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Proposed run-of-river Hydro Schemes at Banvie Burn, Lochbroom Burn and Dowally Burn

Cultural Heritage Assessment

CFA ARCHAEOLOGY LTD

The Old Engine House
Eskmills Business Park
Musselburgh
East Lothian
EH21 7PQ

Tel: 0131 273 4380

Fax: 0131 273 4381

email: info@cfa-archaeology.co.uk

web: www.cfa-archaeology.co.uk

Author	George Mudie MA FSA Scot MIfA
Illustrator	
Editor	
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**Proposed run-of-river Hydro Schemes at
Banvie Burn, Lochbroom Burn and Dowally Burn**

Cultural Heritage Assessment

CHAPTER X CULTURAL HERITAGE

X.1 INTRODUCTION

This chapter considers the likely effects on cultural heritage interests of the construction and operation of three proposed run-of-river hydroelectric schemes: at Banvie Burn, Blair Atholl, and at Lochbroom Burn and Dowally Burn, near Pitlochry. The assessment has been undertaken by CFA Archaeology Ltd.

X.2 PLANNING AND LEGISLATION BACKGROUND

Context

Scotland's historic environment contributes to the Scottish Government's strategic objectives and to the National Performance Framework. The Scottish Historic Environment Policy (SHEP) document sets out Scottish Minister's policies for the historic environment, and provides policy direction for Historic Scotland and a framework that informs the day-to-day work of a range of organisations that have a role and interest in managing the historic environment. Through the SHEP Scottish Minister's are determined to achieve three outcomes for Scotland's historic environment.

1. That the historic environment is cared for, protected and enhanced for the benefit of our own and future generations.
2. To secure greater economic benefits from the historic environment.
3. That the people of Scotland and visitors to our country value, understand, and enjoy the historic environment.

Cultural heritage resources include sites with statutory and non-statutory designations, as set out in Scottish Planning Policy (SPP) (2010).

Sites with statutory designations include:

- Scheduled Monuments
- Listed Buildings
- Conservation Areas
- Designated Shipwrecks

Sites without non-statutory designations include:

- World Heritage Sites
- Gardens and Designed Landscapes
- Other Historic Environment Interests

Cultural heritage resources relevant to this assessment are Scheduled Monuments, other Historic Environment Interests, Listed Buildings and Gardens and Designed Landscapes.

Scheduled Monuments

Scheduled Monuments are protected under the Ancient Monuments and Archaeological Areas Act 1979 (1979 Act). The statutory consent of the Scottish Ministers is required before any works are carried out which would affect a Scheduled Monument (SM). Impacts upon the setting of a Scheduled Monument form an important consideration in the granting or refusal of planning consent. Further information on development control procedures relating to Scheduled Monuments is provided in SPP and in Planning Advice Note 42, Archaeology (PAN 42).

Listed Buildings

Under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (1997 Act), the Scottish Ministers are required to compile a list of buildings of special architectural or historic interest. Such buildings are classified into Categories A, B and C(s), in decreasing order of importance. Planning authorities and the Scottish Ministers are required to have special regard for the desirability of preserving Listed Buildings and their settings, and any features of special architectural or historic importance they possess. Historic Scotland state that a Listed Building should at all times remain the focus of its setting and that attention should not be distracted from it by the presence of any new development. Government policy and guidance is also provided in SPP.

Historic Gardens and Designed Landscapes

The effect of a proposed development on a designated Historic Garden or Designed Landscape listed in An Inventory of Gardens and Designed Landscapes in Scotland or its Supplements (Inventory; published by Historic Scotland) is a material consideration in the determination of a planning application, although the designation is non-statutory in effect. Under the provisions of the Town and Country Planning (General Development Procedure) (Scotland) Order 1992 (1992 Order), planning authorities must consult Historic Scotland on any proposed development that may affect a site contained in the Inventory. Government policy and guidance is also provided in SPP.

Other archaeological Features

There is a range of other non-designated archaeological sites, monuments and areas of historic interest, including battlefields, historic landscapes, other gardens and designed landscapes, woodlands and routes such as drove roads that do not have statutory protection. Sites without statutory protection are curated by the local planning authority, and SPP and PAN 42 provide national planning policy guidance and advice on the treatment of such resources. SPP 23

requires that planning authorities ensure that development plans provide land use policy frameworks for the protection, conservation and enhancement of the historic environment within which any development impacts can be properly assessed. PAN 42 indicates that the principle that should underlie all planning decision-making is preservation of cultural heritage resources in situ, where possible, and by record if destruction cannot be avoided. It is recognized in the PAN that preservation may not always be possible, and where damage is unavoidable various mitigation measures may be proposed.

Regional and Local Planning Policy Guidance

Structure Plan

Policy 8 of the Perth and Kinross Structure Plan (2003) states that the council will seek to ensure that the rich and varied cultural heritage resources of Perth and Kinross are recognised, recorded, protected and enhanced as appropriate. New development which would adversely affect Listed Buildings, Conservation Areas, Scheduled Ancient Monuments, Historic Gardens and Designed Landscapes or their settings will not be permitted unless there is a proven public interest where social, economic or safety considerations outweighs the cultural interest in the site. The same protection will be afforded to sites proposed for designation. Other important archaeological sites or landscapes will also be protected from inappropriate development.

Local Plan

Policy 25 of Perth and Kinross Council's Highland Area Local Plan (2000) states that the council will safeguard the settings and archaeological landscapes associated with Scheduled Monuments in the absence of reasons overriding proven public interest.

Policy 26 seeks to protect unscheduled sites of archaeological significance and their setting. Where development is proposed in such areas, there will be a strong presumption in favour of preservation in situ and where, in exceptional circumstances, preservation of the archaeological features is not feasible, the developer, if necessary through appropriate conditions attached to planning consents, will be required to make provision for the excavation and recording of threatened features prior to development commencing.

Policy 28 states that the settings of Listed Buildings will be safeguarded.

X.3 APPROACH TO ASSESSMENT

Background

Figures X.1, X.2 and X.3 depict the proposed developments at Banvie, Lochbroom and Dowally respectively, along with the locations of archaeological sites and monuments identified by the cultural heritage study within a 100m wide field survey centred upon the proposed routes and those sites with statutory and non-statutory designations within 1km of the powerhouse. The

Banvie scheme would run through low lying pasture around Blair Atholl Castle and through recently felled plantation forestry along its upper reaches. The Lochbroom and Dowally schemes would run through improved pasture fields and areas of mixed forestry.

Site numbers are shown in brackets in the following text. Appendices X.1 to X.3 provide tabulated gazetteer information on the character and baseline condition of each site within the respective development corridors. Appendices X.4 to X.6 provide lists of those external receptors within 1km of the individual powerhouses.

Aims and objectives

The specific objectives of the cultural heritage study were to:

- identify the cultural heritage baseline in the vicinity of the various elements of the proposed development (around the weir intakes, along the pipeline routes and at the powerhouse locations);
- Consider the potential impacts of construction and operation of the proposed developments on the cultural heritage resource; and
- Propose mitigation measures to reduce or offset and predicted adverse impacts where appropriate.

Methods

The collation of baseline information will be carried out in accordance with the Institute for Archaeologists' Code of Conduct (2009) and Standard and Guidance for Archaeological Desk-Based Assessment (2008). The principal methods comprised archival and documentary research, consultation with interested parties, and walk-over reconnaissance field survey.

Consultation

A consultation letter was sent to Historic Scotland inviting its comment on the potential effect of the proposal on cultural heritage resources under its curatorial jurisdiction. Details of any proposed or forthcoming designations potentially affecting the development were also requested.

Perth and Kinross Heritage Trust (PKHT) was consulted for its comment on the scope of the assessment and to seek approval of the proposed methodology. The Trust was also invited to comment on the potential effect of the proposal on cultural heritage resources under its curatorial jurisdiction.

Desk-based assessment

Up-to-date information was obtained from appropriate sources on the locations and extents of any sites with statutory and non-statutory designations and undesignated archaeological or historic environment sites along the routes of the proposed pipelines and in the vicinity of the proposed weir intakes and powerhouse locations.

Information was obtained from Historic Scotland on Scheduled Monuments, Listed Buildings, and Historic Gardens and Designed Landscapes. The locations of Conservation Areas were obtained from the Local Authority Conservation Officer.

Detailed information on previously recorded archaeological sites and monuments were obtained from the National Monuments Record of Scotland (NMRS) and from the PKHT Historic Environment Record (HER). Data for previously recorded sites was supplied by PKHT in GIS compatible format.

An assessment was made of vertical aerial photograph collections held by RCAHMS. Sorties dating from 1946, 1949, 1971 and 1988 were available for examination. Oblique aerial photographs of recorded sites were also consulted.

Ordnance Survey maps and other early maps held by the Map Library of the National Library of Scotland were examined, to provide information on sites of potential archaeological significance and to assess land-use history for the proposed development areas. The National Archives of Scotland were also consulted but this source it did not provide any information relevant to the study.

Bibliographic references were consulted to provide background and historical information.

A list of all sources consulted during the assessment is provided in Section X.8.

Field Survey

A reconnaissance field survey was undertaken along the routes of the three proposed schemes (Figures X.1, X.2 and X.3). The field survey was carried out in order to:

- Assess any information previously obtained through the desk-based assessment;
- Identify the extent and condition of any visible archaeological sites and features within a 100m wide field survey corridor centred upon the proposed routes of the hydro schemes;
- Identify any areas with palaeoenvironmental potential;
- Assess the topography and geomorphology of the proposed development areas with a view to informing an assessment of the archaeological potential of the proposed development areas;

- Key cultural heritage receptors within 1km of the powerhouse locations were visited in order to assess the possible effect on their settings.

Assessment of Significance of Effects

Archaeological and built heritage sites and features represent a non-renewable resource that are often fragile and suffer from constant attrition, from both natural and human causes. The relative importance of cultural heritage resources is summarised in Table 1.

The main thresholds of archaeological importance are sites of national importance, protected by statute, and sites with non-statutory designations of regional and local importance.

Sites of national importance comprise those sites protected by scheduling under the 1979 Act, and sites of "schedulable quality". Scheduling is an ongoing process and not all sites of "schedulable quality" are currently scheduled.

Sites of regional and local importance are those that do not merit scheduling, but which have significance within a regional or local context. This may, for example, apply to their importance to regional or local history, or they may be the only local example of a monument type. A final category, sites of lesser importance, covers those archaeological or historic environment features that are of little intrinsic cultural heritage value and the find-spots of artefacts now removed.

Category A Listed Buildings are of national or international importance, Category B buildings are of regional or more than local importance and Category C(S) structures are of local importance (1997 Act, Section 1; SHEP). Gardens and Designed Landscapes listed in the Inventory (and those on candidate lists, proposed for inclusion in the Inventory) are considered to be nationally important. Table X.1 summarises the relative importance of key cultural heritage resources.

Table X.1 Definitions of importance of cultural heritage resources

Importance	Site types
International	<ul style="list-style-type: none"> • World Heritage Sites
National	<ul style="list-style-type: none"> • Scheduled Ancient Monuments • Sites of schedulable quality • Category A Listed Buildings • Inventory status Historic Gardens and Designed Landscapes • Outstanding Conservation Areas
Regional	<ul style="list-style-type: none"> • Archaeological sites and areas of distinctive regional importance • Category B Listed buildings

	<ul style="list-style-type: none"> • Conservation Areas
Local	<ul style="list-style-type: none"> • Archaeological sites and areas of local importance • Category C(S) Listed Buildings • Unlisted buildings and townscapes of some historic or architectural interest
Lesser	<ul style="list-style-type: none"> • Other archaeological sites • Find-spots

Potential impacts on cultural heritage interests have been assessed in the following categories:

- None: where no effects is predicted
- Direct: where there would be a physical effect on a site caused by the proposed development. Direct impacts tend to have permanent and irreversible adverse effects upon cultural heritage remains. Direct effects may be caused by a range of activities associated with the construction and operation of the proposed development including ground disturbance, vehicle movement and soil and overburden storage. Direct impacts on cultural heritage features are normally adverse, permanent and irreversible.
- Indirect: where the setting of a site may be affected. Indirect impacts may relate to new development reducing views to or from cultural heritage features with important landscape settings, may result from increased noise or vibration, or may cause increased fragmentation of the historic landscape and the loss of connection between its component parts. Indirect effects on cultural heritage features can be adverse, neutral or beneficial in nature.
- Uncertain: where there is a risk that the works may impinge on a site, for example where it is not clear where the location or boundaries of a site lie, or where the baseline condition of a site cannot be established satisfactorily from desk-based assessment and field survey alone, or where the precise nature of development works is not known.

Impacts have been assessed in terms of their magnitude, longevity (permanent / temporary), reversibility, and nature (adverse / neutral / beneficial).

- Beneficial effects are those that contribute to the value of a receptor through enhancement of desirable characteristics or the introduction of new, positive attributes.
- Neutral effects occur where the development can be accommodated comfortably by the receiving environment while neither contributing to nor detracting from the value of the receptor.
- Adverse effects are those that detract from the value of a receptor through a reduction in or disruption of valuable characterising components or patterns, or the introduction of new inappropriate characteristics.

Magnitudes of impact are assessed in the categories imperceptible, low, medium or high, and are described in Table X.2.

Table X.2 Definitions of magnitude of effect

Level of magnitude	Definition
High	Major effects fundamentally changing the baseline condition of the receptor, leading to total or major alteration of character or setting.
Medium	Moderate effects changing the baseline condition of the receptor materially but not fundamentally, leading to partial alteration of character or setting.
Low	Minor detectable impacts which do not alter the baseline condition of the receptor materially.
Imperceptible	A very slight and barely distinguishable change from baseline conditions.
None	No discernible change to the baseline condition of the character or setting of the receptor.

Table X.3 combines these criteria to provide an assessment of whether or not an impact is considered to be significant as required by Environmental Impact Assessment (Scotland) Regulations 1999.

Table X.3 Matrix for assessing significance of effects

Magnitude ▼				
High	Minor	Moderate	Major	Major
Medium	Negligible	Minor	Moderate	Major
Low	Negligible	Negligible	Minor	Minor ¹
Imperceptible	Negligible	Negligible	Negligible	Minor
None	None	None	None	None
Sensitivity ►	Lesser	Local	Regional	National / International

Moderate and major effects are considered to be significant.

¹ A non-material change to baseline conditions cannot by its nature lead to a significant effect. A significant effect arises from a material change to baseline conditions. This distinction explains why this particular significance assessment finding is not 'moderate'.

X.4 BASELINE CONDITIONS

Consultation Responses

In its reply to the consultation letter (17-07-09) Historic Scotland stated that the applicants should ensure that the proposed Banvie development does not cause damage to St Bride's Church (SAM 1631), particularly during construction works on the pipeline. With regards to the Loch Broom scheme the applicants should ensure that the proposed development does not damage the Moulinearn Military Bridge (SM 9584). River erosion is threatening the upstream north east footings of the bridge and Historic Scotland would like to ensure that the proposed development does not increase the level of erosion at this monument. No comments were made regarding the proposed scheme at Dowally or in regards to setting issues for any statutory or non-statutory sites in the vicinity of any of the three proposed routes.

In its response to the consultation (15-07-09) the Perth and Kinross Heritage Trust Assistant Archaeologist raised site specific issues in connection with the three proposed routes as they are within an archaeologically sensitive region of Highland Perthshire. He requested that particular attention should be paid to St Bride's Kirk (3), Wade's military road (2) and the Old Blair cottages (4) along the Banvie route. At Lochbroom, the tollhouse (9), lime kiln (10) and general prehistoric settlement in the area were noted. At Dowally the cairn site (16) and township (17) were noted. Information on sites in the vicinity of the proposed development, held in the Council's HER, was provided.

Cultural heritage Baseline: Banvie Hydro-scheme

Seven sites (1-6, 8) were identified at Banvie through the NMRS and HER. One additional site (7) was identified from cartographic evidence.

Prehistoric features

No cultural heritage sites of certain prehistoric origin have been identified along the route of the proposed pipeline at Banvie. One feature of possible prehistoric origin was identified during the desk-based assessment. The cropmark of a curve of a ditch (1.1), identified from aerial photographs, is recorded in the NMRS. This cropmark appears to be associated with and may be part of a large sub-circular enclosure (1.2) in an open field to the east of Blair Castle. However, it is also possible that the large enclosure may be a later feature; given its location, at the south end of the Coymn Road, which may have been an early drover's road, the feature (1.2) could perhaps be a stock enclosure.

Medieval or later rural settlement features

Seven sites (2-8) of the identified sites date to the medieval or post medieval period.

Site (2) is an 18th century military road, it is considered to be of regional importance.

St Brides Church (3) at Old Blair (now in ruins) dates from the 16th century. However, given the dedication to St Bride (Bridget) and its location on an early route (7) leading from Atholl into the central highlands, it is possible that the site has medieval or earlier origins. A small graveyard surrounds the church. The church is a Scheduled Monument and the church and graveyard are category B listed. The site is of national importance.

The cottages at Old Blair (4), Lady Jean's Well (5) and the Craig Urrand quarries (6) all belong to the post medieval period. The cottages (category C(S) listed) and the well are of local importance and the quarries are of lesser importance.

Site (7) is the route of the 13th century 'Comyn Road' and the later 16th century Minigaig Road, although the current route is more modern and used as a forestry road. As a historic communications route and probable drove road it is considered to be of local importance.

Cultural heritage sites of unknown date

A number of cropmark features (1.1 – 1.3) to the east of Blair Castle are of unknown date. One is a circular enclosure, approximately 40m in diameter (1.1). A second appears to be a large sub-circular enclosure approximately 150m in diameter (1.2) which, based on its size and form, may be the remains of a prehistoric enclosure; possibly a settlement. Alternatively it may be the remains of a medieval or later stock enclosure as it is situated beside an important route (7) into the central Highlands. Given the location within the Blair Castle designed landscape and the short distance from the north east facing facade of the Castle, it is also possible that these cropmarks represent some form of designed landscape feature. A group of linear cropmarks (1.3) in an area of open Parkland are considered to be of a later date due to their linear form. It is possible that they represent part of medieval or later field boundaries or remains of former designed landscape features. All three sites are of unknown importance, although the linear cropmarks (1.2) are unlikely to be of more than local importance.

Archaeological potential

The majority of the proposed Banvie pipeline route would run along a steep slope above the burn and within an area of mature coniferous forest. A short section at the southern end of the route, around Old Blair and Blair Castle, would pass through improved pasture fields. The majority of cultural heritage sites in the wider area are listed buildings which have been erected in the 18th and 19th centuries to compliment the Blair Castle gardens and designed landscape or are farming related buildings.

The archaeological potential along the proposed route of the hydro scheme is assessed as being of moderate potential between Old Blair and Blair Castle due to proximity to the settlement at Old Blair, St Brides Church and Blair Castle. Earlier remains associated with these sites may be encountered during the excavation of the pipeline. The proposed route of the scheme will also

cross two fields to the east of Blair Castle where cropmarks have been identified suggesting that there is some potential for hitherto undiscovered buried archaeological remains.

The archaeological potential of the route to the north of Old Blair is considered to be of low potential as the majority of it would be routed through coniferous forest, some of it recently felled, and on steeper ground.

Cultural heritage Baseline: Lochbroom Hydro-scheme

Seven cultural heritage sites were identified along the proposed Lochbroom route, four from the NMRS and HER (9-12), one from cartographic evidence (13) and two through field survey (14-15). All of these sites and features were identified within a 50m buffer corridor along the originally proposed pipeline route. Further survey (March 2010) along a revised penstock route (Figure X.2) identified no additional sites or features.

Prehistoric features

No features of prehistoric date were identified along the proposed route of the scheme.

Medieval or later rural settlement features

Seven sites (9-15) date to the medieval or post medieval period.

Moulinearn Toll House (9) is the site of an early 19th century toll house, formerly set beside an early alignment of the present A9. There are no visible surviving building remains at the recorded location and it is probable that the site has been destroyed during the construction of the modern A9. It is considered that any surviving buried remains of the toll house are of no more than local importance.

The Mains of Dalcapon lime kiln (10) and farmstead (11) are likely to date from the late 18th / early 19th century. The ruinous lime kiln (10) is considered to be of lesser importance and the farmstead (11) of local importance. The farm buildings are organised in three groups: the two northernmost buildings appear to be of an older stead type that have, in later years, been used for storage. The middle building is not depicted on the 1st Edition Ordnance Survey map and appears to have been latterly used as farm workers accommodation. The southernmost group of two buildings includes the farmhouse, which appears to date from the mid 19th century, and an unroofed building.

The township of Milton of Dalcapon (12), which includes a former mill, is likely to date from the late 18th / early 19th century. The mill building and the remains of a wheel pit and mill lade survive. No other buildings or the associated well and track (13) were identified within the field survey corridor. The mill is considered to be of local importance. The well and track are considered to be of lesser importance.

Field clearance and a dyke (14 and 15) at Tominarich are likely to date from the period of land improvement in the 18th to 19th century. Both are considered to be of lesser importance.

Archaeological potential

The majority of the proposed Lochbroom pipeline route would pass through improved pasture fields, although a short section at the western end would run through coniferous forestry. The proposed route would run down a west-facing slope with a steep gradient; the gradient increasing sharply at the western end of the route. Previously recorded cultural heritage sites in the vicinity of the proposed route mainly date from the 18th and 19th centuries and include a number of farmsteads at the north-eastern end of the route and the military road.

The archaeological potential of this route is considered to be low due to the landscape it passes through: improved pasture and coniferous forestry on relatively steep slopes, and the type of archaeological sites identified along its length: post medieval improvement period farming features. Prehistoric field systems have been identified further to the north of the proposed route but no similar features were recorded along the route.

Cultural heritage Baseline: Dowally Hydro-scheme

Six cultural heritage sites were identified along the proposed Dowally route. Two sites: the site of a cairn (16) and a township (17), are recorded in the NMRS. A sawmill (18), a trackway (20) and a lodge house (21) were identified from cartographic records. One feature, a quarry (19), was identified through field survey.

Prehistoric features

The site of a burial cairn (16) at Dowally was identified from the NMRS. The cairn is recorded as having been removed in the 19th century and no trace of the site was visible during the field survey, although there may be further as yet undiscovered buried remains associated with the cairn in this general vicinity. The site is considered to be of local importance.

Medieval or later rural settlement features

Much of Dowally township (17), which included a sawmill, most likely dates from the late 18th / early 19th century. A number of inhabited buildings, dating to the 19th century, survive on the east side of the A9. The township is considered to be of local importance.

A group of three buildings (18), including a sawmill, is likely to date from the late 18th / early 19th century. There are remains of these buildings at the cited location although none is in good condition. This site is considered to be of local importance.

A quarry (19) at the side of the track (20) leading to Raor Lodge (21) may well date to the construction of the lodge in the mid 19th century. The trackway (20), which would form the

access track for the proposed development, is first depicted on Roy's map (1747-55) and is likely to date from at least the mid 18th century. The quarry and track are considered to be of lesser importance and the lodge is considered to be of local importance.

Archaeological potential

The proposed Dowally route would run through improved pasture fields at its western end. The upper eastern end would be run through an area of heather moorland and bog that is currently utilised for rough grazing. The majority of the recorded cultural heritage sites in the vicinity of the route are clustered around the township of Dowally and are 18th/19th century listed buildings (see Appendix X.3). Possible prehistoric cultivation remains have been recorded approximately 500m to the north of the proposed route, at its eastern end, around Craigadow.

The archaeological potential of the proposed route is considered to be low. The route passes through areas of improved pasture, forest and heather moorland. There may be some potential for archaeology around the township of Dowally as the remains of earlier habitation may be uncovered and the proposed route would cross a field where a prehistoric burial cairn and 'stone coffins' were found in the 19th century.

X.5 PREDICTED EFFECTS

The assessment of predicted effects was carried out with reference to the design layouts shown on Figures X.1, X.2 and X.3, using the assessment criteria set out in Section X.3.

All Scheduled Monuments, Category A, B and C(S) Listed Buildings, Conservation Areas and historic Gardens and Designed Landscapes within a 1km viewshed of the powerhouses have been assessed for potential effects on their settings arising from the construction of the proposed developments. All visual impacts on cultural heritage sites beyond 1km are considered to be not significant in terms of the Environmental Impact Assessment Regulations.

Predicted Effects: Banvie Hydro scheme

Direct effects:

Five sites (1.1, 1.2, 2, 7 and 8) are predicted to receive direct, adverse, permanent and irreversible effects during the installation of the proposed pipeline.

What may be a large sub-circular enclosure (1.2) is of unknown date or function and of unknown importance. The proposed access and pipeline route would pass through the eastern half of the possible enclosure. The predicted direct effect is assessed as being of medium magnitude and unknown significance.

A linear ditch cropmark (1.3) is most likely of medieval or later date. The proposed access route and pipeline would cross the western end of the cropmark. The predicted direct effect is

assessed as being of low magnitude and negligible significance.

Site (2) is a section of an 8th century military road of regional importance. The proposed route would cross this road at a point between St Brides Kirk, to the west, and the walled garden, to the east. As only a short section of the road would be affected, the predicted direct effect is assessed as being of low magnitude and of minor significance.

Site (7) is the route of the former 13th century 'Comyn Road' which ran from Blair Atholl to Ruthven. The route is still a track through the hills, although the affected section is now a forestry track and very little, if any, of the original fabric is likely to survive in situ. The site is of local importance. The pipeline and access track would broadly follow this historic route through the forest. The predicted direct effect is assessed as being of low magnitude and negligible significance.

Site (8) is the garden and designed landscape surrounding Blair Castle. The site is recorded in the Inventory and is of national importance. The scheme pipeline would be routed underground and, although it would cross several minor landscape features within the policies, the works would require a relatively small land take. The proposed powerhouse would be located beside the Banvie Burn. The predicted direct effect on the garden/designed landscape is assessed as being of low magnitude and minor significance.

Indirect effects

Twenty-seven key receptors (Figure X.1, Appendix X.x) have been identified within 1km of the proposed powerhouse location. Four receptors are predicted to receive indirect effects on their settings. The remaining 23 receptors are not predicted to receive indirect effects as many would not have views of the powerhouse due to the topography of the surrounding landscape, tree cover and intervening buildings. The setting of some of the receptors, such as statues and a sundial, would not be affected at all as their settings are defined by their immediate surroundings and they are all more than 500m from the location of the proposed powerhouse. Other features, such as footbridges, have no setting issues as they were built at specific locations for practical reasons and not for strategic reasons or visual impact.

There would be some temporary effect on the settings of St Brides Church (3), a Scheduled Monument and listed building (SAM 1631 / HBNUM), and on the listed Old Blair Cottages (4, HBNUM 5703), due to the proximity of construction works and elevated noise levels during the construction phase. However, the effects would short term and temporary and are considered to be of low magnitude and no more than minor significance.

Blair Castle (6074) is a Category A Listed Building set within a garden and designed landscape and lies approximately 200m to the north west of the proposed powerhouse. The main elevations of the castle are oriented to the north east and the south west. There would be no clear views from the castle to the proposed powerhouse as it would be hidden by mature trees and tall shrubs. However, the pipeline and the access track would be visible to the east of the

castle during the construction phase. These development features would only be prominent for a short time and once reinstatement is complete would provide little change to the current landscape setting of the Castle. A temporary indirect effect of low magnitude and minor significance is predicted.

The proposed hydro scheme would lie almost wholly within the Blair Castle garden and designed landscape (8). The excavations required for the pipeline would not result in any lasting damage to the garden as a whole as the proposed development would require a small land take and would be reinstated following the pipeline installation. The powerhouse would be a small building and would be screened by trees and shrubs. As a result the predicted indirect effect on the garden and designed landscape is considered to be of low magnitude and minor significance.

The Dairy at Mains Farm (6082) is a Category C(S) Listed Building in a farmyard setting 150m to the south west of the proposed powerhouse and is to a large degree screened by trees and shrubs. The predicted indirect effect on the setting of the dairy is judged to be of imperceptible magnitude and negligible significance.

Predicted Effects: Lochbroom Hydro scheme

Direct effects:

Three sites (9, 14 and 15) are predicted to receive direct, adverse, permanent and irreversible effects. Any surviving buried remains of the Moulinearn Toll House (9) could be affected by the siting of a construction compound and the construction of the powerhouse. However, it is considered probable that the building was destroyed during the construction of the A9. The predicted direct effect on any surviving remains is considered to be of low magnitude and negligible significance.

The field clearance stones forming a causeway (14) and supporting a farm track may be affected by the movement of any heavy machinery along this temporary track. The predicted direct effect is considered to be of imperceptible magnitude and negligible significance.

The remains of a drystone wall (15) are in very poor condition and it does not survive at its western extent. A temporary access track would cross the dyke in this western area. The predicted direct effect is considered to be of imperceptible magnitude and negligible significance.

The proposed pipeline route would also cross several surviving drystone walls and, at its western end (west of Mains of Dalcapon), the pipeline would follow the route of a disused track that formerly led to Mains of Dalcapon. The predicted direct effect on the drystone walls (which would be reinstated following the installation) is considered to be of imperceptible magnitude and negligible significance. The effect on the former track would be of minor significance.

Indirect effects:

Six key receptors have been identified within 1km of the proposed powerhouse location (Figure X.2, Appendix X.x). The sites are Pitcastle Homestead (726), The Lairds House (11852), Moulinearn Inn (11840), Moulinearn Bridge (9584), Dalcapon cropmark (9524) and Prince Charlie's Bridge (9581). There are no predicted adverse effects on the settings of any of these sites as the proposed powerhouse location would be hidden either by intervening woodland or topography.

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Predicted Effects: Dowally Hydro scheme

Direct effects:

A direct effect is predicted on one cultural heritage site along the proposed Dowally scheme route. A construction compound would be built close to the recorded site of a former burial cairn (16). The site was removed in the 19th century and no trace of this former cairn survives, however, it is possible that some buried remains may still be present. The predicted direct effect on any surviving or associated remains is unknown.

Indirect effects:

A temporary indirect effect on the setting of the listed houses within Dowally township (17) will occur during the construction phase to due to the proximity of construction works and elevated noise levels during the construction phase. However, the effects would short term and temporary and as the township is situated next to the A9 the predicted effect is considered to be of imperceptible magnitude and negligible significance.

Six key receptors have been identified within 1km of the proposed powerhouse location (Figure X.3, Appendix X.x), three of which are predicted to receive indirect effects: Dowally Village Smith (5578), two cottages (5578) and Dowally Church (5576). No effects are predicted for the remaining three sites: Dalguise Railway Viaduct (11117), Rotmell Farm (5575) and Clachan More standing stones (1514) as the location of the powerhouse will be hidden from view by a combination of tree cover, standing buildings and the close presence of the A9

The three listed buildings: Dowally Village Smith (5577), Calvor and Bisset cottage (5578) and Dowally Church (5576) are located within Dowally village (17) and their settings are the village as a whole and the largely agricultural landscape which surrounds the it. The powerhouse would be hidden from view from the Category B listed church (5576) by existing buildings within the township and by intervening trees. A temporary indirect effect on the setting of the houses will occur during the construction phase to due to the proximity of construction works and elevated noise levels during the construction phase. However, the effects would short

term and temporary and taking into account the township's close proximity to the A9 the predicted effect is considered to be of imperceptible magnitude and negligible significance.

X.6 MITIGATION PROPOSALS

In accordance with guidance contained in SPP 23 and PAN 42, the preferred option for mitigation is preservation of important remains in situ where practicable and by record where preservation is not possible. The mitigation measures presented below take account of this planning guidance and offer various options for recording and ensuring that, where practical, upstanding sites and features are preserved intact in order to retain the present historic elements of the landscape.

An appropriate strategy for construction phase archaeological mitigation, tailored for each scheme, would be set out in written schemes of investigation (WSI) agreed in advance of the commencement of the developments by Perth and Kinross Council Archaeologist.

Banvie

Mitigation through design

The layout of the proposed development has been designed to take account of the cultural heritage baseline as far as this has been established based on existing records. The major sites along the pipeline route have been avoided as far as is possible and direct impacts on known archaeological sites have been limited. The proposed pipeline route through the coniferous forest along the upper reaches of the Banvie Burn would broadly follow forestry roads parts of which may be on the same alignment as the route of an early (13th century) road (7) the exact course of which is unknown.

The pipeline would avoid St Brides Church (3) and Old Blair (4) but would cross the route of the former Wade military road (2).

Preservation in situ / Fencing-off

There are no upstanding sites or features along the proposed pipeline route that would specifically require fencing-off during the construction phase.

Watching briefs and excavation

A watching brief would be carried out where the proposed pipeline crosses the area of cropmarks (1.1 and 1.2) to the north east of Blair Castle. A controlled topsoil strip would be carried out well before the pipeline trench is excavated in order to reveal any features that may be related to those visible on the aerial photographs at this location. Sample excavation would be undertaken to determine the nature, condition and, if possible, date of any exposed features and to inform a more detailed and appropriate mitigation strategy.

A watching brief would be carried out where the proposed pipeline crosses the wade military road (2) to the east of St Brides Church. This will be carried out in order to ensure the preservation by record of any surviving evidence for construction phases visible in section or any dating evidence that may be uncovered during the excavation of the pipe trench.

Any further watching briefs that may be required by the Perth and Kinross Archaeologist will also be incorporated into the WSI for this scheme.

Construction guidelines

Written Guidelines will be issued on behalf of (Client) for use by all construction contractors, outlining the need to avoid causing unnecessary damage to known sites. That document will contain arrangements for calling upon retained professional support in the event that buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts etc) should be discovered in areas not subject to archaeological monitoring. The guidance will make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

Lochbroom

Mitigation through design

The layout of the proposed development has been designed to take account of the cultural heritage baseline as far as this has been established based on existing records. The major sites along the pipeline route have been avoided as far as is possible and direct impacts on known archaeological sites have been limited.

A temporary access track would cross a stone built causeway (14) and the dilapidated remains of a post medieval drystone wall (15). The powerhouse and a construction compound would be sited at the former location of a late 18th / early 19th century Toll House (9).

Preservation in situ / Fencing-off

There are no upstanding sites or features along the proposed pipeline route that would specifically require fencing-off during the construction phase.

Watching briefs and excavation

It is considered that there are no sites along the proposed development corridor that would require a specific watching brief during the construction phase. Any watching briefs that may be required by the Perth and Kinross Archaeologist will be set out in the WSI for this scheme.

Construction guidelines

Written Guidelines will be issued on behalf of (Client) for use by all construction contractors, outlining the need to avoid causing unnecessary damage to known sites. That document will contain arrangements for calling upon retained professional support in the event that buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts etc) should be discovered in areas not subject to archaeological monitoring. The guidance will make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

Dowally

Mitigation through design

The layout of the proposed development has been designed to take account of the cultural heritage baseline as far as this has been established based on existing records. The major sites along the pipeline route have been avoided as far as is possible and direct impacts on known archaeological sites have been limited.

The powerhouse and a construction compound would be sited close to the former location of burial cairn and 'stone coffins' reportedly removed in the 19th century.

Preservation in situ / Fencing-off

There are no upstanding sites or features along the proposed pipeline route that would specifically require fencing-off during the construction phase.

Watching briefs and excavation

A watching brief would be carried at the location of the proposed powerhouse and construction compound, should that area require any topsoil stripping.

Any further watching briefs that may be required by the Perth and Kinross Archaeologist will be set out in the WSI for this scheme.

Construction guidelines

Written Guidelines will be issued on behalf of (Client) for use by all construction contractors, outlining the need to avoid causing unnecessary damage to known sites. That document will contain arrangements for calling upon retained professional support in the event that buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts etc) should be discovered in areas not subject to archaeological monitoring. The guidance will make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

Operational phase

No mitigation measures are required in relation to the operation of the three hydroelectric generation schemes.

Decommissioning phase

No mitigation measures are anticipated in relation to the decommissioning of the three hydroelectric generation schemes.

X.7 SUMMARY AND CONCLUSIONS

Banvie

Eight sites (1-8) of cultural heritage interest have been identified by the assessment within the proposed development corridor from a range of desk-based sources, results of consultations and a reconnaissance field survey. It is possible that additional, buried and unrecorded remains of archaeological interest survive along the lower reaches of the proposed pipeline route, outwith the coniferous forestry area.

Three key receptors (6074, 6082, 8), within 1km of the proposed powerhouse, have been assessed in regard to potential impacts on their settings but no significant effect is predicted on any of these sites.

Mitigation proposals have been put forward to offset the predicted direct effects on the two cropmark sites (1.1 and 1.2) and on the military road (2).

Lochbroom

Seven sites (9-15) of cultural heritage interest have been identified by the assessment within the proposed development corridor from a range of desk-based sources, results of consultations and a reconnaissance field survey. It is possible that additional, buried and unrecorded remains of archaeological interest survive along the proposed pipeline route.

Six key receptors (9524, 726, 9584, 11840, 11852 and 9581), within 1km of the proposed powerhouse location, have been assessed in regard to potential impacts on their settings but no significant effect is predicted on any of these sites.

Dowally

Six sites (16-21) of cultural heritage interest have been identified during the assessment within the proposed development corridor from a range of desk-based sources, results of consultations and a reconnaissance field survey. It is possible that additional, buried and

unrecorded remains of archaeological interest survive along the proposed pipeline route, in particular around the village of Dowally where a burial cairn was formerly present.

Six key receptors (5576-8, 1514, 11117 and 5575), within 1km of the proposed powerhouse location, have been assessed in regard to potential impacts on their settings but no significant effect is predicted on any of these sites.

Mitigation proposals have been put forward to offset the possible adverse effects in the vicinity of the site of the former cairn at Dowally (16).

X.8 REFERENCES

Cartographic

Gordon, R. 1636-52 *'Atholl Rennach with all the bordering waists'*

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Ordnance Survey 1st and 2nd Editions, *'Perthshire'* Sheets XXI (1860-62), L, LI and XL (1863)

Ordnance Survey, *'Perthshire'* 1:2500 (1976 & 1983)

Pont, T. 1583-96 (19) *'Forest of Atholl'*

Pont, T. 1583-96 (20) *'Glen Tilt Cameron'*

Roy, W. 1747-55 *'Military Survey of Scotland'*

Stobie, J 1783 *'The counties of Perth and Clackmannan'*

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Willdey, T. 1746 *'A map of the King's Roads, made by his Excellency General Wade in the Highlands of Scotland'*

Bibliographic

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Institute for Archaeologists 2009 *'Code of Conduct'*

Anon *'City of Dunkeld and Parish of Dowally'* 1791-99 Old Statistical Account

Bisset, T. 1791-99 *'Parish of Logierait'* Old Statistical Account

Cameron, S. 1834-35 *'Parish of Logierait'* New Statistical Account

MacKenzie, J. 1834-35 '*Parish of Dunkeld and Dowally*' New Statistical Account

McLagan, J. 1791-99 '*Parish of Blair Atholl and Strowan*' Old Statistical Account

Stewart, J. 1834-35 '*Parish of Blair Atholl*' New Statistical Account

Aerial Photographs

Vertical Aerial Photographs

Sortie	Frames	Date	Scale
106G/Scot/UK 59	4171-4174 4042-4047 4259-4261	08-05-46	1:10000
106G/Scot/UK 60	4368-4373	08-05-46	1:10000
5414/477	3270-3273	16-06-49	1:10000
Zeiss 406 12"	191-210	06-07-71	1:7500
Zeiss 406 12"	201-213	15-08-71	1:7500
Jasair	504-88-185 to 187 503-88-046 to 048	15-05-88	1:24000
Jasair	18-88-105 18-88-107	09-06-88	1:24000

Oblique Aerial Photographs

B23434	General aerial view showing castle and grounds	RCAHMS 1989
B23435	General aerial view showing castle and grounds	RCAHMS 1989
B23438	General aerial view showing castle and grounds	RCAHMS 1989

Appendix X.1: Cultural heritage features along the proposed Banvie development route

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
1	Blair Castle	Cropmarks (enclosures, linear features)	286900	766200	NN86NE 44 / MPK6481	NMRS; HER	<p>The HER records that vertical aerial photography has identified the curve of a ditch (1.1) that may be part of larger enclosure 300m east of Blair Castle. (The NMRS provides no detail but provides a reference to a collection of oblique aerial photographs).</p> <p>RCAHMS oblique aerial photograph B23434 shows the SW arc of a possible circular enclosure approximately 40m in diameter close to the north edge of an area of open parkland named as Target Park. The ditch surrounds a solitary broad leaf tree.</p> <p>A number of other cropmarks (1.2 and 1.3) are visible in this general area on vertical aerial photographs from 1946, in Target Park and in an open field to the south of St Bride's Kirk ().</p> <p>What appears to be a large sub-circular enclosure (1.2) is visible in the field south of St Bride's Kirk. The enclosure measures approximately 150m in diameter. The feature is of unknown origin and date but it could be the remains of a prehistoric settlement. Alternatively, it may be a medieval or later stock enclosure, given its location next to a medieval or earlier route into</p>	Unknown

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
							<p>the central Highlands (7) or it may be associated with some earlier designed landscape feature. Roy's Military Survey map (1747-54) shows an avenue of trees crossing this area on a SW to NE alignment.</p> <p>The 1946 vertical aerial photographs also show a small collection of linear cropmarks (1.3) in the field immediately to the south of that containing the sub-circular enclosure (1.2). These linear features are likely to date from the post-medieval period, judging by their linear form, and may be the remains of former field boundaries or of former designed landscape features.</p> <p>No visible features or earthworks were recorded during the field survey.</p>	
2	Blair Atholl	Military Road	286680	765780	MPK9297	HER	<p>The HER records a section of General Wade's military road which here runs from Old Bridge of Tilt to Old Blair and then crosses the Banvie Burn, continuing along Glen Garry.</p> <p>The original course may be that marked on Roy's Military Survey map (1747-54). The course of the road is not clearly shown on the Ordnance Survey 1st edition map but it is shown on modern Ordnance Survey maps</p> <p>The road crosses the Banvie Burn via a</p>	Regional

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
							category B listed single arch bridge, the lower section of which may be 'military' in origin. Field survey recorded a grassed over but otherwise well preserved road running between the Blair Castle walled garden and Old Blair (4).	
3	St Brides Church	Church, burial ground	286748	766499	NN86NE 1	NMRS	The NMRS records that the 16th century church is now in ruins. Within the church is the Vault of John Graham of Claverhouse. The Church is a Scheduled Monument and a Category B Listed Building. Field survey recorded that the Church is as described above and that the unenclosed Church and Churchyard are surrounded by mature trees.	National
4	Old Blair	Cottages	286770	766585	NN86NE 71	NMRS	The NMRS holds a record for cottages at this location but provides no other details. The Statutory List records that Old Blair Cottages comprises a single storey rubble L-plan group of houses, single storey and attic. The groups is category C(S) listed Field survey recorded that the two storey mortared masonry and slate roofed cottages are still inhabited.	Local

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
5	Lady Jean's Well	Well	286235	767220	NN86NE 5.8	NMRS	<p>The NMRS describes an elliptical grotto sunk into a bank. It is built of rustic masonry and has a domed 3-arch gothic front. The site is depicted as a "Summer House" on the 1st Edition Ordnance Survey map.</p> <p>Field survey recorded that the grotto is still standing and in good condition with a small spring running towards its centre.</p>	Local
6	Craig Urrand Wood	Quarry	285324	767824	MPK1572 3	HER	<p>The HER records that two quarries are depicted on the 1st and 2nd Edition Ordnance Survey maps, on either side of Banvie burn.</p> <p>Field survey recorded that the quarry on the eastern side of the burn measures approximately 20m by 15m and is approximately 5m high. The quarry on the western side of the burn measures 10m by 10m and is approximately 4m high.</p>	Lesser
7	Blair Atholl	Track	286780 285240	766775 767880		Cartographic	<p>A track is depicted on Roy's Military Survey map of 1747-53 and on Willdey's map of 1746. This is the route of the Minigaig Road a 16th century linking Blair Atholl with Kingussie. This road replaced the earlier 13th century 'Comyn's Road', so named as it is thought to have been built by the Comyn family, to link their strongholds</p>	Local

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
							at Blair Atholl and Ruthven. Field survey recorded that a modern estate track now follows this route and timber lorries and estate vehicles make extensive use of the track; culverts have been cut through the track at a number of locations.	
8	Blair Castle	Historic Garden and Designed Landscape				NMRS	The designed landscape at Blair Castle was first laid out in the mid-18th century although a tower house had been present on the site since the 13th century. The designed landscape includes extensive woodlands, parkland, formal gardens and a walled garden. Within the gardens there is a wealth of ornaments, follies and eye-catchers. In addition to the category A listed Castle and 'The Whim' there are 16 B listed and five C(S) listed structures. The garden and designed landscape is described in the Inventory of Gardens and Designed Landscapes in Scotland as having outstanding value.	National

Appendix X.2: Cultural heritage features along the proposed Lochbroom development route

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
9	Moulinearn Toll House	Toll house	297103	754698	NN95SE 38	NMRS	<p>The NMRS records that an early 19th century single storey toll house, enclosure and pond are depicted on the Ordnance Survey 1st and 2nd Edition maps.</p> <p>The building is visible on the 1946 and 1971 aerial photographs as roofed. Examination of Ordnance Survey maps dating from 1976 and 1983 show that the building was destroyed during the construction of the A9.</p> <p>Field survey recorded that there is no visible trace of any building or other feature at this location.</p>	Local
10	Mains of Dalcapon	Lime kiln	297599	754827	MPK1585 9	HER	<p>The HER records that a lime kiln is depicted on the 1st Edition Ordnance Survey and all subsequent maps.</p> <p>The lime kiln is not visible on the 1946 aerial photographs or those from 1971.</p> <p>Field survey recorded the possible remains of a sub-circular kiln measuring 4m by 3.5m. It has been infilled by rubbish from the farm and is covered by tree growth.</p>	Local
11	Mains of Dalcapon	Farmstead	297670	754761	MPK1585 8	HER	<p>The HER records that a farmstead of five buildings, with an access track, is depicted on the 1st Edition Ordnance Survey and all subsequent maps.</p>	Local

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
							<p>The farmstead is visible on the 1946, 1971 and 1988 photographs.</p> <p>Field survey recorded that the buildings appear to date from the 19th century and are masonry and mortar built with slate roofs. The northernmost range of farm outbuildings is single storey, built of mortared masonry and partly roofed with corrugated iron. The long central building in the complex is of mortared masonry with a slate roof. It has an attic converted into rooms and a small brick extension has been built onto the rear. These buildings appear to have been latterly used as farm workers accommodation. The southern range includes the main farmhouse and a second, unroofed, building. The farmhouse is a large two storey mortared masonry building with a slate roof. The building appears to have been deserted in the late 1980s. The access track is still in good condition.</p>	
12	Milton of Dalcapon	Mill, lade, township	297850	754950	NN95SE 55	NMRS	<p>The NMRS records that a township of one unroofed, three roofed buildings (one of which is a long building) and another which lies across the mill lead, is depicted on the 1st Edition Ordnance Survey map.</p> <p>Two unroofed rectangular buildings are visible on the 1946 aerial photograph,</p>	Local

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
							<p>within woodland, but they are not visible on the 1971 photograph.</p> <p>Field survey recorded the remains of a large two storey, unroofed building positioned to the side of the mill lead. A wheel pit is attached to the north end of the building. The building is in very poor condition.</p>	
13	Milton of Dalcapon	Well and track	297900	754900		Cartographic	<p>A well and track immediately to the south of the burn are depicted on the 1st Edition Ordnance Survey map.</p> <p>These sites could not be located during the field survey due to dense vegetation in the general area.</p>	Unknown (Lesser)
14	Tomintarich	Field clearance	298584	755083		Field survey	Field clearance stones have been used to create a small causeway carrying a farm track over a small depression between two fields.	Lesser
15	Tomintarich	Field clearance and dyke	298885 298665	755122 755120		Field survey	Field clearance stones have been piled against the north side of the remains of a dyke running along the northern edge of a field. The dyke is over 200m long, is 0.7m wide and up to 0.5m high. In places the field clearance is spread up to 2m wide and is up to 0.4m high.	Lesser

Appendix X.3: Cultural heritage features along the proposed Dowally development route

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
16	Dowally	Cairn (site of)	300170	747900	NO04NW 3	NMRS	<p>The NMRS records that the New Statistical Account (NSA) states that the cairn measured 9m (30ft) in diameter and 1.8m (6ft) in height. The NSA records that when the cairn was removed in the 19th century an iron chain and stone coffin were uncovered. The coffin is recorded as being filled with black earth. Other 'stone coffins' are also reported as being found close by but further location details are not given.</p> <p>Field survey recorded that there are no upstanding remains of this site in the vicinity of the cited coordinates.</p>	Unknown (Local)
17	Dowally	Township	300100	747900	NO04NW 18	NMRS	<p>The NMRS records that a township of four unroofed buildings, nine roofed buildings (including a sawmill) and twelve enclosures is depicted on the 1st Edition Ordnance Survey map (1867).</p> <p>Field survey recorded that the majority of the buildings depicted on the 1st Edition Ordnance Survey map on the south side of the burn survive within the present township. These are mortared masonry buildings with slate roofs. Two of the buildings are C(s) listed. The sawmill, depicted as part of the township, is now the site of a</p>	Local

Site No.	Site Name	Site Type	Easting	Northing	NMR/HER No	Source	Site Description	Site Importance
							modern house.	
18	Dowally	Sawmill	300700	474850		Cartographic	<p>Three buildings, one of which is annotated as a sawmill, are depicted on the 1st Edition Ordnance Survey map (1867).</p> <p>Field survey recorded the remains of one building 6m long and 5m wide standing to a height of 1.5m. The other two buildings shown on the 1st Edition map appear to have been destroyed and infilled by rubbish dumped from the bank above.</p>	Local
19	Raor Lodge	Quarry	301250	747837		Field survey	Field survey recorded a large quarry pit at the side of a track. The sub-circular quarry measures 10m wide by 20m long and up to 4m high.	Lesser
20	Dowally	Track	300112 301650	747950 748050		Cartographic	A track is depicted on Roy's map (1747-55) running along the south bank of the Dowally Burn from Dowally (Duley Kirk) and running through the hills to Loch Oisney and then on to Kirkmichael in Strathardle. A track following a similar	Lesser

Site No.	Site Name	Site Type	Easting	Northing	NMR/ HER No	Source	Site Description	Site Importance
							alignment is also depicted on the 1st Edition Ordnance Survey map. Field survey recorded that a signposted walking route follows a similar route to Raor Lodge (21) and beyond.	
21	Raor Lodge, Dowally	Lodge	301690	747870		Cartographic	Two buildings within a sub-divided D-shaped enclosure and named as 'Rere Lodge' are depicted on the 1st Edition Ordnance Survey map (1863). Field survey recorded a small two storey masonry and mortar house with a slate roof. The building is located within a large fenced garden with two large modern outbuildings to the rear.	Local

Appendix X.4: External Receptors within 1km of Banvie powerhouse

Ref No	Site	Easting	Northing	Status	Importance	Effect type	Effect Magnitude	Significance of predicted effect
1631	Blairchurch, St Bride's Church	286748	766499	SM / Category B	National	Indirect	Low	Minor
6064	Front Bridge, Blair Castle	287276	765451	Category A	National	None		
6074	Blair Castle	286577	766186	Category A	National	Indirect	Low	Minor
6076	Blair Castle, sun dial	286488	766182	Category A	National	None		
6065	Grotto on River Tilt	287565	766305	Category B	Regional	None		
6067	Obelisk, Tom-na-croiche	287293	766506	Category B	Regional	None		
6069	Bailanloan	287058	766923	Category B	Regional	None		
6070	Old Blair (Inn)	286710	766577	Category B	Regional	None		
6072	Old Blair bridge	286625	766548	Category B	Regional	None		
6075	Blair Castle, Terrace	286444	766216	Category B	Regional	None		
6079	Statue of Diana and Actaeon	286504	766445	Category B	Regional	None		
6080	Walled Garden	287027	766343	Category B	Regional	None		
6081	Statue of Hercules	287028	766274	Category B	Regional	None		
6083	The Obelisk	2865	7664	Category B	Regional	None		
6101	Blair Atholl, Parish Church	287433	765428	Category B	Regional	None		
6103	Blair Atholl Mill	287176	765197	Category B	Regional	None		

Ref No	Site	Easting	Northing	Status	Importance	Effect type	Effect Magnitude	Significance of predicted effect
6104	Blair Atholl, village hall	287257	765340	Category B	Regional	None		
6105	Blair Cottages	287159	765327	Category B	Regional	None		
6107	Blair Atholl War Memorial	287102	765355	Category B	National	None		
6109	Bridge of Tilt	287577	765521	Category B	Regional	None		
5703	Old Blair, Cottages	286770	766585	Category C(S)	Local	Indirect	Low	Negligible
6066	Foot bridge and adjoining garden walls	287591	766414	Category C(s)	Local	None		
6071	Old Blair (Footbridge)	286683	766571	Category C(s)	Local	None		
6077	Bridge over Banvie Burn	286574	766341	Category C(s)	Local	None		
6078	Bridge over Banvie Burn	286595	766269	Category C(s)	Local	None		
6082	The Dairy, The Mains	286585	765970	Category C(s)	Local	Indirect	Imperceptible	Negligible
6102	Blair Atholl, School	287484	765446	Category C(s)	Local	None		
6106	Atholl Arms Hotel	287106	765308	Category C(s)	Local	None		
	Blair Castle Gardens	286577	766186	Garden and Designed Landscape	National	Indirect	Low	Minor

Appendix X.5: External Receptors within 1km of Lochbroom powerhouse

Ref No	Site	Easting	Northing	Status	Importance	Effect type	Effect Magnitude	Significance of predicted effect
726	Pitcastle, homestead	29712	75536	SM	National	None		
9524	Mill-Lands of Dalcapon, cropmark of enclosure (henge)	29714	75439	SM	National	None		
9581	Prince Charlie's Bridge	29751	75414	SM	National	None		
9584	Moulinearn , military bridge	29693	75475	SM	National	None		
11840	Moulinearn Inn	296866	754805	Category B	Regional	None		
11852	Lairds House, Pitcastle Mains	297316	755460	Category B	Regional	None		

Appendix X.6: External Receptors within 1km of Dowally powerhouse

Ref No	Site	Easting	Northing	Status	Importance	Effect type	Effect Magnitude	Significance of predicted effect
1514	Clachan More, standing stones	30003	74799	SM	National	None		
11117	Dalguise Railway Viaduct	299497	747943	Category A	National	None		
5575	Rotmell Farm	300489	747041	Category B	Regional	None		
5576	Dowally Church	300136	748026	Category B	Regional	Indirect	Imperceptible	Negligible
5577	Dowally Village, Smith	30013	74797	Category C(s)	Local	Indirect	Imperceptible	Negligible
5578	Dowally Village, Calvor and Bisset	300146	747956	Category C(s)	Local	Indirect	Imperceptible	Negligible



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- CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
- t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. No:	X.1	Revision:
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Title: Cultural Heritage Constraints

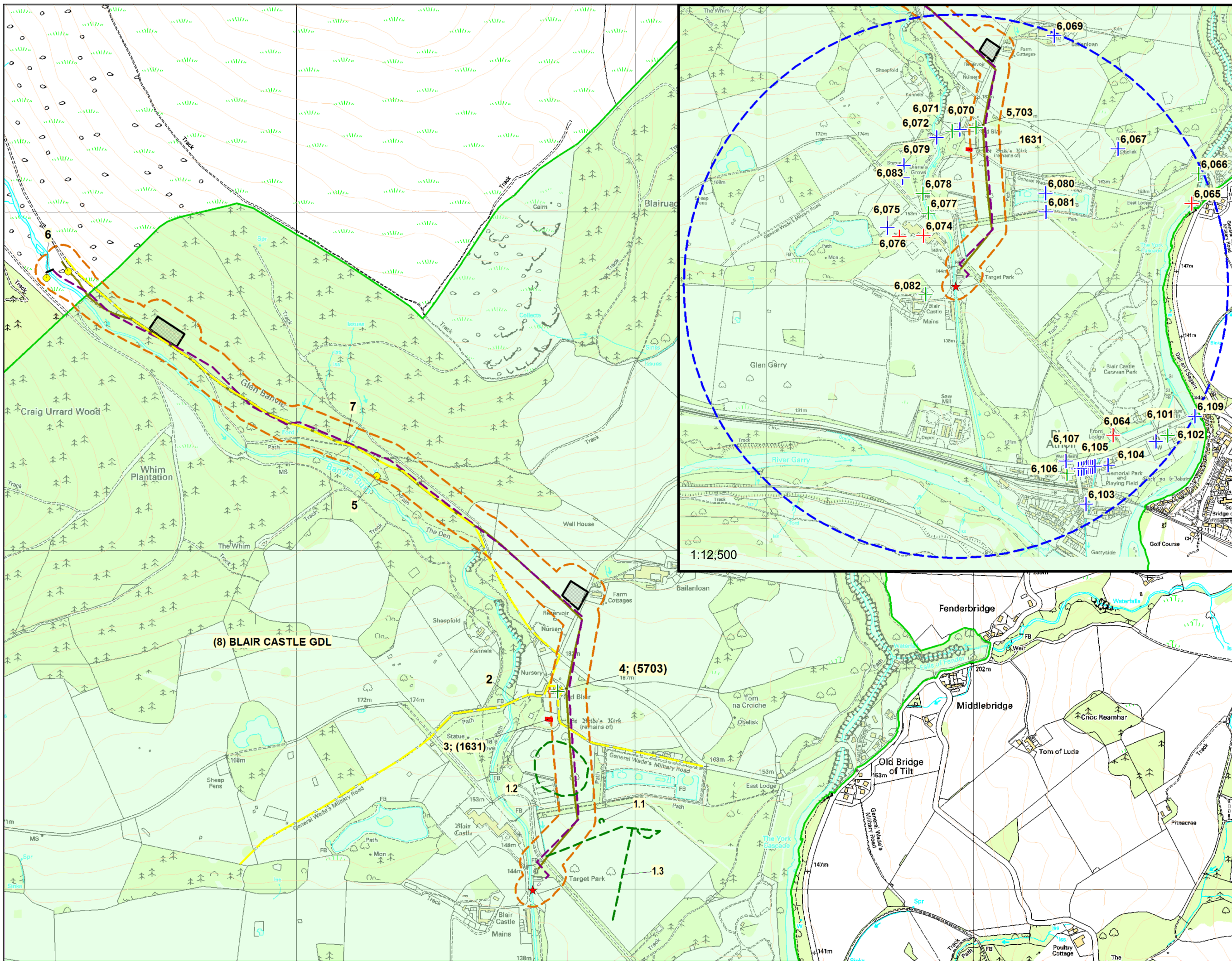
Project:
Blair Atholl Mini Hydro Scheme -
Banvie

Scale:
1:10,000 @ A3

Client:

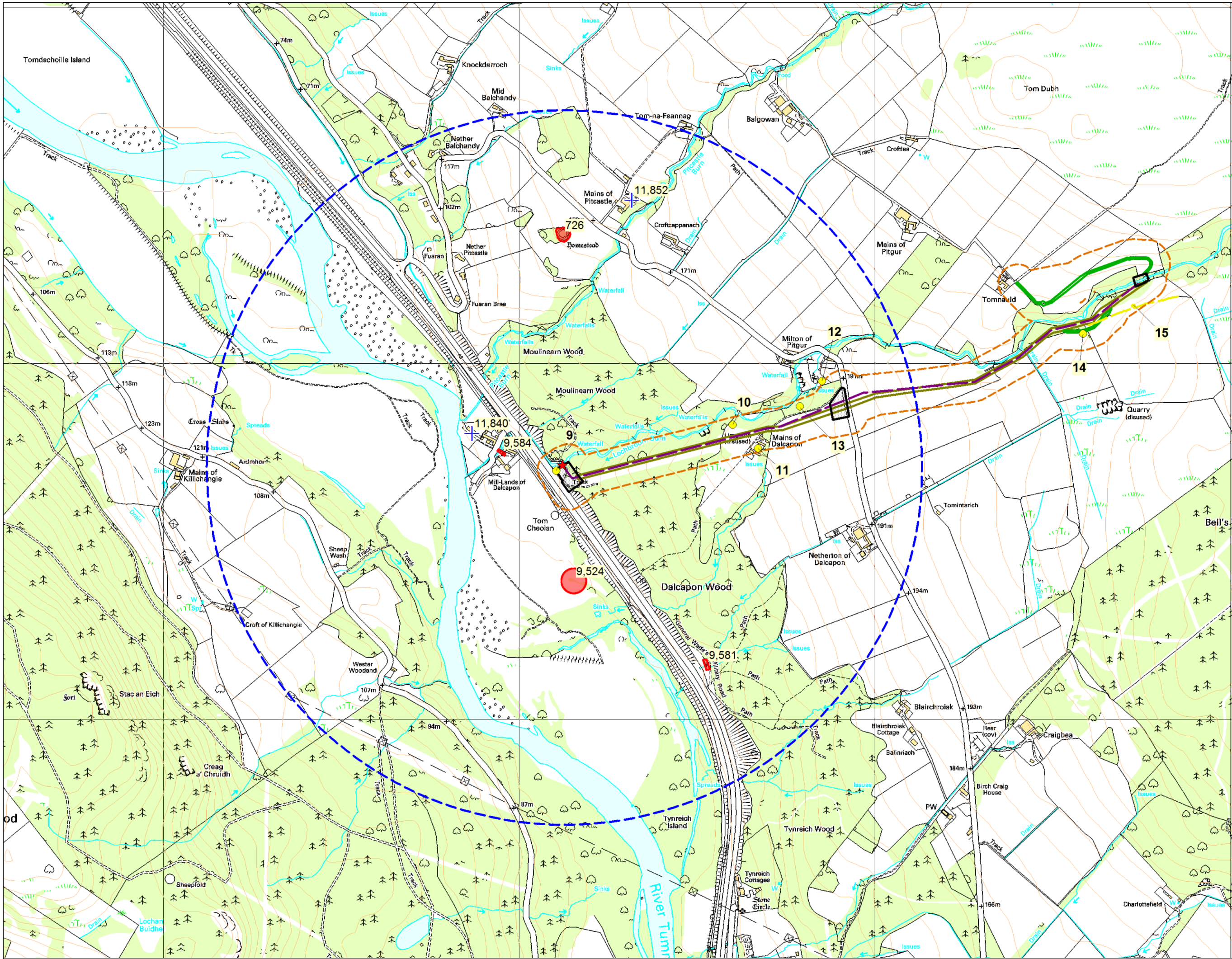
Atmos Consulting

Drawn by: SW	Page No: 0	Report No:
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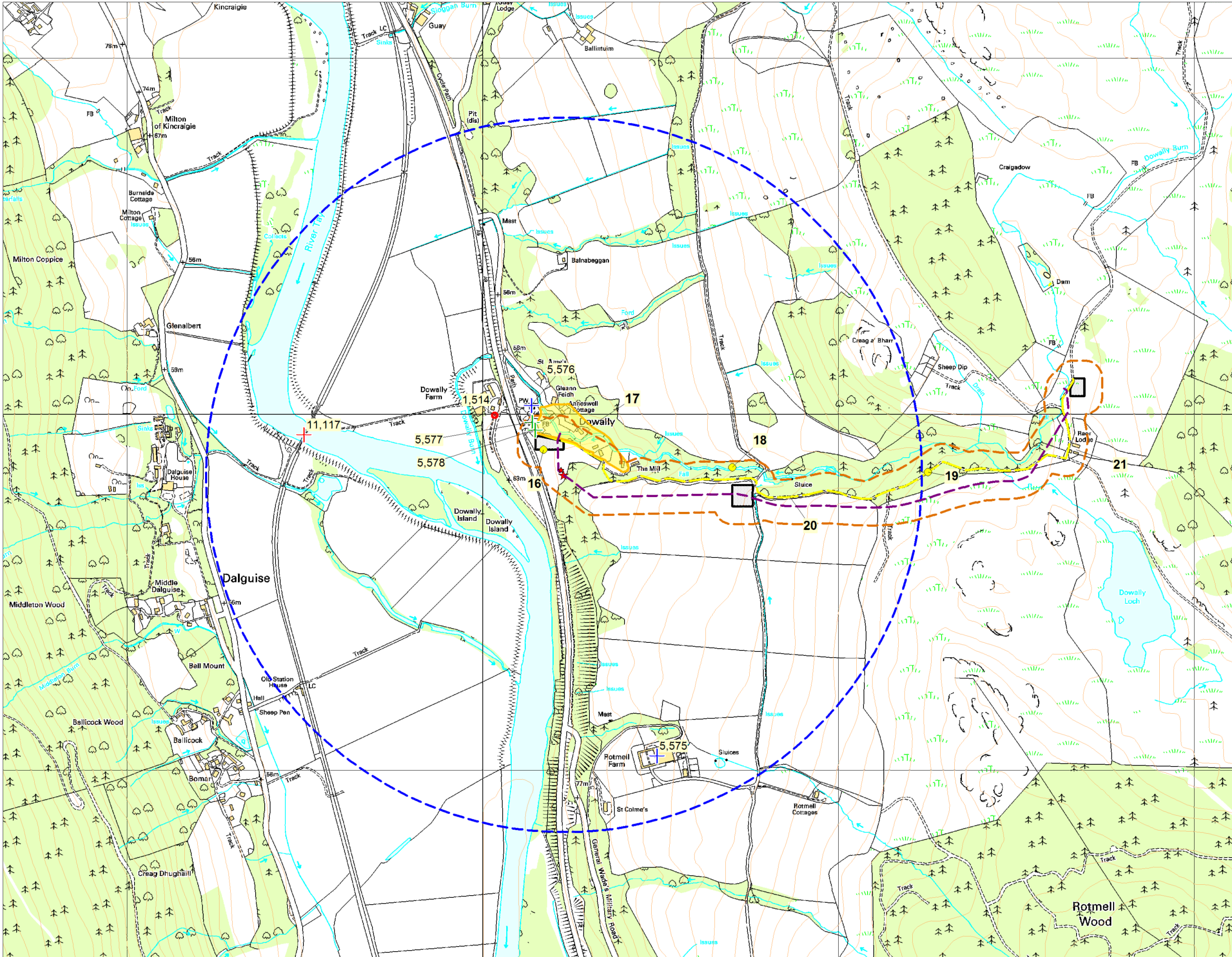
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- Key:
- Scheduled Monument
 - B Listed Building (2)
 - Cultural Heritage Site
 - Cultural Heritage Linear Site
 - 1km Buffer
 - 50m Buffer
 - Pipeline
 - Access Route
 - Temporary Access Route
 - Construction Compound
 - Powerhouse

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. No:	X.2	Revision:	
Title:	Cultural Heritage Constraints		
Project:	Blair Atholl Mini Hydro Scheme - Lochbroom		
Scale:	1:10,000 @ A3		
Client:	Atmos Consulting		
Drawn by:	SW	Page No:	0
Report No:			



- Key:
- Scheduled Monument
 - A Listed Building (1)
 - B Listed Building (2)
 - C(S) Listed Building (2)
 - Cultural Heritage Site
 - Cultural Heritage Site Area
 - Cultural Heritage Linear Site
 - 1km Buffer
 - 50m Buffer
 - Pipeline
 - Construction Compound
 - Powerhouse

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. No: **X.3** Revision:

Title:
Cultural Heritage Constraints

Project:
**Blair Atholl Mini Hydro Scheme -
Dowally**

Scale:
1:10,000 @ A3

Client:
Atmos Consulting

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