

**THE HIGHLAND COUNCIL**  
**CAITHNESS, SUTHERLAND & EASTER ROSS PLANNING**  
**APPLICATIONS AND REVIEW COMMITTEE**  
**29 January 2008**

Agenda Item	4.1
Report No	01/08

**06/00429/FULSU – Installation of small scale hydro-electricity generation scheme (0.95MW) consisting of access tracks, overhead power line, pipeline, intake structure, turbine house with hardstanding, tailrace, and 3No. borrow pits (As Amended)**  
**at Wester Fearn Burn, Mid Fearn, Ardgay**

**Report by Area Planning and Building Standards Manager**

**SUMMARY**

The proposal is in detail to form a small scale (0.95MW) hydro-electric scheme on the Wester Fearn Burn. The application is being reported to Committee as it is subject to the Hearings procedure. Edderton Community Council have objected to the application.

Ward Number 5 – East Sutherland and Edderton

Applicant – Mr C W Brooke, Fearn Lodge, Ardgay

**The Recommendation is to GRANT planning permission subject to conditions.**

The application is the subject of a Hearing.

**1. PROPOSAL**

The proposal is in detail to form a small scale (0.95MW) run of river hydro-electric scheme on the Wester Fearn Burn. The Burn is located approximately 4.1km south east of Ardgay, and 0.6km to the northwest of the Struie junction with the A836 and B9176.

**2. PLANNING HISTORY**

2.1 No previous planning applications or permissions for the site. The developer sought a Screening Opinion from the Planning Authority in August 2006. The Planning Authority advised the applicant on 5 October 2006 that an Environmental Statement would not be required for the proposed development.

2.2 98/00204FULRC – Freshwater and rearing hatchery at Wester Fearn. Approved 21 July 1998.

The Highland Salmon Company operates a salmon hatchery and smolt rearing operation downstream of the development, which has been in operation for around 9 years, producing 250000 smolts and 300000 fry per annum.

### **3. PUBLIC PARTICIPATION**

3.1 The application was advertised as a Potential Departure from the Development Plan on 24 November 2006. The application was re-advertised on two further dates, 27 April 2007 and 16 November 2007, following the receipt of additional information and an amended application. The expiry date for the publicity period was 7 December 2007. Letters of representation have been received against the application from three parties.

3.2 The letters of representation are available in the Area Office and will be available at the Committee meeting. The names of those making representation are listed at the end of this report. The representations relate to the following matters:

- Ground disturbance during pipeline construction could weaken the bank and trigger off landslides during periods of high rainfall. Steep nature of the hillside and lack of bedrock or trees to support the ground on the proposed pipeline route could increase the risk of landslide. Pipeline damage with a high pressure burst due to landslide will have serious consequences for burn water quality.
- Frost damage to pipeline
- Control of silt
- No permanent additional employment generated by proposal
- Viability of the existing Highland Salmon Company salmon hatchery and smolt rearing operation downstream of the development and the livelihood of its employees could be affected by any reduction in water quality during and post construction.
- High probability that fish stock insurance cover will be removed by insurers during construction period, with high probability that the policy excess and premium will increase significantly once the development is operational.
- Potential knock-on implications for Highland Salmon Company long term contracts to other fish farms if Highland Salmon Company is unable to fulfil these contracts.
- Risk of chemical and sediment water pollution during construction and during any future maintenance.
- Drop in the level of water flow during any start up and shut down procedure will affect fish farm water intake.
- Impact on wild fish in burn.
- Bio-security – applicant operates fish farm on Easter Fearn Burn which has had a history of fish health problems. Potentially increased risk of fish disease transfer to the Wester Fearn Burn via the movement of individuals and equipment from the Easter Fearn Burn / fish farm.
- Insufficient hydrological monitoring data provided to demonstrate the viability of the Burn.

- Proposed renewable energy project is in direct conflict with an existing downstream commercial activity.
- Level of compensation flow

## 4. CONSULTATIONS

### 4.1 Edderton Community Council

8 December 2006 - Fully support the application.

10 December 2007 - In response to the revised plans the Council has reviewed its earlier decision after being made aware of the objection from Highland Salmon Company Ltd. The Council no longer supports the application. In principle we support plans for generating energy from renewable sources but they should not create the potential to place existing businesses at risk. The Council is not convinced that the proposal meets that condition.

### 4.2 Internal Consultees

**Area Roads and Community Works Manager** –No objections. The developer shall provide written details of an appropriate traffic management plan for the agreement in writing of the Planning Authority in consultation with the Roads Authority to effect safe and appropriate site access prior to the commencement of development.

**Archaeology** – No objection.

**Access Officer** – The proposal will require the limited closure of the access track to the south of Wester Fearn Burn to allow construction of the pipeline. This closure should be for the minimum period possible and upon the work being completed the track should be fully restored and open to responsible access takers. The Wester Fearn Burn is recorded as being paddled by canoeists in recent years and the stretch of water is in the Scottish White Water Guide. Although the intake weir will disrupt access along the burn, as long as access in and out of the burn is possible (up and downstream of the weir) the proposal is not expected to hinder access.

### 4.3 External Consultees

**SNH** – 28 November 2006 - No objection. The site lies within the catchment of the Dornoch Firth and is about 1.5km from its southern shore. The Dornoch Firth and Morrich More Special Area of Conservation (SAC) and Dornoch Firth National Scenic Area (NSA) may be indirectly affected.

SNH is satisfied that a survey for both otters (European Protected Species) and water voles has been conducted and that work will stop immediately should otters be encountered during work and advice sought from SNH on how to proceed. Furthermore, SNH is content that the applicant has identified potential sources of pollution and has put in pollution control measures which comply with the relevant SEPA Pollution Prevention Guidelines. SNH is also satisfied that SEPA have been consulted to their satisfaction with regard to compensation flows to ensure sufficient

water continues to flow in all stretches of the burn below the intake weir at all times of the year under all water regimes. Suggest that conditions are required regarding:

- Method statement detailing how any pollution incidents are to be managed is agreed with SEPA to ensure water quality entering the SAC.
- Adequate Compensation Flow provided.
- Should otters be found, work should stop immediately.

6 December 2007 - SNH can now confirm that the conditions which SEPA propose to attach to the CAR authorisation to carry out a controlled activity for the proposal and which are detailed in the (SEPA) Schedule: General Conditions CAR/L/1016861 fully address SNH's previous comments. SNH has no further comments to make.

**SEPA** – Proposal requires a licence through The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (CAR) for the abstraction of water from Wester Fearn Burn. Following consideration of the CAR application, a licence will be issued within 14 days from the 26 November 2007, following Scottish Ministers declining to call in the CAR application for consideration. One of the main concerns regarding the scheme is the water quality during construction and operation of the scheme. The applicant has provided SEPA with an outline method statement. However, a final method statement will be required to be submitted and agreed as a condition of the CAR licence prior to any construction works. It will also address any of the changes which the applicant has had to make to take into account the actual ground conditions. The purpose of the method statement is to identify any potentially polluting activities which may occur as a result of the works and to subsequently put in place mitigation measures to avoid causing pollution.

13 December 2007 – SEPA have approved the proposal through the CAR application process (CAR/L/1016861). SEPA has removed its objection to the planning application and is now satisfied in a planning context.

**Scottish and Southern Energy** – No comments received.

## **5. POLICY**

5.1 The following policies are relevant to the assessment of the proposal

### **Highland Structure Plan:**

- G2 Design for Sustainability
- G4 Community Benefit and Commitment
- E1 Distributed Renewable Energy Developments
- E4 Hydro Energy Developments
- L4 Landscape Character

## Ross and Cromarty East Local Plan

BP2 – Permit development unless this would be likely to have a significantly adverse effect on, or be significantly adversely affected by, the features for which the area has been designated (Dornoch Firth National Scenic Area, SAC).

BP3 – Presume against development particularly where there would be significant damage to heritage, amenity or public health.

5.2 The proposal also requires to be assessed against the following relevant Scottish Planning Policies (SPP); National Planning Policy Guidelines (NPPG), and Planning Advice Notes (PAN):

- SPP1: The Planning System
- SPP15 Planning for Rural Development
- SPP6 Renewable Energy

## 6. PLANNING APPRAISAL

6.1 **Determining issues** – Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

### 6.2 Overview of the proposal:

**Intake structure and small dam** in the Wester Fearn Burn (NH 60583 86534), approximately 2.6km south west of the A836 bridge over the Wester Fearn Burn at Kennel Cottage. The dam will be approximately 2m in height, 16m long and 400mm wide (1900mm total width including drop-out chamber and spill). Gabion baskets are proposed on the north side of the Burn covering 50m upstream of the intake structure and dam to prevent bank erosion, particularly during spate.

**Turbine house and hardstanding** (NH 62764 87551) to the west of Kennel Cottage adjacent to the A836 bridge over the Wester Fearn Burn. The turbine building is approximately 18m x 8m x 9.6m with a profile sheet roof and a rendered block wall finish.

**Short buried tailrace** into the Wester Fearn Burn (NH 62774 87563) below the turbine house at Kennel Cottage.

**Pipeline** of approximately 2.6km length made from glass reinforced plastic (GRP) double bell coupling pipe at 32 bar, with a bore of 800mm connecting the intake structure and dam to the turbine house. The majority of the pipeline is to be buried with small upper sections exposed at burn crossings. The lower section of the pipeline above the turbine house will be above ground and is approximately 150m in length.

**Upgrading and improvement of the existing estate track** for construction traffic from the bottom of the Struie junction on the A836, including a culvert crossing.

**Three small borrow pits** along the length of the access track at NH 60561 86285 (Borrow Pit 1), NH 61124 86420 (Borrow Pit 2), NH 61734 86625 (Borrow Pit 3).

**Small section of overhead line** to connect the turbine house with the adjacent 11kv overhead electricity line.

**Provision of compensation flow** of water over the dam.

- 6.3 In addition to the above, the proposed construction of the hydro-electric scheme requires the use of an existing forestry track from Kincardine, Ardgay. This will be used by ready-mix concrete lorries to deliver concrete to a point approximately 200m to the north (NH 605 896) of the intake structure. From here, the concrete would be lifted by helicopter for pouring direct into the shuttering at the intake structure. It is anticipated that approximately 30 helicopter journeys will be required, spread over 5 days. Access to the turbine house and hardstanding will be taken from the existing access to Kennel Cottage.
- 6.4 The water would be abstracted from the Wester Fearn Burn above the waterfalls and gorge section and transported via a mainly buried pipeline to a powerhouse adjacent to Kennel Cottage and then discharged from a single turbine and returned to the river via a buried tailrace. The bottom of the abstraction channel is at an elevation of 151m, with the highest point of the weir 2m above this. The head of water is to be 152.2m. The discharge at the tailrace is between the 10m and 20m contour. The burn at the point of the intake is set within an open area of poorly draining heather covered peat, with forestry planting to the north towards the proposed ready-mix delivery point. Immediately to the east of this, the burn carries over a waterfall and into a gorge section, with a steady fall thereafter discharging to the Dornoch Firth.
- 6.5 Members will note that following discussions with the applicant, the discharge point for the turbine house was relocated approximately 130m downstream of the fish farm water extraction point (April 2007).
- 6.6 The agent has confirmed the following technical details and response to the grounds of objection:

**Construction of the Intake Weir** will be in four stages:

**Stage 1** – Temporary weir of rocks, sealed with sandbags built upstream of the intake site with a pipeline carrying the full volume of the burn over the site of the weir, to allow the preparation of the bedrock to receive the weir (cleaning rock and drilling for anchorages) and to enable the positioning and sealing with concrete of the scour pipe at the lowest point in the weir footing. On completion the stream will be allowed to flow through the scour pipe and then the temporary dam and pipe will be removed. A dry footing is now available to construct the rest of the weir. The scour pipe will extend a sufficient distance above and below the weir to provide a sufficient dry area to contain any accidental spillage.

**Stage 2** – Drilling of rock anchorages will be completed, reinforcing secure and shuttering erected. The shuttering rock interface and all shuttering joints will be sealed in preparation for pouring.

**Stage 3** – On completion of a thorough and satisfactory inspection of the shuttering and sealing then the concrete pouring can commence. Bulk concrete will be placed by helicopter enabling equipment cleaning to be carried out well clear of the construction site. No mixing or equipment cleaning will take place close to the river. Concrete will never be poured if there is likelihood of rising water within 24 hours of pour.

**Stage 4** – On the removal of shuttering the screens and penstock valves will be installed. The protection measures on the north bank will be built and rock armour placed on the south bank.

**Borrow Pits** – The won material will be used to construct the track to the intake and to prepare pipe bedding material when this cannot be won from the trenching material. Estimate around 1600 cu m would be required if no trenching materials were suitable and that each borrow pit will be approximately 90sqm. The ground will be sloped during extraction such that surface water will run inwards to soakaway, not towards any watercourse. A small amount of **concrete batching** will be undertaken on site either at Borrow Pit 1, or at the turbine house site. The **position of the turbine house** will be determined by where the bedrock is and neither blasting nor a breaker is proposed. **Refuelling sites** are at Borrow Pit 1 and the hardstanding at the kennels near the turbine house.

There will be **intake level monitoring** that controls the turbine output in relation to the available water supply. If the level in the drop out chamber, where the level probes are to be installed, drops below a set level, then the turbine shuts down and an alarm is initiated.

**Compensation flow** has been determined by SEPA hydrologists and is 74l/sec rising with increasing natural flows to 178l/sec at turbine full flow. In addition to that a further 80l/sec must be released to supply the hatchery. The compensation flow notch in the weir is designed to release the agreed flow at all times and is at a level below the turbine intake level. When it is cold enough for ice to form on the screens the flows have usually dropped to a non-generating level. If the screens did block for any reason the flow goes over the weir down the burn and not to the turbine. The design and functionality of the 'hands free' compensation flow notch will be approved by SEPA before construction commences.

**Pipe** is 800mm diameter "Flowtite" glass-reinforced plastic (GRP) with double bell couplings. Trenching, bedding haunching, backfilling, laying and jointing will be to the manufacturer specifications. The pressure ratings of pipe used exceed the design rating. Exposed pipe will be painted in matt grey, green and brown camouflage shades and patterns to break the visual impact of the straight edges of exposed pipe. The manufacturers' projections based on strain tests of various types and UV exposure tests predict life in excess of 50 years for the pipeline.

The amended application has moved the pipeline away from the only unstable bit of bank that threatens the river with landslip. Although this involves a deep cut it will remove stability concerns.

**Sedimentation** - Propose to allow the area above the intake weir to fill with gravel. Once filled, any stones/gravel bigger than 10mm (the intake screen spacing) will

proceed downstream. Any particles smaller than 10mm will collect in the drop-out chamber and will be returned to the stream as part of routine maintenance. Do not consider that there will be any perceived change in the sediment regime once the area behind the weir has filled. The emptying of the catch pit chamber would be after consultation with the downstream fish farm operators. The process will be to clear the accumulations through the scour valve at the bottom of the dam returning any river-bed material in a controlled manner.

The risk of landslide has been minimised by moving the pipe track away from the ravine along its entire route. The pipeline is not designed to fail and the coupling mechanisms and pipe installation will be carried out to the manufacturer's specification.

**Turbine** is grease lubricated and the design ensures that excess grease is collected in the turbine house and does not enter the water side of the machines. The hydraulics are in a bunded area, so a spillage or burst cannot reach the watercourse. We will install an overspeed valve at the intake which will detect any abnormal flow rate and shut the pipeline down. Expect the pipeline to be cleaned infrequently, probably every 10 years. The generator is rated at less than 1MW so there will not be the potential to produce more electricity than that, as the generator size will be the limiting factor.

The **design and operation of the tailrace** are regulated and controlled under the conditions of the Water Environment (Controlled Activities) (Scotland) Regulations 2005 for the authorised Water Use Licence number CAR/L/1016861 dated 10<sup>th</sup> December 2007 (section 3.7.1). "The return of the abstracted water shall not cause significant scouring of the bed or banks of the river and shall not result in the disturbance of sediment or the destruction of habitat". The angle of discharge is acute to the bank and will not impinge on the opposite bank of the Burn.

**Flawed designs / materials** – It is not in the long term interests of the development to use flawed designs or materials in any part of the development. The capital outlay is far too large to risk any substandard equipment or procedures.

**Noise** can be a problem if not designed for at the outset. The alignment and baffles in the tailrace tunnel are the most important factors and the solutions are known and will be implemented. Banking around the building will ensure that the machine is not heard at Kennel Cottage.

The **water quality and quantity of water** in the burn will be maintained during the construction and operational phases as detailed under the conditions of CAR Licence. **Water pollution** is also governed by this licence.

The **maximum abstraction** allowed under the CAR licence for The Highland Salmon Company is currently set at 80l/sec. The amount of compensation water at the dam plus inflows downstream mean that the fish farm will always have access to its maximum allowed abstraction of 80l/sec.

**Ice Problems** - During severe frosts the first casualty would be turbine shut down caused by low intake level failure, due to ice growing on the screen bars. After this



has happened all the flow reverts down the burn. On thawing the compensation notch could indeed get blocked but we would not start the turbine until all river ice had passed (because it causes us other operational problems). Ice blockages would therefore have cleared before we would restart.

**Watercourse Crossings** - Propose to bridge only one burn by building piers to support the pipe. Small streams and ditches shall be crossed by designing an appropriate crossing of whatever size when we reach each crossing, based on the levels encountered at each crossing.

Approximately 200 return **vehicle movements** are anticipated with pipes and other construction material over an eight week period during intake and pipeline construction. A further 50 return movements are anticipated in relation to the turbine house. 10 further daily return movements will be from engineering, construction and supervisory personnel.

**Bio-Security** measures routinely in place should be sufficient to mitigate against cross contamination. Propose to have a disinfectant mat at the gate into the farmyard that pipe transporting vehicles will cross. Construction staff involved in weir and drop out chamber operations will not have access to any of the Dornoch Firth Fish Farm Ltd sites. Bio-security systems are currently implemented at the fish farm sites to reduce the risk from the spread of fish diseases, parasites and pathogens.

**Public access** will be restricted to the intake site area and turbine house area during construction.

The applicant has had his **insurance policy** amended to include specifically cover for the construction and operation of the hydro electric schemes with a cover of £5m. In addition, the contractors involved in the construction have their own third party liability insurance.

**Welfare facilities** will be located at the borrow pit nearest the intake whilst that work is ongoing and will be transferred to the turbine house for its construction. Each site will have a portable building and separate toilet unit.

**Working hours** – Maximum 12 hour day, starting at 7.30am. Work on the intake and pipeline will only be carried out in daylight hours.

All works shall be undertaken in accordance with **SEPA's Pollution Prevention Guidelines** PPG1, PPG2, PPG3, PPG5, PPG7 and PPG26.

A written **Best Management Practice** will be used for the operation phase of the hydro scheme.

The **health of the wild and fish farmed stocks** will not be altered as the management procedures that will be operating in the construction and operation stages will be implemented to meet the conditions of the CAR Licence.

**Written notice** of the commencement of development of the hydro scheme will be given to Highland Salmon Company Ltd.

The Wester Fearn Burn Hydro project will **employ** at least one person full time. There will also be a large number of local people employed in the construction phase of the project. The developer has indicated that he has many years experience of managing a salmon hatchery and smolt unit with a hydro scheme upstream of the fish farm intake, on the Easter Fearn Burn. The developer considers that this in itself is proof that a hydro scheme can operate with no impact on a downstream salmon farm operation, or the wild fish population / natural ecosystem.

- 6.7 **The proposal requires to be assessed against the appropriate policies of the Development Plan, supplementary guidance and National Planning Policy and Guidelines as referred to in the Policy section.** In particular, the proposal requires detailed assessment of the following fundamental issues:
- whether the principle of development is appropriate in terms of policy
  - whether the layout of development is appropriate
  - the impact on the amenity of the area and residents
  - other material issues raised by the objectors
- 6.7 **Policy** – The clear thrust of national, strategic and local policy is to support hydro energy developments, provided that their impacts are not significantly detrimental. Council policy also requires that there is satisfactory provision for the discharge and monitoring of an appropriate compensation flow. The proposed scheme is in broad conformity with relevant policies. However, the details need to be assessed to establish the extent of any adverse impacts and balance these relative to the advantages of the development.
- 6.8 The Ross and Cromarty East Local Plan allocates the site under Policies BP2 and BP3. Policy BP2 applies to the area where the turbine house and tailrace are located and would generally favour development on the site unless it would have a significantly adverse effect on the Dornoch Firth National Scenic Area (NSA) or Special Area of Conservation (SAC). Members will note that SNH have indicated that the proposal is not considered to have an adverse impact on either the NSA or SAC. Furthermore, the proposal is assessed as not having an adverse impact on the landscape character as required by Highland Structure Plan Policy L4.
- 6.9 Policy BP3 is more restrictive in nature. However, I do not consider that the proposal is contrary to Policy BP3, as it would not cause significant damage to heritage, amenity, or public health interests.
- 6.10 The Council supports the use of hydro power as noted by Highland Structure Plan Policy E1. Distributed Renewable Energy Developments.
- 6.11 Members will note that satisfactory provision for a discharge and monitoring of a compensation flow for the Wester Fearn Burn has been agreed by SEPA through the CAR process, and therefore the proposal accords with Highland Structure Plan Policy E4 Hydro Energy Developments.

- 6.12 The application must also be assessed against Highland Structure Plan Policy G2. I consider that the proposal accords with the servicing requirements of the policy. The weir and intake structure are located a considerable distance from any houses or businesses and therefore these elements are not considered to have a significantly detrimental impact on general amenity with respect to noise, siting or design. The turbine house and tailrace are much closer to existing houses and businesses. The developer has indicated that the design of the tailrace will incorporate appropriate baffles to help to reduce noise impact. The siting and design of the turbine house is considered to be acceptable.
- 6.13 The proposal will have an impact on the freshwater system of the Wester Fearn Burn. It is judged that the main impact will be during the construction phase of the scheme, rather than during any operation. The potential impacts and principal concerns of those making representations on the proposal relate to the potential change in the water quality of the Burn, particularly as a direct result of construction activity. The main areas of concern relate to increased sedimentation in and consequent pollution of the water as a result of the proposed work at the weir and intake, and trenching and pipe laying activity. Such concerns are not insignificant and have been expressed by the operators of the Highland Salmon Company hatchery which is downstream from the proposed development site. Members will note that if there was any pollution incident in the Burn as a result of construction or ongoing maintenance activity, this would have a very significant impact on the existing small fish hatchery business which relies on high water quality for its reputation, the sale of its end product and long term business viability. The test of Policy G2 here, in my view, is whether the proposal will have a significantly detrimental impact on the freshwater system of the Burn, including pollution and discharges.
- 6.14 Members will note that both SNH and SEPA have been consulted on the proposal. SNH have advised that they have no objections, provided that the development is undertaken in accordance with conditions relating to:
- adequate compensation flow in the Burn
  - stopping work if otters are found and advice sought from SNH
  - detailed method statement detailing how any pollution incidents are to be managed is agreed with SEPA to ensure water quality entering the SAC.
- 6.15 Members will be aware that SEPA are the regulatory body with responsibility for controlling the abstraction of water, impoundments, engineering activities and point source pollution. SEPA assessed the planning application and a separate but parallel application under CAR for the development in terms of hydrological and ecological impact. SEPA have confirmed that they do not object to the proposal. They have indicated that they have issued a CAR licence, subject to conditions, in relation to management of pollution incidents and maintaining water quality. This requires a detailed method statement to be provided to clearly set-out the construction and long term operation of the development to minimise the risk of pollution taking into account the SEPA Pollution Prevention Guidelines and appropriate Best Practice.
- 6.16 The applicant has advised that at times when there is little water in the Burn, the turbine would not operate, with water not being abstracted and passing downstream

unchanged in quality and quantity. The turbine will generate different amounts of electricity depending on the volume of water flowing down the river. When the turbine is running a compensation flow would always continue downstream over the weir.

6.17 Accordingly, I would advise Members that the proposal is considered to be acceptable in this respect and therefore accords with Policy G2, subject to the developer providing a detailed Method Statement as required by both SEPA and SNH in relation to management of pollution incidents and maintaining water quality.

6.18 The agent has indicated that his client is agreeable to a restoration bond being put in place for the development. The value of this bond has still to be agreed by the developer in discussion with the Planning Authority.

#### 6.19 **Representations**

**Accuracy of the topographical survey data in relation to the designed routing and depth of the proposed pipe from the intake structure and weir to the turbine house.** In particular, concerns have been raised over the first section of approximately 500m of pipe from the intake structure and weir to a point just short of the existing access track, close to the edge of the ravine below the waterfall. The issue here appears to be that in order to get the necessary pipe fall from the intake structure and weir, the pipe must be laid close to the edge of the ravine in a deep trench. The objectors have argued that the location of this increases the risk of ground disturbance and landslide to the Burn. The agent has affirmed that the calculations are correct, the objectors that the calculations are incorrect.

**Pipeline burst and frost damage** – Agent has indicated that in cold weather it is unlikely that there will be sufficient water to generate power.

**Pollution, Sediment** – Measures for controlling pollution will be set out in the detailed Method Statement as required by both SEPA and SNH. I would advise Members that this should also be a condition of any Planning Permission.

**Bio-Security** – The agent has indicated that disinfectant matting will be put in place at Mid Fearn. I would suggest to Members that additional disinfectant matting is put in place at all the entrance points to the site – Kincardine, Kennel Cottage, opposite Fearn Lodge, and at the temporary access at the Struie junction.

**Level of Compensation Flow** – this is set by SEPA through the CAR licence.

**Potential impact on wild fish in burn** – SNH have indicated that they have no concerns with regard to this.

**Insufficient hydrological monitoring data to demonstrate Burn viability** – Members will note that there is sufficient data for SEPA to assess the proposal. The actual commercial viability of the proposal is not a material planning consideration.

**Conflict between renewable energy project and existing commercial activity –**

There is undoubtedly a degree of potential conflict, particularly during the construction and commissioning of such a development. Much of this can be mitigated by appropriate conditions governing construction and operation of the development. Members will note that this can be achieved both by SEPA regulation (through CAR) and any Planning Permission that the Planning Authority may issue. The Planning Authority and SEPA both have an interest in the proper management of the construction phase, and the long term ongoing running of the development.

**Removal of hatchery insurance –** I would advise Members that the provision of insurance cover is a commercial matter for the insurance company and is not a material planning consideration. Nevertheless, I am sure that this would be a matter of strong concern to all Members. The agent has indicated that the applicant has changed his own insurance cover and that the contractors will have appropriate third party liability cover.

**7. CONCLUSION**

- 7.1 The proposal is considered to accord with and be supported by Development Plan policies, and in particular those on hydro energy developments in the Highland Structure Plan. Furthermore, the hydro scheme is in accordance with the emphasis in government policy to encourage sustainable renewable energy schemes. Members will note that the proposal is relatively modest in size and is self contained within the confines of the Wester Fearn Burn. It will have little impact on natural or built heritage. The site can be easily serviced using existing roads and tracks, and will not significantly affect any existing housing or recreational users. There may be an impact on the existing commercial downstream fish hatchery. However, any risk associated with the construction or on-going operation of the hydro scheme can be minimised by the strict adherence to conditions set out by both the Planning Permission and the CAR licence issued by SEPA.
- 7.2 The proposal is considered to be acceptable and accords with Development Plan Policies, subject to the developer providing a detailed Method Statement as required by both SEPA and SNH in relation to management of pollution incidents and maintaining water quality.

**RECOMMENDATION**

**Grant planning permission subject to conditions and the provision of a restoration bond:**

- (1.) The development shall be undertaken in accordance with the Application, except insofar as amended by the terms of this consent or which have subsequently been agreed in writing by the Planning Authority in consultation with other relevant authorities. The development shall be undertaken in its entirety, in one continuous phase, with no partial implementation. Construction activities shall be completed within a six month period from the commencement of development unless otherwise agreed in

writing by the Planning Authority. All reinstatement shall be undertaken within three months of completion of all construction work, and in accordance with condition 2 below, other than may be allowed expressly by the conditions of this permission or as otherwise agreed in writing by the Planning Authority.

- (2.) At least one month prior to the commencement of any development on the site, a site-specific construction method statement shall be submitted to and require the approval in writing of the Planning Authority in consultation with other relevant authorities. This method statement shall detail the following matters in particular:
  - (a) a detailed construction programme and timetable including restoration;
  - (b) a code of construction practice incorporating Scottish Environment Protection Agency's Pollution Prevention Guidelines;
  - (c) pollution prevention measures including contingency plans;
  - (d) waste management and waste minimisation;
  - (e) a method statement covering landscape/habitat restoration and reinstatement and proposals for ongoing maintenance and management of the site.
- (3.) At least one month prior to the commencement of work, details of all access arrangements (both permanent and temporary) shall be agreed with the Planning Authority in consultation with the Roads Authority. This shall detail the following matters in particular:
  - (a) An assessment of construction traffic generation and management insofar as public roads are affected. This shall include details of upgrading work to any existing access points, details of any new access points and provision of extended passing places in consultation with the Roads Authority;
  - (b) A written traffic management plan, including temporary traffic lights and traffic control measures.
- (4.) Prior to the commencement of any development on site, the final detailed design, insofar as it relates to siting and visual appearance, of the intake weir, gabions and bank protection measures, pipe line routing and tailrace, shall be submitted to and require the approval in writing of the Planning Authority.

Note: The design of the whole structure should be kept as simple as possible, with the form of the weir relating to the plane of the impounded water, and finished in a uniform texture and colour that relates to the adjacent exposed rock outcrops.
- (5.) Prior to the commencement of any development on site, the detailed design and siting of the powerhouse shall be submitted to and require the approval in writing of the Planning Authority. The existing trees in the vicinity of the proposed powerhouse shall be retained insofar as is possible and there shall be no lopping, topping or felling of these trees without the prior written approval of the Planning Authority.
- (6.) Prior to the commencement of any development on site, the detailed route of the permanent access tracks shall be pegged out and agreed on site by the Planning Authority.
- (7.) Prior to the commencement of any development on site, details of the location and extent of all temporary works, accesses, and storage areas/compounds shall be submitted to and require the approval in writing of the Planning Authority.

- (8.) During the construction phase, the normal working hours within the site shall be between 0730 and 1900 hours Monday to Friday and between 0730 and 1300 hours on Saturday, with no work being carried out on Sundays or public holidays, unless with the prior written approval of the Planning Authority in consultation with the Environmental Health Authority.
- (9.) Public access along the access tracks to the intake shall remain open throughout the construction period and the operation of the scheme. Notices shall be erected to advise of any diversions necessary, of a style and at locations to be agreed in writing with the Council's Access Officer before any work commences on site and shall be displayed before the tracks are affected. All tracks shall be reinstated immediately on completion of works in consultation with the Access Officer to the satisfaction of the Planning Authority.
- (10.) Unless otherwise agreed in writing by the Planning Authority, in the event of the scheme not generating electricity for a continuous period of twelve months with no realistic expectation of resumption in the foreseeable future, the site shall be reinstated within a period of eighteen months following the expiry of such period of cessation or within such timescale as agreed in writing by the Planning Authority. Reinstatement shall include the removal of the above ground infrastructure, if considered necessary, and restoration of the natural water regime to normal flows, to the written satisfaction of the Planning Authority in consultation with other relevant authorities.
- (11.) At least one month prior to the commencement of any development on the site the developer shall provide written notice of the commencement of development to the Planning Authority and the Highland Salmon Company Ltd.
- (12.) Prior to the commencement of any development on site, the developer shall install and thereafter maintain throughout the period of construction appropriate disinfection facilities, including vehicle matting and pedestrian foot disinfection baths at the vehicle and pedestrian entrance points to the development site. The location of these facilities and the specific disinfection measures at each site shall be provided for the agreement in writing of the Planning Authority at least one month prior to the commencement of development.
- (13.) The development shall be undertaken in accordance with the CAR licence issued by SEPA (CAR/L/1016861).

Reasons 1-13: In order to satisfactorily manage the development, in the interests of amenity and for the avoidance of doubt.

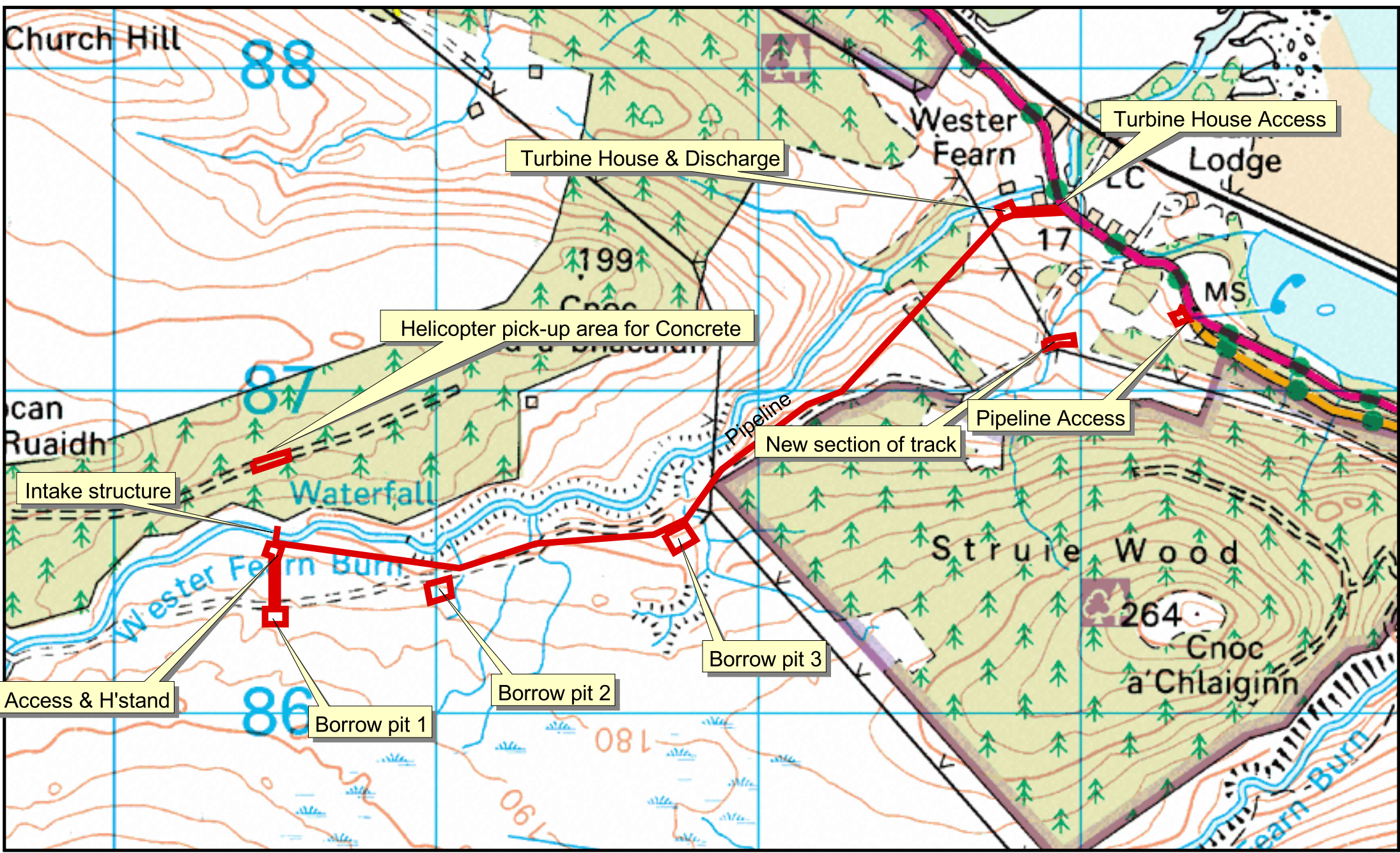
Signature: Allan J Todd

Designation: Area Planning & Building Standards Manager

Author: Bob Robertson 01862 812044

Background Papers: As referred to in the report above and case file reference number 06/00429/FULSU

Date: 17 January 2008



06/00429/FULSU  
 Installation of small scale hydro-electricity generation scheme (0.95 MW) consisting of access tracks, O H power line, pipeline, intake structure and turbine house with hardstanding and tailrace (Amended application) at Wester Fearn Burn, Midfearn, Ardgay.

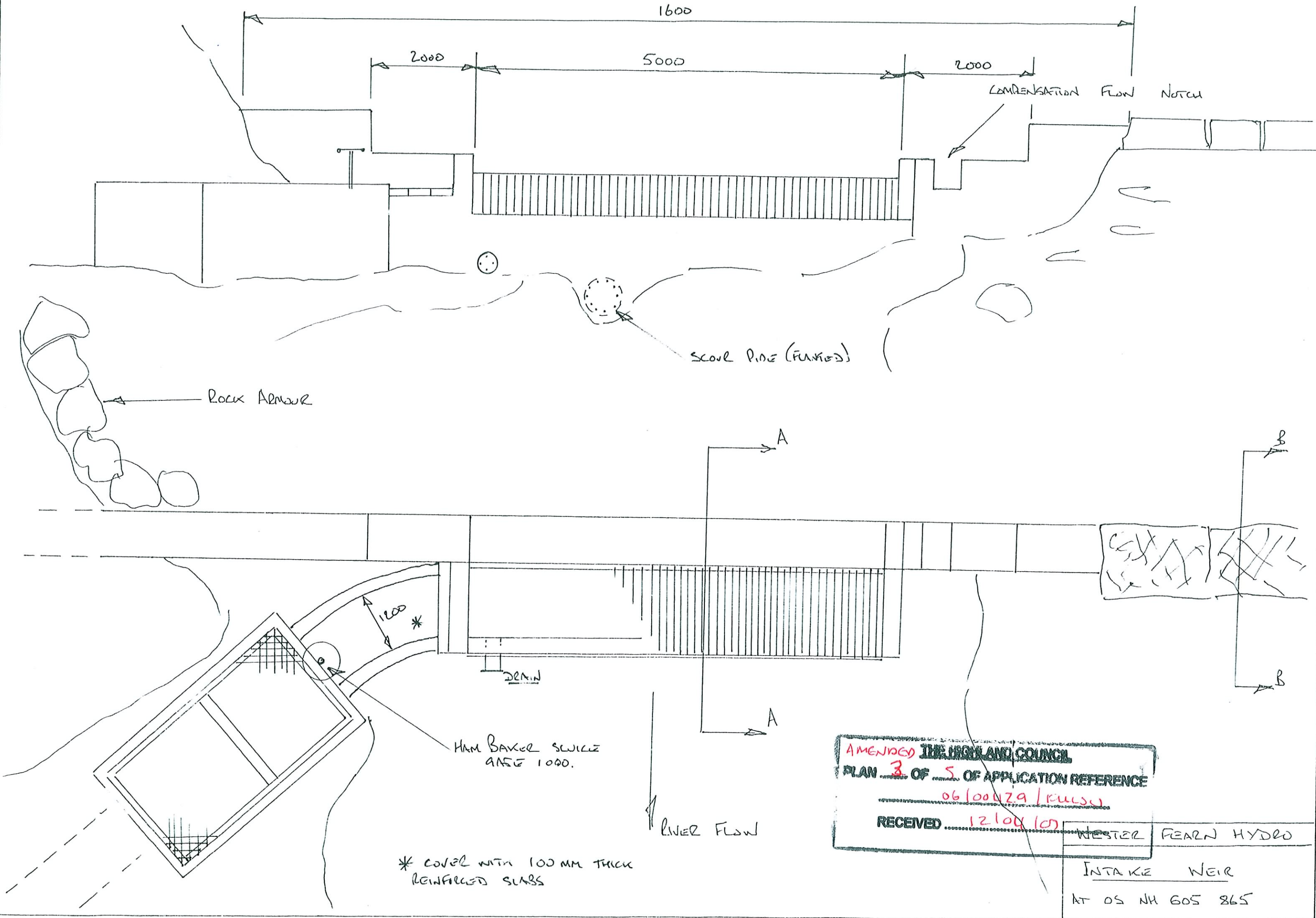
Mr C W Brooke  
 per John Duncanson Engineering Ltd  
 Inshoch House  
 Swordale Road  
 Evanton



Date: 15 January 2008

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1600

2000

5000

2000

CONDENSATION FLOW NOTCH

SCOUR PILE (FRAMED)

ROCK ARMOUR

A

B

1200 \*

DRAIN

HAM BAKER SWIRE  
RASE 1000.

RIVER FLOW

AMENDED THE HIGHLAND COUNCIL  
 PLAN 3 OF 5 OF APPLICATION REFERENCE  
 06/00079/KUSU  
 RECEIVED 12/04/09

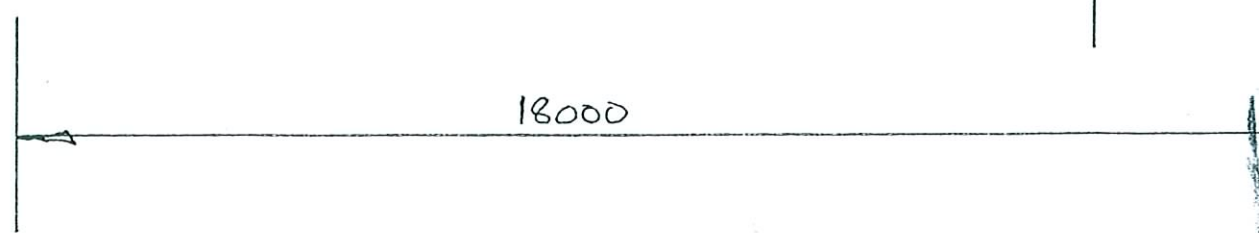
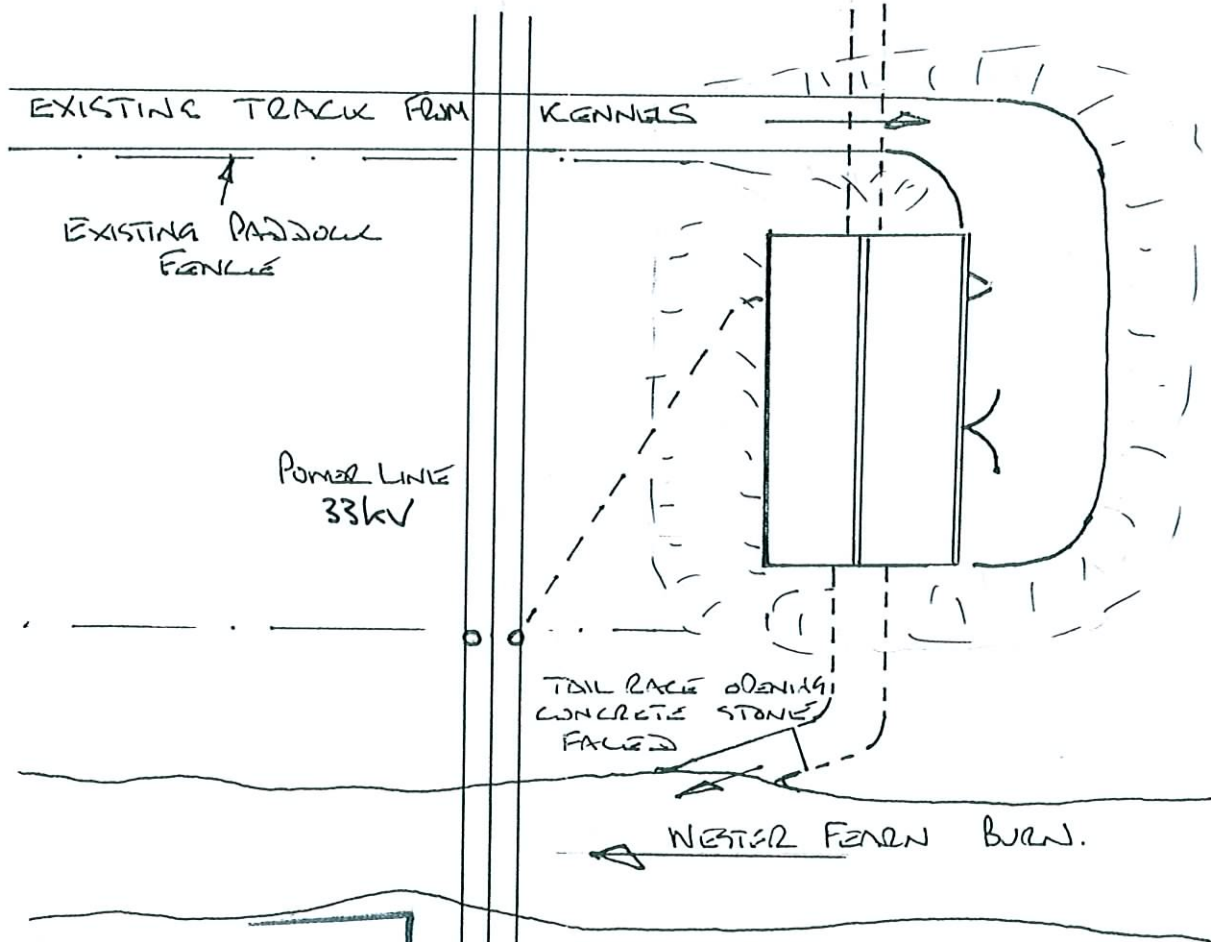
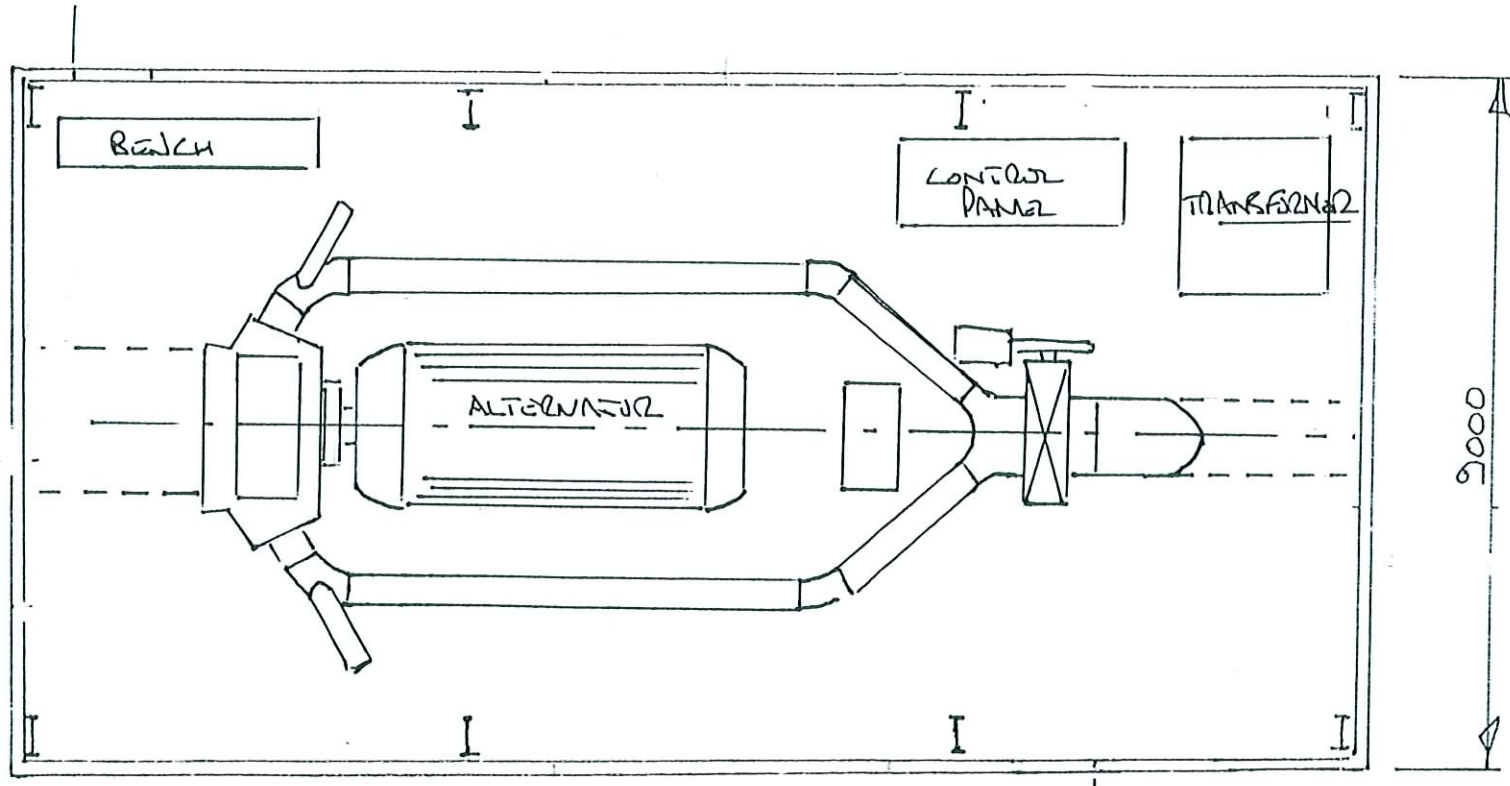
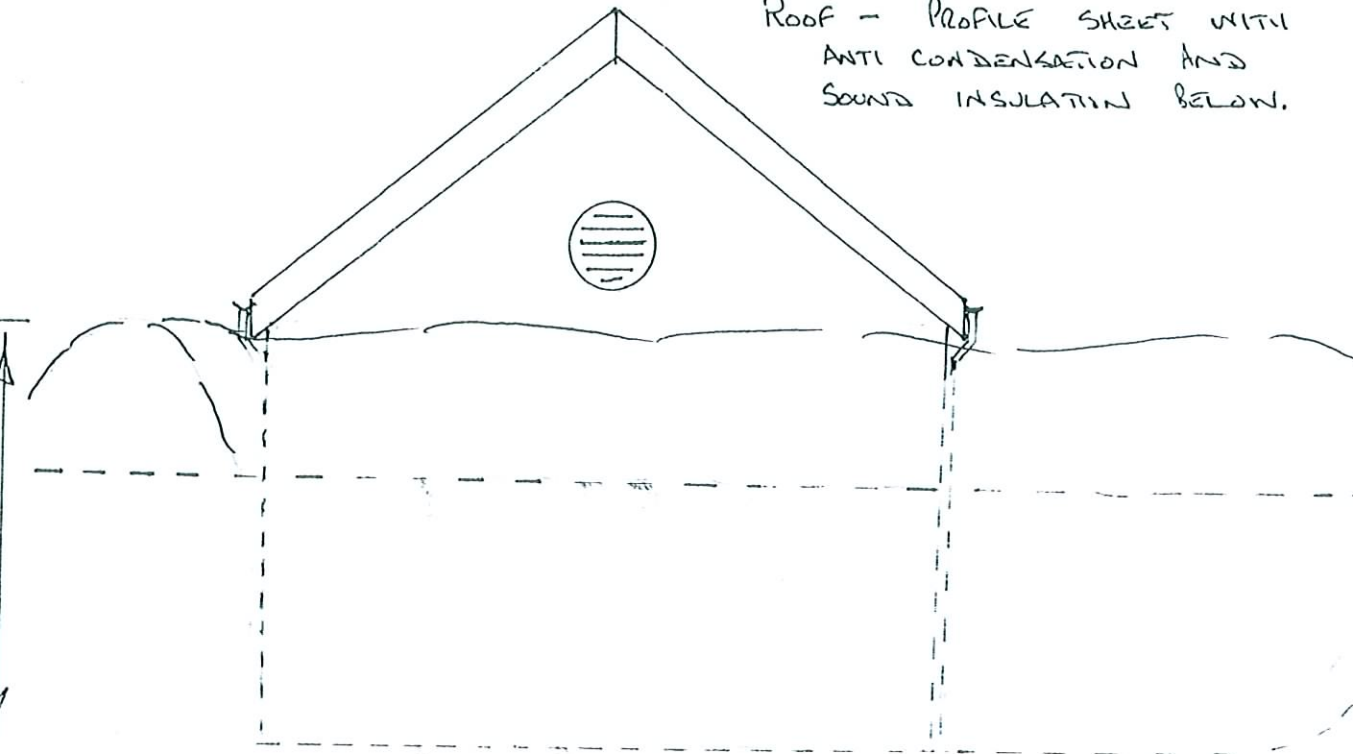
WESTER FEARN HYDRO

INTAKE WEIR

AT OS NH 605 865

\* COVER WITH 100 MM THICK REINFORCED SLABS

Roof - PROFILE SHEET WITH ANTI CONDENSATION AND SOUND INSULATION BELOW.



AM 6 030706/3 OF APPLICATION REFERENCE  
 PLAN 5 OF 5  
 06/00429/PUSO  
 RECEIVED 12/04/07  
 HATCHERY SITE

WESTER FEARN HYDRO  
 TURBINE HOUSE  
 ISSUE 3 9/4/07