DESIGN & ACCESS STATEMENT

Wood Chip Store, off Desford Lane, Ratby, Leics. LE6 0LN

This document has been prepared to accompany a 'determination' under Appendix B of the Town and Country Planning (General Permitted Development) Order 1995 ('the GPDO').

Purpose

The purpose of the building is to store wood chip for fuel, grown and harvested locally, within the rural area West of Ratby village. This area is within the National Forest, which is heavily tree-planted.

Forest thinning can be used as wood fuel, once it has been chipped and requires a local storage facility to avoid lengthy transport movements. Similarly, the purpose-grown, coppiced willow and hazel requires local storage to dry the material for use as fuel.

Freshly harvested timber is cut in the Autumn, initially dried 'in the round' over Winter and chipped in Spring. It needs to be stored under cover for at least six months in order to dry out and maximise its calorific value. Moisture content needs to be typically reduced from 70% to less than 25%. Above 25% moisture content the combustion efficiency is reduced drastically.

The Building

The purpose designed building has a floor area of 175 sq.m. and provides a storage volume of 455 cu.m.

It is rectangular in plan, with a curved roof which rises from 2.6m at the eaves to 4.1m at the apex. However, the base is to be dug into the sloping site so that the NE elevation only projects 2.5m above ground level at the highest point.

The building is a simple, steel portal of 6 stanchions carrying a shallow, curved roof of green profiled metal sheeting. All sides are formed with steel weldmesh panels which offer security, but allows the drying wind to blow through the structure to maximum effect. Precast 'L' shaped retention units are used internally to prevent material from spilling out of the sides.

A concrete loading forecourt of 130 sq.m. is to be formed immediately to the SW, at the entrance to the building.

The building is 'minimalist' in concept, with partially transparent 'walls'. Although it would be simpler to use a standard, prefabricated agricultural shed, the scheme's low curved roof is a more elegant solution and sympathetic to the landscape.

Location/Access

The proposed storage building is located 80 metres from Desford Lane, making use of the new access road recently constructed for Pear Tree Business Park. (See location Plan). It is discreetly located and 'dug into' the SW sloping site

Biomass fuel is to be used to heat the BREEAM 'Very Good' Pear Tree Business Park conveniently located on the adjacent site. The fuel will be transferred to the site by a small telehandler with a loading shovel, tipped directly into the hopper in the boiler house

Good vehicular access will facilitate the distribution of any surplus fuel to other local users. Coppiced timber and forest thinning will be transported to the storage facility by tractor and trailer along Burroughs Road and the agricultural track shown on the attached distribution map.

Agricultural Holding

The total agricultural land holding of Cawrey Limited extends to about 40Ha in total. Most of the land which relates to this operation is let under Farm Business Tenancies for grazing cattle and arable crops. The area for woodfuel production occupies 6.6Ha, comprising 1Ha of willow and hazel coppice to the North of Burroughs Road and 5.4Ha of amenity woodland (Wirlybones Wood) to the South of Burroughs Road. The amenity woodland contains stands of coppice and will provide annual thinning for the biofuel operation. The coppice willow is a fast growing 'Tora Hybrid' cut on a 3 year rotation.

The Woodland Trust administers Burroughs, Pear Tree and Martinshaw Woods, extending to an area in excess of 100Ha. Our client is in discussions with the Trust to receive thinning and waste material from felling, etc., for processing and storage within the wood chip building.

Biomass – Fuel of the Future

In the search for non-fossil fuel solutions, biomass is a 'no-nonsense' answer to carbon neutral heating. The growth of timber in woods or coppiced areas directly captures carbon dioxide from the atmosphere to create the fuel.

Central Government has targeted all new homes to be 'zero-carbon' from 2016, all new public sector buildings from 2018 and all non-domestic buildings from 2019. The Department of Energy and Climate Change (DECC) supports the Microgeneration Certification Scheme (MCS) and the Renewable Heat Incentive (RHI) which comes into force in June 2011.

Biomass is a sustainable, local resource, there is a plentiful supply of material in this area of the National Forest which can be processed locally and will help to future-proof new and existing developments.