38232 (N end at Strathan cottages) to NG 93421 38148 (and continues to River Attadale)**

A formal boundary aligned NE-SW consisting of two substantial banks with a ditch between them which has been planted with Alder trees. It is possible the Alder trees, which like damp conditions, may have colonised the ditch but they have a linear appearance that suggests deliberate planting. This boundary is shown as a watercourse on the current OS map but it is no longer a running watercourse. However, further N in the field major new drainage ditches have been excavated and have diverted water from this earlier ditch. The quite substantial banks suggest it had been maintained for many years as a canalised drainage feature boundary. The banks representing the original canalisation and subsequent clearance of the watercourse being cast up onto the banks. The banks are up to 4m wide and stand to at least 0.5m high, they have flat tops suggesting they may have been utilised as trackways.

**Impact of development:** The bank and ditch will be cut through by the new access track but damage will be minimal as a gate is already present.

**Mitigation:** The site has been flagged. Keep new access track to existing gate and avoid trees and earthworks. A watching brief is not required.



**Site 4 boundary consisting of a canalised burn, now a 'dry' ditch lined with Alder trees, and two substantial banks. View to the NE.**

## **Site 5      Boundary**

### **NG 92990 38454 (NW end) to NG92990 38454 (SE end)**

Planted boundary of beech trees on a turf and rubble bank in the fenced off woodland on the n bank of the River Attadale. It may continue further to the SE but is denuded. Within the woodland on the river bank are another two stone and turf dykes with ditches along their river side running parallel to the river. These may be flood defences. A large bank of river cobbles, which had been created by machine, was also observed and is a more recent attempt to narrow the river and control flooding and overflow of its banks when it is in spate.

**Impact of development:** None. The boundary is fenced off from the location of the new track. There are a few mature trees in the field adjacent to the bank and these should be avoided.

**Mitigation:** Avoid trees adjacent to the fence line in the field.





**Site 5 Planted Beech trees on an earth and rubble dyke formal boundary feature, view to the W.**

## **Site 6        Bridge remains**

**NG 92721 38528**

The remains of a bridge comprising splayed cement bonded rubble abutments, concrete springer support pier and a cement cutwater pier in the river. There is a ford on the upriver E side of the bridge remains. The abutment on the S bank was not visited and appears largely washed out on the river side where a concentration of river cobbles was observed but no concrete springer / support pier. Estate materials (gates, fencing etc) are stored on the N abutment.

**Impact of development:** None, adjacent to the new track route which follows an existing track at this point. Ensure the remains are avoided.

**Mitigation:** Avoid.





**Site 6 Remains of a bridge with a ford on its up-river E side (left of photograph). The abutment on the S side of the river has largely washed out and one pier remains in the river. The buildings on the far (S) side of the river are the Home Farm. View to the W.**

## **Site 7 Building**

### **NG 94368 37763**

A small, collapsed sub-oval drystone structure located on the S bank of the Allt Odhar just above the flood line at about 1m above the edge of the burn. The buildings, constructed of river boulders, measures c. 3m NW-SE x 2.5m overall and the walls appear to be 0.50m thick. The structure stands to 0.4m high. The river boulders, as opposed to cobbles, are good building stones being sub-angular with flat faces and measure 0.40m x 0.20m x 0.15m on average. The structure is overgrown with heather and some bracken but is clearly visible. There is no obvious entrance. The small size of this structure located so close to the burn suggests it might have been a dairy store or a still.

**Impact of development:** This building is avoided by the new track and private wire route. It is not considered to be at risk and a watching brief is not required.

**Mitigation:** The site has been flagged but should be fenced off with orange plastic fencing to ensure it is avoided. If it cannot be avoided excavation in advance is required.





**Site 7 small structure on the S bank of Allt Odhar. View to the ENE.**

### **Site 8 Stone and Turf dyke**

**NG 94330 37773 E end to NG 94313 37773 cut through by small burn to NG 94285 37775 where cut through by burn (?possible lade) and then curves to the SW to the NE end of building Site 1 where it terminates at NG 94271 37559 (W end).**

A quite substantial turf and stone dyke at least 1.5m wide and 1m high. Coursed stone was visible in one or two locations on its interior (S side). The dyke runs E-W along the old (glacial) river bank and separates the higher ground on which the settlement remains (Sites 1, 10, 11, and 12) are located from the lower lying river bank, which is susceptible to flooding. This bank is an enclosure bank for the settlement remains and would have acted as a stock control barrier. The dyke is overgrown with dense bracken. Towards its E end adjacent to Site 10 there is the suggestion of an inner bank running parallel to it and there may be a track or entrance to the settlement here. However, the bracken was too dense to locate features easily or get any useful visual overview of how the various elements that could be identified actually relate to each other.

**Impact of development:** The dyke may be disturbed by the development works, in particular the new bridge.

**Mitigation:** See Site 1 recommendations. The dyke should be avoided. A watching brief of the whole settlement area is required.



**Site 8 turf and stone dyke marked by flagging and 1m scale pole running to the E along the edge of the old river bank. View to the E.**

## **Site 9 Dyke**

### **NG 94265 37771 (N end) to NG 94260 37751 (S end)**

A turf and boulder dyke running N-S on the E bank of the Allt a' Ghiubhais. And located c. 5m W of Site 1. This dyke is overgrown with bracken and is not easily distinguished from the natural edge but it forms part of the enclosure of the settlement area along with Site 8. The dyke is c. 1m wide and 1m high. It may continue intermittently to the S along the bank of the Allt a' Ghiubhais.

**Impact of development:** The site is at risk of disturbance by construction of the new bridge and the new track and private wire.

**Mitigation:** See Site 1 recommendations. The dyke should be avoided. A watching brief of the whole settlement area is required.





**Site 9 turf and stone dyke marked by flagging in foreground and Scott standing on it. View to the N.**

## **Site 10                      Structure, probably corn drying kiln**

**NG 94307 37765**

A 2m diameter circular setting of boulders with a central depression c. 0.70m diameter and standing to 0.40m high. There is a possible linear extension on the SW side which may be a flue. The site is overgrown with bracken but appears to have very few tumbled stones associated with it.

**Impact of development:** This site would probably be avoided by the new track but is very close to the development works.

**Mitigation:** See Site 1 recommendations. The structure should be avoided. A watching brief of the whole settlement remains is required.



**Site 10 probable corn drying kiln with possible flue in foreground. View to the NE.**

## **Site 11      Structure**

### **NG 94310 37741**

The remains of a rectangular structure represented by one course of stones and standing to 0.30m high. The walls are poorly defined and the E and S walls are most apparent. The walls are 0.50m to 0.70m wide. The site is completely overgrown with bracken and wall lines could not easily be traced by probing with a ranging rod. The site is c. 3.5m N-S x 3m E-W and appears to be aligned NNW-SSE.

**Impact of development:** This site is likely to be disturbed by the new track and private wire route.

**Mitigation:** See Site 1 recommendations. The structure should be avoided. A watching brief of the whole settlement remains is required.





**Site 11 structural remains with E end corners marked by flagging and 1m scale pole showing extent of traceable S wall. Scott standing in the interior. View to the NW.**

## **Site 12                      Possible structure**

### **NG 94311 37718 (centre)**

A possible rectangular structure c. 10m NE-SW x 8m overall but the wall lines are not clear. Probing suggested a reasonably convincing N wall and the site is a slight mound. However the dense bracken and the stony nature of the underlying ground (moraine) made it impossible to be absolutely certain a structure is present. This site is located just above the old river bank of the Allt a' Ghiubhais.

A number of suspicious stones that might indicate structures or clearance features were located in the SE of the bracken covered area but the bracken is too dense to identify any certain features. The bracken extends to the E to c. NG 94331 37693 where it gives way to low lying boggy molinas grass at the bottom of a steep slope down from the existing estate track which the new track will join a little further to the E. There are no archaeological features on the steep slope or on the E part of the new route of the access track and private wire route.

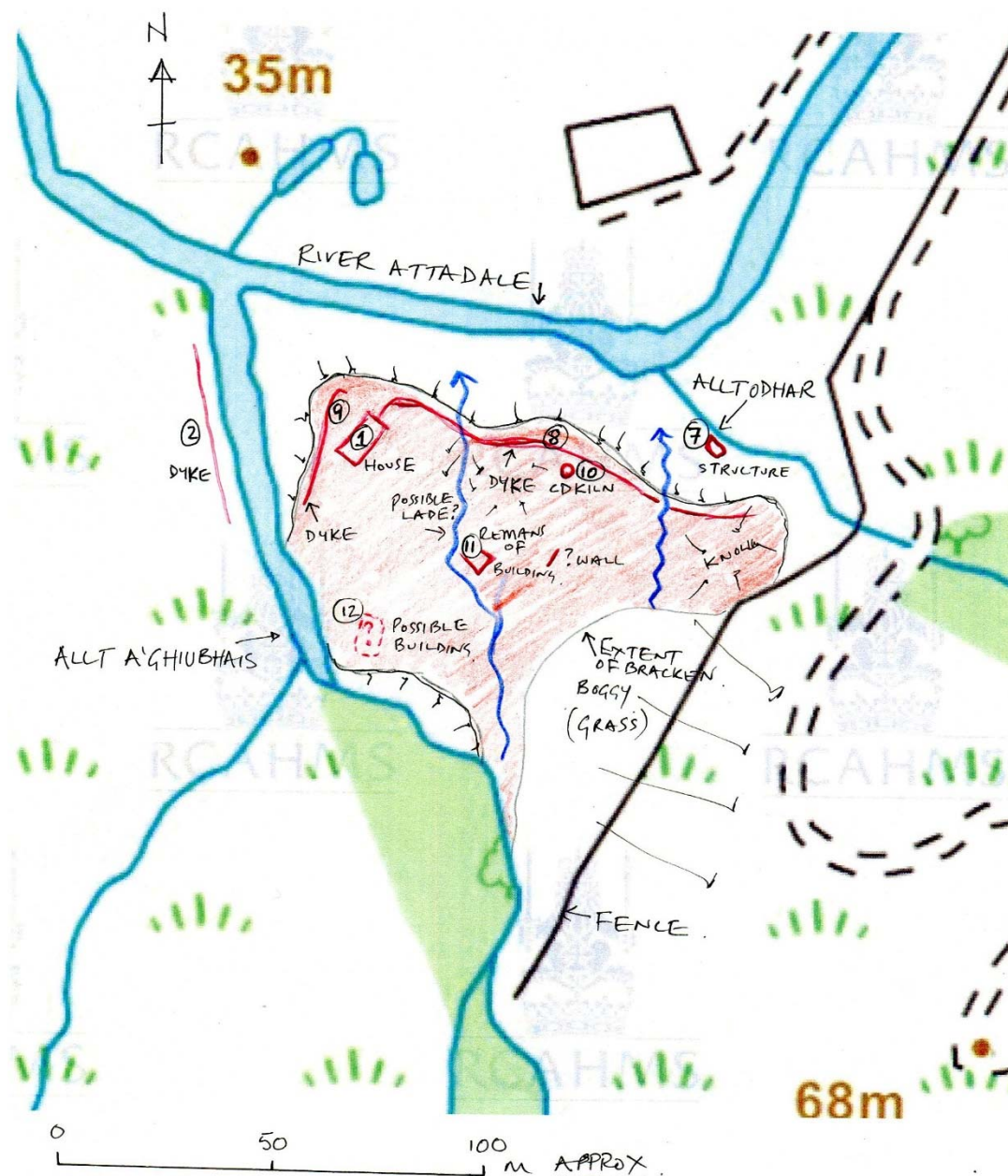
**Impact of development:** This site would probably be disturbed by the new track route. However, it is less certain than Sites 1, 7, 8, 9, 10, and 11 so it would be sensible to route the new track across this southern part of the site as it appears the potential impact on buried archaeological features might be less.

**Mitigation:** See Site 1 recommendations. The structure should be avoided. A watching brief of the whole settlement remains are is required.





**General view to the NW over the settlement area covered in bracken and along the strath of Attadale towards Loch Carron.**



### Sketch plan of settlement remains at Strathan Hydro Scheme Powerhouse area

**Site 1** Building NG 94267 37757 / NG 94260 37756

**Site 2** Turf and stone dyke NG 94200 37830 (NW end) to NG 94263 37723 (SE end)

**Site 7** Building NG 94368 37763

**Site 8** Stone and Turf dyke NG 94330 37773 E end to NG 94313 37773 cut through by small burn to NG 94285 37775 where cut through by burn (?possible lade) and then curves to the SW to the NE end of building Site 1 where it terminates at NG 94271 37559 (W end).

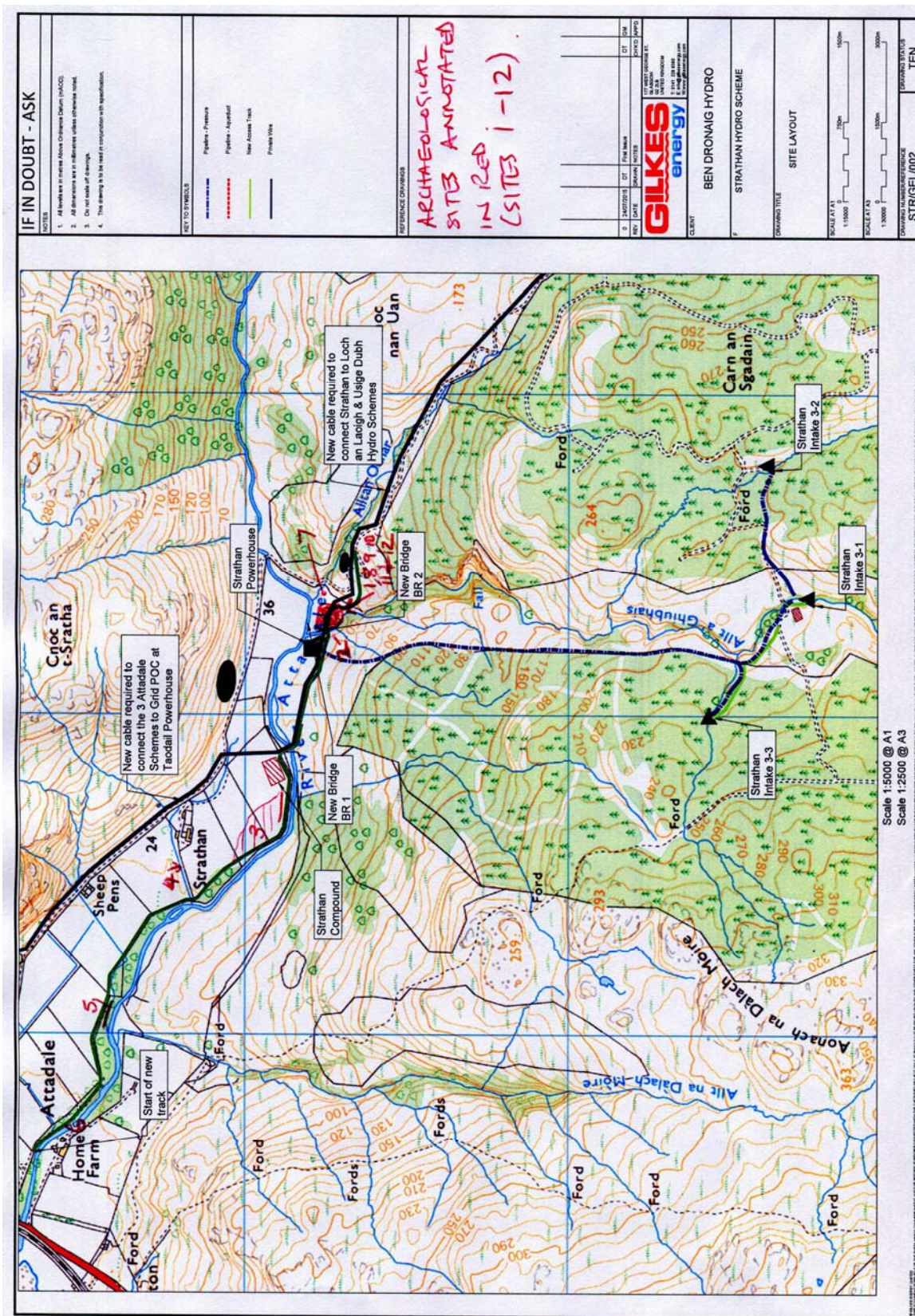
**Site 9** Dyke NG 94265 37771 (N end) to NG 94260 37751 (S end)

**Site 10** Structure, probably corn drying kiln NG 94307 37765

**Site 11** Structure NG 94310 37741

**Site 12** Possible structure NG 94311 37718 (centre)





Strathan Hydro Scheme site plan annotated to show archaeological sites in red.

***Summary Table of Strathan Archaeological Sites with Impact and Mitigation Recommendations***

<b>Site Number</b>	<b>Grid Reference (+/- 5m)</b>	<b>Comment</b>	<b>Impact</b>	<b>Mitigation</b>
<b>1 Structure</b>	NG 94267 37757 Or NG 94260 37756	Previously recorded as Site 5 by Robertson and Dagg.	At risk of disturbance by new track and private wire and new bridge construction.	Avoid by re-routing the track to the south and micro-siting.  Fence off with orange plastic fencing.  Watching brief required.  If the site cannot be avoided excavation in advance of development.
<b>2 Dyke</b>	NG 94200 37830 (NW end) to NG 94263 37723 (SE end)	Previously recorded as Site 6 by Robertson and Dagg. Robertson and Dagg recommended a watching brief of Site 6. This is not necessary as the dyke has been recorded and it is unlikely a watching brief would produce any further useful information other than it is a turf and rubble dyke.	At risk of disturbance by powerhouse and new bridge construction.	Avoid as much as possible.  A watching brief is not required.
<b>3 Field clearance and glacial</b>	NG 93744 37861	Linear field clearance / wall line along bank of River Attadale and	Will be disturbed by the new track and construction compound and bridge works.	Nothing required but machine operator to look out for any structural elements. If any structural elements are present these should be



<b>moraine dump</b>		glacial moraine dump.		avoided for inspection by the archaeologist.
<b>4 Boundary</b>	NG 93598 38232 (N end at Strathan cottages) to NG 93421 38148 (and continues to River Attadale)	Banks and ditch old canalised watercourse planted boundary	May be disturbed by new access track but already crossed by track and gate.	Avoid and keep to exiting track route and use gate. Preserve trees.
<b>5 Boundary</b>	NG 92990 38454 (NW end) to NG92990 38454 (SE end)	Planted beech tree and dyke boundary	Avoided and on S side of fence.	Nothing required. Avoid mature trees in field.
<b>6 Bridge remains</b>	NG 92721 38528	Abutments and pier only, ford on its E side	Avoided but adjacent to new track on line of existing track.	Avoid. Watching brief not required
<b>7 Structure</b>	NG 94368 37763	On S bank of Allt Odhar	Avoided but close to works area.	Avoid. Fence off with orange plastic fencing.
<b>8 Dyke</b>	NG 94330 37773 (E end) to NG 94271 37559 (W end).	Follows natural edge of older watercourse	At risk of disturbance by new track and private wire and new bridge construction.	Avoid by re-routing the track to the south and micro-siting.  Fence off with orange plastic fencing.  Watching brief required.  If the site cannot be avoided excavation in advance of development.
<b>9 Dyke</b>	NG 94265 37771 (N end) to NG 94260 37751 (S end)	Follows natural edge of older watercourse	At risk of disturbance by new track and private wire and new bridge construction.	Avoid by re-routing the track to the south and micro-siting.  Fence off with orange plastic fencing.  Watching brief required.

				If the site cannot be avoided excavation in advance of development.
<b>10 Structure, corn drying kiln</b>	NG 94307 37765	Well defined structure	At risk of disturbance by new track and private wire and new bridge construction.	<p>Avoid by re-routing the track to the south and micro-siting.</p> <p>Fence off with orange plastic fencing.</p> <p>Watching brief required.</p> <p>If the site cannot be avoided excavation in advance of development.</p>
<b>11 Structure</b>	NG 94310 37741	Poorly defined building remains	At risk of disturbance by new track and private wire and new bridge construction.	<p>Avoid by re-routing the track to the south and micro-siting.</p> <p>Fence off with orange plastic fencing.</p> <p>Watching brief required.</p> <p>If the site cannot be avoided excavation in advance of development.</p>
<b>12 Possible structure</b>	NG 94311 37718 (centre)	<p>Suggestion of a structure at this location but not certain.</p> <p>If the access track cannot be moved any further to the S crossing the Allt a'Ghiubhais at this location will minimise the impact on the settlement remains.</p>	At risk of disturbance by new track and private wire and new bridge construction.	<p>Avoid by re-routing the track to the south and micro-siting.</p> <p>Fence off with orange plastic fencing.</p> <p>Watching brief required.</p> <p>If the site cannot be avoided excavation in advance of development.</p>