Design and Access Statement

Issue 1.0

Produced for **Woodyfuel Ltd**

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Woodyfuel Planning Development

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QUALITY CONTROL

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1.0	06/11/2020	First Issue

CONTENTS

1.0 GENERAL CONSIDERATIONS

This document has been produced as part of a planning application made to North Lincolnshire Council to utilise existing structures, previously used as agricultural stores, and associated external concrete and hardstanding to house a wood processing operations at Holmes Lane Stores, Winterton, Scunthorpe, DN15 9QX.

This document is part of a suite of application documents which includes:

- The planning application form;
- The Planning Statement;
- Design and Access Statement;
- Air Quality Impact Assessment; and,
- Supporting drawings.

1.1 Introduction

This document provides a description of the design and access issues considered in respect of the development of an existing building previously used for potato storage, farm workshop and grading, weighbridge, existing concrete and hardstanding areas and the installation of four biomass boilers and two drying floors situated at Holmes Lane Stores, Winterton.

Site Address:
Holmes Lane Stores,
Winterton,
Scunthorpe,
DN15 9QX

Grid Reference: 494527, 418392

The existing site consists of three portal frame buildings and two lean to's which cover an area of approximately 0.36 acres. There is a large area of hardstanding and concrete which covers an area of 0.6 acres and there is also some previously undeveloped land bringing the total area of the site to 2.04 acres. The site is currently vacant and has been that way since mid-2018. Its most recent use was as a potato storage, farm workshop and grading facility.

1.2 The Applicant

Woodyfuel Ltd (Woodyfuel) is the applicant. Woodyfuel are a BSL approved wood fuel supply business based in Northern England. They provide wood chip, pellet and logs to companies that operate using small, medium and large-scale heat boilers. They currently operate from three sites in England (Stocksfield, Alnwick and Knottingley), two of which are in Northumberland and the other is in West Yorkshire, and are a leading supplier of wood fuel in the north of England.

The company is looking to develop a new site at Holmes Lane Stores so that they can continue to supply renewable fuel to customers in the north of England and expand into Lincolnshire. The site will be used primarily to process and store virgin wood products for fuel and also provide a side service to dry grain produced on the surrounding agricultural land.

The proposed activities to be undertaken on site include:

- The reception of virgin wood via weighbridge;
- Screening of virgin wood;
- Chipping of virgin wood;
- Storage of wood (in the round), forest residue, wood chip and wood pellets (all virgin);
- Transport of virgin wood;
- Use of four 600kW biomass boiler to provide heat to two drying floors;
- Use of two drying floors to dry biomass (primary purpose) and grain;

Please note, no waste wood will be brought on to site.

The development of this site will allow Woodyfuel to continue to produce renewable wood fuel in the north of England whilst also allowing them to offer a service to dry grain from the surrounding agricultural land. This will also enable Woodyfuel to minimise the carbon emissions and air pollution associated with the delivery of their products by reducing journey distances as well as those of the farms that require grain to be dried. The development will increase revenue as well as improve the environmental credentials of the company, which will allow Woodyfuel to continue to operate a sustainable business. This sustained business allows Woodyfuel to continue to support a range of direct and indirect local employment opportunities including the addition of two full-time employees, vehicle drivers, servicing and maintenance contractors, as well as a range of supporting administrative roles.

2.0 PROPOSED DEVELOPMENT

2.1 Site Description

The site is located at Holmes Lane Stores, less than 1km due east of the market town of Winterton. The site is located approximately 9.4km north east from the centre of Scunthorpe, 9.0km southwest of the centre of Barton-upon-Humber and 19km southwest of the centre of Kingston upon Hull (all distances are straight line). The Humber Estuary is located 3.3km north of the site. The surrounding area is predominantly of agricultural use, interspersed with hamlets. The site can be accessed via Holmes Lane. See Figure 1 below for current site location.

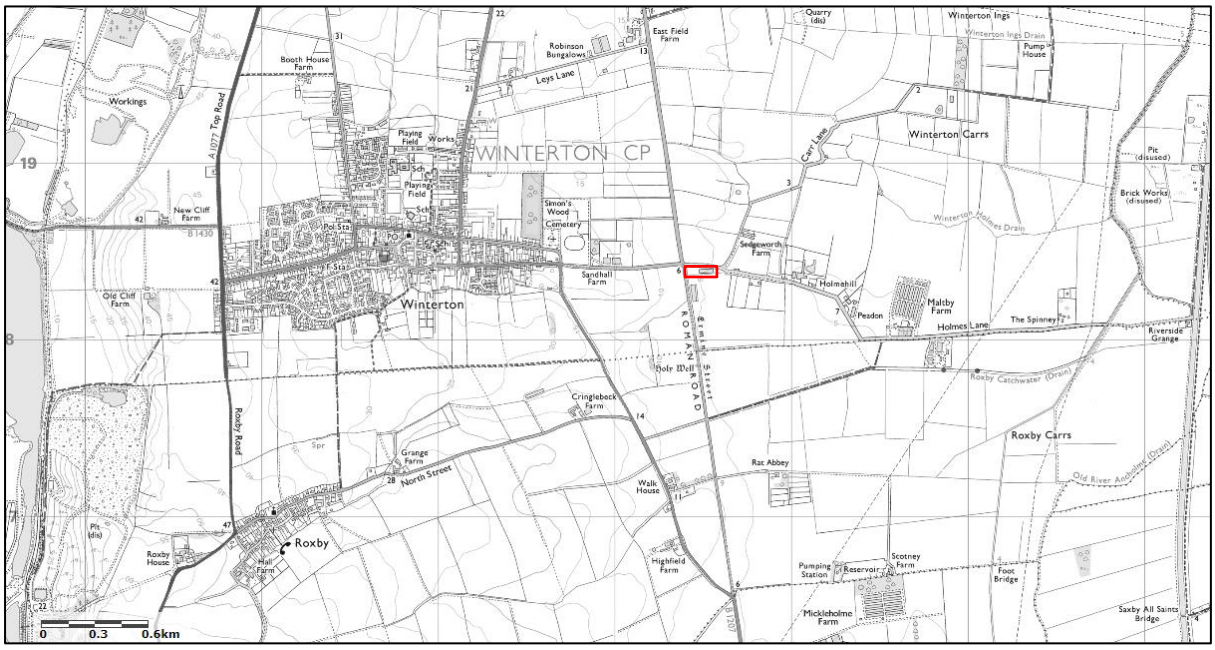

Figure 1 - Site Location Plan (Red Line Indicates Site Boundary)

The development is considered to be compliant with current and emerging planning policy (as detailed in the accompanying Planning Statement) and has been designed to minimise potential environmental impacts.

2.2 Existing Activities

The site is an existing site with three frame buildings, two lean-to's and a concrete and hardstanding area. The site has been vacant since mid-2018 and there are currently no activities taking place on the site. The most recent use of the site was as a potato storage, farm workshop and grading facility.

2.3 Proposed Activities

This application is for:

- The installation of a weighbridge;
- The operation of a wood processing facility;

- The installation of two drying floors to dry biomass (primary purpose) and grain; and,
- The installation of four 600kW biomass boilers to provide heat to the drying floors.

To provide an overview of proposed operations:

Forest residue (mix of top end of tree and branches) will be delivered into site and be deposited on the concrete or hardstanding area. Please note, this material is chipped in the forest and delivered to site on walking floor trailers. If required, it will then be loaded from the reception area on to the screener on the concrete pad or deposited directly on to the drying floor. The screener is a 3-way screener machine so from one side oversize will be deposited on the floor where it will then be chipped in the shredder, the second side will produce fines and the third side (centre conveyor) will provide the correct chip size. Once the oversize is chipped it will be deposited back on the concrete or hardstanding area to await delivery off site or placed on the drying floor if drying is required. The fine material will be deposited back on the concrete or hardstanding area to await delivery off site. The correct grade will either be dried or stored on the concrete or hardstanding area to await delivery off site, transported off site as soon as it has been screened or should it have been dried it will be stored in the existing building prior to being transported off site.

In addition to this activity, roundwood will be brought into site and stored separately on the concrete or hardstanding area. This material can be chipped as required straight into a walking floor trailer and transported offsite to avoid double handling. It can also be chipped and then moved on to the drying floors as required. Once dried, it will either be transported straight off site from the drying floors or moved into the buildings to await transport off site.

Wood pellets may also be brought to site where they shall be stored prior to transport to customers.

Also separate to this primary activity, grain can be brought onto site from nearby farms. The grain is deposited directly onto the drying floor. Once dry, the grain will be stored in the existing building prior to being transported off site.

Please note, depending on the customer base, different wood products may not be required at all times so the above description has been provided to give an overview of the potential activities.

2.3.1 *Annual/Weekly Tonnages*

The applicant envisages that the site will accept up to 13,000 tonnes per annum. On average, approximately 250 tonnes of virgin wood and/or grain will therefore be delivered to site per week. This average figure does not account for seasonal variation where demand may be higher than the 250 tonnes per week and lower in others but is included for ease of reference. Deliveries will not be received on Sundays.

2.3.2 *Biomass Boilers*

The boilers installed at site consist of four Binder 600kW thermal capacity boilers. The feeding system to each boiler involves an auger to deliver woodchip into the boilers. The boilers will be operated in line with the manufacturer's specification. The heat produced by the boilers will solely be used for the provision of all the heat required by the drying floors on site.

2.3.3 *Boiler Maintenance*

The boilers will have a manual de-ashing process to remove bottom ash that accumulates below the combustion grate. The ash is deposited into an attendant bin/skip prior to removal for disposal. As the exhaust gas enters the cyclone body it passes through swirl vanes that accelerate the gas velocity and the final fly ash particles are separated from the gas and fall to the bottom of the unit. A collection bin/skip is fitted to the cyclone to allow collection and removal of the fly ash. The treated gas is then drawn up the central tube and exhausted to atmosphere. The boilers have a high velocity airflow to maintain clean conditions and additional cleaning can be undertaken through a quarterly plant shutdown and clean out.

The boilers will be cleaned and maintained during each 72-hour cycle. There will also be between 2 and 4 major strip downs of the boilers per year, depending on requirements. These strip downs will take approximately half a day. Furthermore, the boilers will require one major service per year. The service will take approximately half a day.

The operation of the boilers will be supported by a full maintenance schedule which will include but is not limited to: daily visual checking of performance data levels and low order tasks such as greasing. An external contactor will conduct a quarterly visit schedule in which the boilers shall be stood down to enable a full clean out of the refractory, integrity inspection and cleansing/replacement of filtration equipment.

2.3.4 *Boiler Abatement System*

As all feedstock is sourced from virgin timber emission abatement technology is not required on the boiler.

2.3.5 *Drying Floor*

Virgin wood can be chipped and deposited directly onto one of the two Welvent drying floors, it can be chipped elsewhere on the concrete or hardstanding area and then transported to the drying floors or it can brought in directly as wet chipped. The drying process will consist of the following; round wood or forest residue will be brought to site with an average moisture contents of 60%, it will then be chipped and placed on one of the Welvent drying floors for approximately 72 hours or such time that the average moisture contents falls below 25%,. Wood chip will then be fed into the biomass boilers on site as required and surplus woodchip will be delivered to Woodyfuel's end customers. Alternatively, if required, wet grain will be deposited directly onto one of the two drying floors until such time that the grain has achieved the required moisture content before being loaded into vehicles for removal from site.

2.3.6 *Operating Hours*

The site will not be open to the general public. Table 1 below outlines the operating hours for the site, during these times the site will be fully operational, including receiving and dispatching deliveries.

Table 1 Woodyfuel Operating Hours

Day	Operating Hours
Monday – Friday	07:00 – 18:00
Saturday	07:00 – 14:00

Sunday	07:00 – 14:00
Bank Holidays	07:00 – 14:00

2.4 Layout

The site has a gross area of 0.83 hectares. The existing buildings make up 0.15 hectares of this, with the concrete and hardstanding areas making up 0.24 hectares The remaining area of land which is made up of unmade land with some vegetation makes up 0.44 hectares.

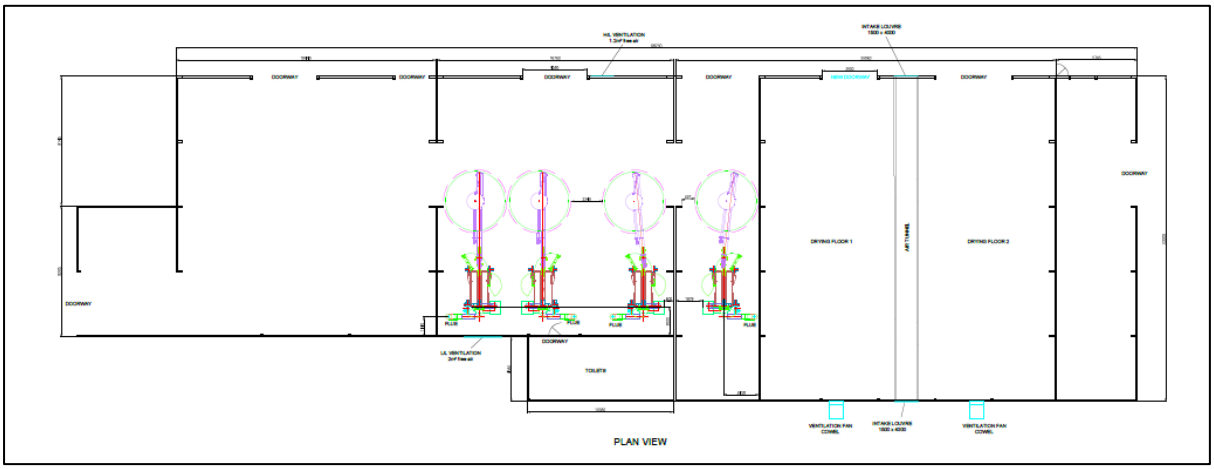

Figure 2 – Holmes Lane Stores proposed layout

2.4.1 *Concrete pad and hardstanding*

The existing concrete pad and hardstanding covers an area of 0.24 hectares and it is situated around the buildings albeit predominantly to the north, east and west. The concrete pad will be used for vehicle access on site and a carparking area is located to the west of the lean-to building towards the western side of the development. Wood will also be stored and processed on the pad via the screener and shredder. The existing concrete pad does not require any amendments.

2.5 Security

Security measures will be put in place at the development to restrict access. CCTV will be installed, as will a fire alarm. All buildings will be locked outside operational hours.

2.6 Scale

The development seeks to use existing buildings without major alteration so the scale of the site will not change.

2.7 Appearance

The existing Holmes Lane Stores buildings are a mixture of three portal frame agricultural buildings and two lean-to's. They are cladded with breeze blocks and concrete panelling. The development does not require any major alterations to the buildings and as such the appearance will not change with the exception of the four flues from the biomass boilers and amendments to access points. The applicant wishes to maintain the environment and the

character of the local area whilst increasing economic productivity and the social value of the site through job creation. It is considered that the proposed development will not negatively impact the visual character of the area.

2.8 Landscaping

Additional landscaping will not be required as part of this development to ensure that it blends in with the existing surroundings. The area of trees/hedges at the northern, southern and eastern boundaries of the site acts as landscaping and will be retained.

3.0 TRAFFIC STATEMENT

3.1 Site Access

Vehicular access to the proposed site will be as per the existing site which is via two entrances/exits to the site from Holmes Lane. The weighbridge will be located between the access points which will enable a one-way traffic system to be put in place for delivery / collection vehicles. The site layout and access allow for clear access and egress for both regular traffic and for Emergency Services.

The site will not be open to the general public. It is considered that all transport will be vehicular in nature however measures will be implemented to ensure that the site is safe for staff and visitors entering the site as pedestrians. A speed limit of 10 mph will be enforced on site.

3.2 Vehicle Movements

Delivery vehicles shall take the form of artic lorries/walking floors which carry 25 tonne loads. On average across the year, the proposed development is expected to receive approximately 10 deliveries per week (250t / 25t) and a similar amount of lorries removing loads from site for deliveries to customers. The total is therefore assumed to be 20 vehicles movements per week (these movements only account for a one-way trip so will double if accounting for movements in and out of site). This number may reduce when delivery lorries can backhaul (deliver loads and remove loads from site at the same time). Please note, this weekly figure is not deemed to be a maximum figure as it will be subject to seasonal variation where some weeks will experience higher numbers than the figures above. There are therefore expected to be on average 520 delivery transport movements per annum and 520 lorries also removing loads from site with a total of 1,040 movements per annum (these movements only account for a one-way trip so will double if accounting for movements in and out of site). Although the site is located on the B1207, it is less than 2km from the A1077 road which connects Barton-upon-Humber to Winterton with the only road between this and the site being the very straight Ermine Street. The roads in the area are also use to regular movements of agricultural vehicles given the rural setting. As per the numbers above, the proposed site is not anticipated to lead to a high volume of additional vehicle movements over the year and therefore it is the view of the applicant that there will be minimal associated impact with the import and export of materials from the site.

3.3 Parking

Virgin wood will be delivered to the site via artic lorries/walking floors. These vehicles will be required to use the weighbridge and then load and offload on the concrete pad.

The proposed development will have a car parking area which will provide 3 car parking spaces for the two full-time staff and visitors. The parking area will be to the west of the lean-to building towards the western side of the development, this provides easy access to the buildings for operatives and visitors.

4.0 ENVIRONMENTAL CONSIDERATIONS

This section of the supporting statement considers the implications of the development on various elements of the environment including noise, air quality, visual amenity, surface water and lighting.

4.1 Noise

In order to mitigate any noise from minor alterations to the site such as the installation of the boilers, drying floors and weighbridge, these will only occur during working hours. To minimise noise produced once the site is fully operational, deliveries will be limited to operational hours between 7am and 6pm. The building shall provide suitable noise attenuation for the activities conducted inside, including any noise which may arise from the boilers. A shredder and screener are also used on the external concrete pad. These are not seen to provide a significant risk of noise pollution as the site is in a rural setting and the activities will be limited to operational hours.

4.2 Air Quality

Due to the nature of feedstock, the boilers are likely to have minimal effect on air quality in the vicinity of the site. As all feedstock is sourced from virgin timber, emission abatement technology is not required boiler. The site is not in an Air Quality Management Area (AQMA). The closest ecological sensitive receptor is the Humber Estuary SSSI and SAC located 3.3km to the north of the site. The distance between the ecological receptor and site provides a buffer area, which aids the dispersion of potential pollutants. The pollutants should therefore not aggregate together into increased quantities.

4.3 Surface Water

The existing site has a well-established drainage system which will continue to be used by the proposed development.

4.4 Odour

The development is unlikely to create odour due to the scale of the development and woody (virgin) material handled. In addition to this, the boiler operations are undertaken inside the industrial unit providing a barrier to any odour which may arise, even though this is envisioned to be minimal too. The site does not process waste materials or burn them in the boiler, so odour/air abatement is not seen to be required.

5.0 SUMMARY

Detailed design and analysis have been undertaking with regard to mitigating any negative affect on the local area or environmental assets. The development of the site has been designed and certain activities are conducted indoors so that they can fit comfortably within the existing buildings without causing any significant negative impacts.

We see that the design of the development is considerate of the local area and that it also aligns well to the local planning policy objectives as set out in the accompanying planning statement.

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