Proposal Description

Proposal to install GF175 biomass boiler and GFAF autofeed attachment to replace old biomass boiler at:

Trojanwood Ltd, Bourne Road, Pode Hole, Spalding, PE11 3LW

The site is located in the Pode Hole area, West of Spalding.

Proposed biomass boiler will be 175 kW heat input power. The boiler will have an GFAF automatic woodchip feeder and hopper attached. This allows flexibility for the boiler to be fuelled with wooden logs, woodchip.

The boiler will heat the water within it's water jacket and the circulation pump system will distribute the heated water around site via pipework to the premises heated.

The existing biomass fuelled heating system will refurbished and expanded to include additional space heating in the factory. The heating system will include 4 existing Fan Coil Units (FCUs) and various radiators, with a further 2 new FCUs proposed in the recent factory extension.

The pipe above ground will be carbon steel press pipe, any external pipework will be lagged with Isover Climpipe Section Alu2 Glasswool pipe lagging and wrapped with PIB weather proof rubber.

The fuel – logs and woodchip - for the boiler will be obtained from current supplier and sourced from site activities. The site produces wooden products such as wooden cabinets and joinery. Clean wood off-cuts will be produced into logs and woodchip to fuel the boiler.

For installation technical details please refer to "Particulars of the GF175 Biomass Boiler"; "Glenfarrow RHI Emmissions Certificate – Wood" & "AUTOFEED EMT04518 Glen Farrow UK Ltd - GF175-300kW RHI Certificate V2"; "GFAF V2 - SPEC SHEET"

During the works

Vehicular access to the property is via the existing access from Bourne Road and is unaffected by this application.

We anticipate approximately 3 deliveries of materials by wagon for the project and approximately 2 vans per day for the project duration.

The installation is anticipated to last no more than 3 weeks.

The boiler will be situated at the rear yard area behind the existing buildings.

The client's staff will be trained by an experienced Glen Farrow commissioning engineer to operate the boiler. Further support via phone, service or training visits available as normal.

Noise:
During the installation highest noise emitter will be a 4” grinder operating cutting the pipework. Most of the tools to be used will be battery powered light hand tools.

The boiler burner fan can produce up to 87.5 dB(A) sound pressure at 1 m in free air. The fan protection cover which encloses fan from 5 directions with opening facing floor, dampens sound pressure which reduces the noise levels.

The nearest noise receptor is a bungalow– approx. 40 metres from proposed boiler location.

The boiler fan is inverter driven and is speed controlled during normal operation.

Boiler stack was calculated to be 8 metres tall (from ground level) to ensure correct flue gasses dispersion. Boiler flue is 0.2 m ID.

The boiler stack emissions were screened using DEFRA Biomass boiler Screening tool to verify that further air quality assessment is not required.