



PITCASTLE

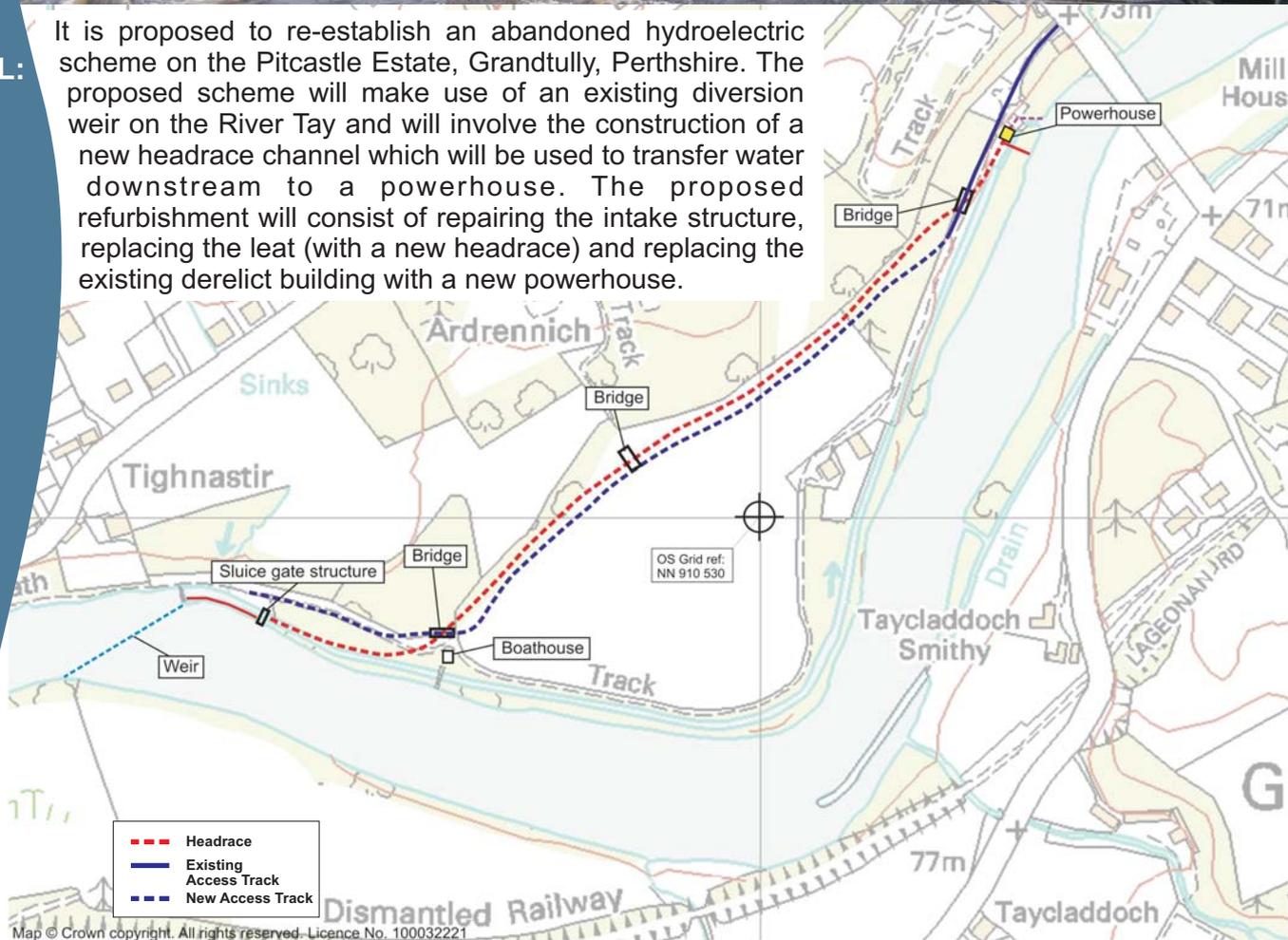
PITCASTLE HYDRO SCHEME

February 2011



The PROPOSAL:

It is proposed to re-establish an abandoned hydroelectric scheme on the Pitcastle Estate, Grandtully, Perthshire. The proposed scheme will make use of an existing diversion weir on the River Tay and will involve the construction of a new headrace channel which will be used to transfer water downstream to a powerhouse. The proposed refurbishment will consist of repairing the intake structure, replacing the leat (with a new headrace) and replacing the existing derelict building with a new powerhouse.



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As owners of Pitcastle Estate, we are aware that such a proposal may involve the views of the wider community. We feel that it is proper that you should know about our plans from the outset of the project so that we may answer any questions you may have.

We would therefore, like to invite you to attend a Public Meeting at the Lesser Village Hall, Grandtully on Wednesday 16th February 2011 between 7pm and 10pm. A short presentation and explanation of what is being proposed will be given as well as some time to answer any questions you may have. We hope you will be able to attend.

Public Meeting Invitation:



PITCASTLE

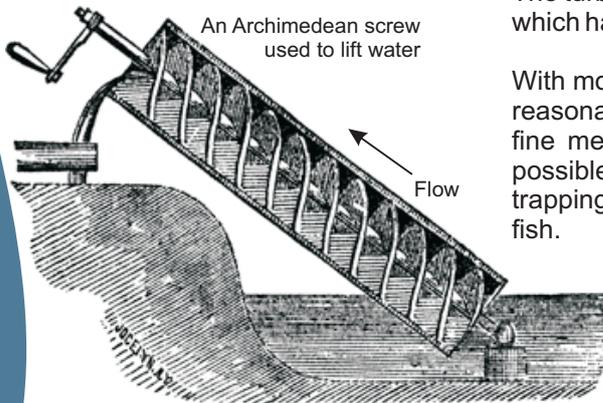


The SCHEME:

Water would be abstracted from the River Tay, by means of an existing diversion weir, and transported via a new headrace to a powerhouse. The water would then be discharged through a turbine, which would drive a generator to produce electricity. A tailrace leading from the powerhouse would return the flow to the River Tay, unchanged in quality or quantity.

The scheme will be a run-of-river design with no water storage facility and the electricity generated will be exported to the nearby grid. There are four principle components to the proposal:

- Weir (existing) and intake structure
- Headrace
- Powerhouse
- Access track



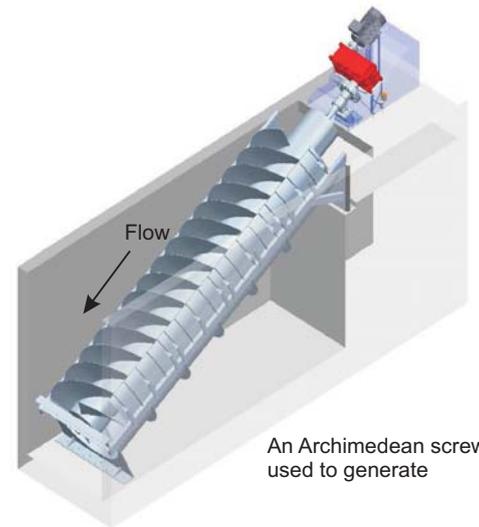
The turbine proposed for the scheme is an Archimedeal screw type, which has a number of advantages over conventional turbines.

With most turbines it is usual to exclude all fish and debris as far as reasonably possible, using expensive and often visually unattractive fine mesh screens, but with the slow turning Screw turbine it is possible to simply let the fish and debris through. There are no trapping points and no pressure discontinuities which can upset the fish.

With the proposed scheme, some larger mesh screening may be utilised to deter aquatic mammals.

Installation costs can be lower than comparable Kaplan turbines and they are mechanically simple. There are few moving parts, so less parts to get damaged and go wrong.

Screw Turbines have good visibility, unlike nearly all other turbines - you can see the water doing the work and generating the power.



The overall construction programme is expected to last approximately 10-12 months, although much of the main civil works will be completed in a 6-8 month period. The main component of the works will be digging the new headrace and constructing the powerhouse.

Although there are some local environmental impacts associated with the proposal, mitigation measures will reduce these to a level of low significance. **Given the contribution to Scotland's renewable energy targets and the associated carbon emissions reduction, this scheme offers significant national benefits.**

For more information contact:

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