

Acoustics

Strict guidelines exist concerning sound emissions from wind turbines and the final design of the wind farm will take full account of these guidelines. Acoustic assessments are undertaken in accordance with the relevant standards, current assessment methodologies and best practice as determined by the regulatory bodies, which include D&G Council, the Scottish Government and the UK Institute of Acoustics.

In consultation with D&G Council, we are undertaking a background sound survey at a number of locations around the site. The results from this survey will be analysed by our acoustics team and will inform the sound emission limits for the operation of the wind farm. These will be agreed with the Council and the wind farm will be required to comply with these as a condition of planning consent.

The acoustic impact of the wind farm will be modelled and the output of this modelled work will be presented in the acoustic chapter of the extensive EIA Report which will accompany the planning application.

The acoustic chapter of the EIAR will demonstrate that RES has considered all appropriate measures in the design, construction, and operation phases to minimise the acoustic impact of the wind farm.

Shadow flicker

Shadow flicker is a phenomenon where, under certain circumstances of geographical position and time of day, the sun may pass behind the rotors of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off.

Shadow flicker can be predicted, modelled and mitigated using specialised software. The Blair Hill Wind Farm proposal is being designed to minimise any potential for shadow flicker. Where shadow flicker is predicted, monitoring software can shut down certain turbines at a particular time of day or in certain weather conditions. This shadow flicker modelling work and potential mitigation measures will be presented in the EIA Report. These mitigation measures would also be included in the conditions of any planning consent.

Hydrology and private water supply

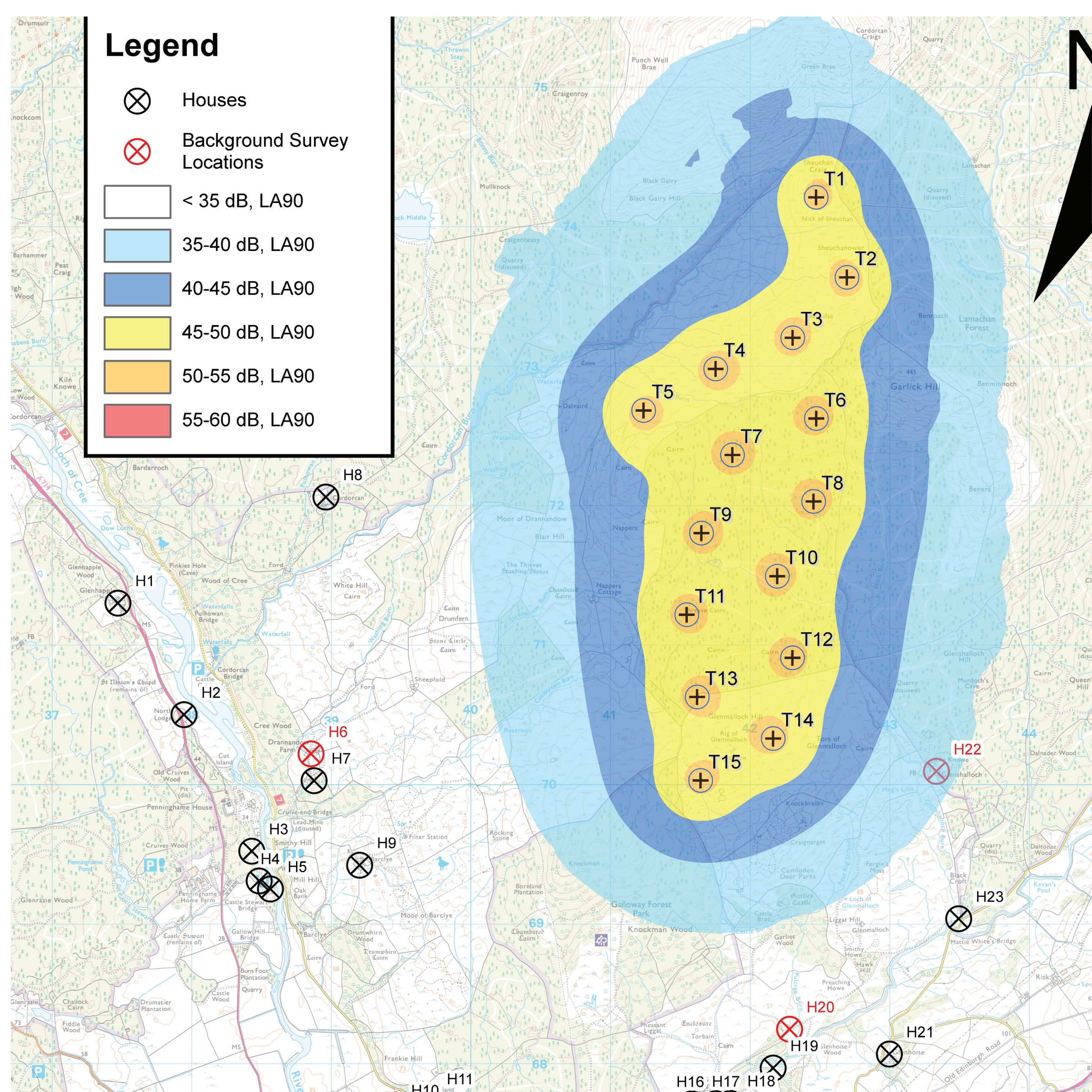
Surveys of the site have been undertaken to establish baseline conditions across the site and determine where sensitive water features are located. The updated layout design will avoid such areas.

A private water supply assessment is being carried out for inclusion in the EIA Report. In accordance with SEPA Regulations⁴, physical measures or additional protection would be put in place where appropriate to minimise the risk to water quality.

Peat

Peat depth surveys have been undertaken to understand peat depths and quality across the site. The surveys found that peat depth varied greatly, but in general indicated peat of less than 0.5m with some pockets of deeper peat.

The scheme has been designed to reduce infrastructure on areas of deep peat to avoid the sensitive habitats which it supports.



⁴<https://www.sepa.org.uk/regulations/water>