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## Report of the Chief Planning Officer

### PLANS PANEL NORTH & EAST

Date: 5<sup>th</sup> January 2017

**Subject: 16/03101/FU—Change of use and extension of building from a workshop and storage to a combined heat and power plant and the storage of fuel at Moor Lodge Caravan Site, Bardsey, Leeds.**

#### APPLICANT

Mr James Brown

#### DATE VALID

6<sup>th</sup> June 2016

#### TARGET DATE

01<sup>st</sup> August 2016

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#### Electoral Wards Affected:

Harewood

Yes

Ward Members consulted  
(referred to in report)

#### Specific Implications For:

Equality and Diversity

Community Cohesion

Narrowing the Gap

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### RECOMMENDATION: GRANT PERMISSION subject to the specified conditions:

1. Standard time.
2. Plans to be approved.
3. Walling and roofing materials to matched the existing
4. Details of numbers of deliveries of fuel to be submitted and agreed, records of the delivers shall be kept.
5. Delivery vehicles shall not exceed the size (7.5 tons) and capacity shown on the details hereby approved.
6. Waste from the biogas unit shall be collected no more than every three months
7. Details of a scheme of noise assessment to be submitted and approved and if necessary, details of noise insulation measures shall be submitted to and approved in writing by the Local Planning Authority.
8. The wood burning plant / CHP unit shall not be operated until a scheme to control noise emitted (if necessary) from it has been approved in writing by the Local Planning Authority and installed as approved.
9. The delivery and loading / unloading of fuel for the wood burning plant and collection of waste produced by the plant shall be restricted to 08:00 hours – 18:00 hours Monday to Sunday.

10. Details of the chimney serving the biomass boiler to be submitted, the chimney needs to be set at a minimum height of 1 metre above the ridge of the building to reduce ground level concentration of pollutants.

## **1.0 INTRODUCTION**

- 1.1 The application was presented to Plans Panel on 1<sup>st</sup> December 2016. Members resolved to defer the decision for a cycle, so that the application can be brought back to with additional information on the type of fuel pellets that will be used, the process they go through and what the emissions/waste comprise of.
- 1.2 The proposed Biogas CHP generator will use wood chips and not pellets to generate electricity whilst also capturing usable heat that is produced in this process. Grade G50 woodchips will be used, which will be from uncontaminated natural or 'virgin' softwood timber, such as larch, spruce, pine or aspen. This means that the wood will be clean and free from any waste, including dirt, sand, rocks, metal etc. The moisture content of the chips will be a maximum of 15% (dry- basis) measuring around 16mm and 50mm in size.
- 1.3 The applicant states that the any woodchip used by the CHP unit will come from an approved supplier from the Biomass Suppliers List (BSL). The Biomass Suppliers List (BSL) was introduced by the Department for Business, Energy and Industrial Strategy (BEIS). It supports the Government's Renewable Heat Incentive (RHI) scheme by ensuring that RHI payments are only issued to biomass boilers using woodfuel that meets certain sustainability and legality requirements.
- 1.4 In terms of the process, the woodchips are fed into the gasifier where they are heated to a high temperature with a low oxygen level to release a combustible biogas. This biogas is then captured and cooled down in the heat exchanger and supplied to the filter unit. Solid particles are filtered out of the gas. The gas is then cooled down to +60C and mixed with air before being fed into the combustion engine. The engine runs a generator to create 45kW of 3 phase electricity. The heat in this process is captured in the water jacket of the engine before being piped out to be utilised.
- 1.5 The CHP unit will produce 45kW electrical, 82kW of heat from engine jacket and exhaust and up to 18kW from when the gas is cooled. This provides 100kW of heat, of which 100% will be used on site by the caravan park for a workshop, shower block, house and flat. Half the electricity produced will be used on site and Northern Power Grid has already agreed to take any surplus into the local network allowing local properties to benefit from a local renewable energy source
- 1.6 The applicant states that the ArborElectroGen system produces little or no visible smoke plume from its flue, virtually no particulates, virtually zero Nitrogen Oxides, and Carbon Dioxide emission levels that are 93% lower than that of an equivalent natural gas-fired CHP system. This is due to the process and temperature at which the gas is produced in the vessel, coupled with the fact that the gas is made up of approximately 50% combustible components (a fuel that produces water vapour and small quantities of carbon dioxide when combusted in the CHP system).

## **2.0 PROPOSAL**

- 2.1 The proposal is to change the use and extend the existing storage building on the site and to install a flue. The single storey extension will measure 4m by 4m and will be 2m in height. The extension is sought to facilitate the installation of an ArborElectroGen 45 Combined Heat and Power Unit. The energy generated will be

used to serve the applicants caravan park. The flue will largely be internal to the building but the top metre will project out and beyond the ridge of the barn.

- 2.2 The building will also be used to store wood chips (fuel for the power unit). The applicant states that the power plant will only require one delivery of wood chips per month to service their needs. Waste from the site will be taken quarterly.

### **3.0 SITE AND SURROUNDINGS**

- 3.1 The application site comprises an area of land that is used as a caravan site and a camping area, all of which is located between Moor Allerton and Scarcroft golf courses, and is located within the designated Green Belt.
- 3.2 Beyond the eastern boundaries are areas of mature woodland, forming part of the landscape of the adjacent golf course. The surrounding area is rural in character, comprising open farmland and areas of woodland.
- 3.3 The site features around 76 caravans, a cottage and a number of agricultural and storage buildings.
- 3.4 The application relates to an agricultural building which was approved in 1993. The applicant claims that the building is currently used for storage purposes for the wider caravan park and on inspection of the building this seems to be the case. The structure is of a conventional agricultural design clad in green coloured metal profile sheets.

### **4.0 RELEVANT PLANNING HISTORY**

- 4.1 There have been a number of applications approved and refused on the site for various buildings and change of use of buildings within caravan park. It is considered that the most relevant of these with regards to a 1993 application under which this storage building was approved ref: 31/38/93/FU. This permission included a following condition;

*The proposed barn, hereby approved shall only be used in conjunction with the stable approved under consent no 90/31/00300, and for those purposes incidental to the enjoyment of the dwelling house as such.*

The reason for the condition was: Because this is not considered a suitable location for a commercial activity.

- 4.2 In 1999 an application seeking Agricultural Determination for the extension was refused (31/273/99/DE). The refusal reason sited that the building was not at the time being used for agricultural purposes and therefore the application could not granted.
- 4.3 Recently an application seeking to house the power unit was refused for its harmful impact upon the openness and the character of the Green Belt ref: 16/01266/FU.

### **5.0 HISTORY OF NEGOTIATIONS**

- 5.1 Following Highways Officer's request for further information on the visibility, details on the frequency of deliveries, the type of delivery vehicles and the turning area within the site. The applicant after discussion with the Planning Officer, provided additional information that was requested this included a site plan that clearly identifies the

access point and the details of the type of delivery vehicle that will be used.

## **6.0 PUBLIC/LOCAL RESPONSE**

6.1 The original site notice for the application was posted on 24.08.2016, after the description of the application was changed a second site notice was posted 01.07.2016.

6.2 8 letters of objections received raising the following concerns;

- The proposed introduction of an industrial process is an inappropriate form of development within the green belt and would harm the local community.
- The proposal is an inappropriate form of development within the Green Belt
- The plans fail to show how the internal layout of the building will function.
- Walls of the building will have to be removed to install the power unit.
- The applicant has failed to indicate additional hard surfacing that will be required for large delivery vehicles to turn within the site.
- Further alterations to the building will be required to accommodate the power unit but these have not been shown on the plans.
- The noise, smoke and smells from the site will harm neighbouring residential amenity.
- The highways and access point to the site is substandard and would not allow for large delivery vehicles safely enter and exist the site.
- The emissions from the unit will cause environmental damage.
- The applicant's assessment that the only one delivery a month will be required to serve the power unit is considered inaccurate
- The feasibility of the power unit is questionable
- The drainage within the site has not been clarified
- There are no waste disposal details submitted with the application
- The proposal may require a larger flue to dispose excess energy
- Details of fuel storage has not been provided.
- The noise and pollution from the plant will have a negative impact on the residents of the caravan park.
- The applicant's assessment that the only one delivery a month would be required in in accurate
- The statement made that no employees will be required on site is also not accurate.
- The noise from the plant and equipment and also deliveries as well as smells and pollution from the unit will have a harmful effect on neighbouring residential amenity.
- The proposal will increase traffic
- The highways and access point to the site is substandard and therefore an increase in traffic movement will raise highway safety issues.
- There are a number of inconsistencies in the supporting evidence.
- The revised scheme should be treated as a new application.
- Noise from the movement of vehicles
- Additional staff will be required

6.3 The Parish Council comments that the application is confusing and that they would like the applicant to attend the next Parish Council meeting.

## **7.0 CONSULTATIONS RESPONSES**

- 7.1 Highways- No significant concern raised, but comments that there is a need to control the size of vehicles.
- 7.2 Nature Conservation- No objection.

## **8.0 PLANNING POLICIES**

- 8.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications are determined in accordance with the development plan unless material considerations indicate otherwise.

### Development Plan

- 8.2 The development plan for Leeds is made up of the adopted Core Strategy (2014), saved policies from the Leeds Unitary Development Plan (Review 2006) (UDP) and the Natural Resources and Waste Development Plan Document (DPD), adopted January 2013.
- 8.3 The site is unallocated in the Development Plan, and is adjacent to the Leeds Habitat Network.
- 8.4 The following Core Strategy policies are relevant:
- P10 – High quality design
  - P11 – Relates to heritage assets
  - P12- Developments in the Green Belt
  - EN3- Low Carbon Energy.

- 8.5 The following saved UDP policies are relevant:

- GP5 – General planning considerations
- N25 – Landscaping
- BD5 – General amenity issues
- LD1 – Landscaping
- N33 – Development within the Green Belt
- N37- Special Landscape Area

### Natural Resources and Waste Local Plan

- 8.6 Energy 3: Proposals for low carbon energy and supporting infrastructure will be supported in principle. However, the proposals must demonstrate the facility has potential to connect to an outlet; the development has addressed Waste 9; and, the proposal should demonstrate the potential to contribute towards CHP.
- 8.7 Waste 9: Environmental and amenity aspects such as appearance, noise, dust, litter, odour, drainage, vermin and gas emissions.

### National Planning Policy

- 8.8 The National Planning Policy Framework (NPPF), published on 27<sup>th</sup> March 2012, and the National Planning Practice Guidance (NPPG), published March 2014, replaces previous Planning Policy Guidance/Statements in setting out the Government's planning policies for England and how these are expected to be applied. One of the

key principles at the heart of the Framework is a presumption in favour of Sustainable Development.

- 8.9 The introduction of the NPPF has not changed the legal requirement that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise. The policy guidance in Annex 1 to the NPPF is that due weight should be given to relevant policies in existing plans according to their degree of consistency with the NPPF. The closer the policies in the plan to the policies in the Framework, the greater the weight that may be given. In respect of the green belt and extensions to buildings the NPPF sets out that planning permission should not be granted unless, amongst other factors, "...the extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building".
- 8.9 The NPPF states that Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development. Paragraph 89 of the NPPF states that LPA's should not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and

## **9.0 MAIN ISSUES**

- Principle of Development – Impact on the character and the openness of the Green Belt
- Renewable and Low Carbon Energy
- Visual Amenity/ Design/ Special Landscape Area
- Highways
- Impact on Neighbouring Residential Amenity

## **10.0 APPRAISAL**

### Principle of Development – Impact on the character and the openness of the Green Belt

- 10.1 The application seeks permission to change the use of this storage building so that it can be used to house a Biogas CHP generator and wood chips. For this, a change of use of the building is required, as the existing building is restricted to be used in connection to a stable block and for purposes incidental to the enjoyment of the main dwelling house on the site (see planning history section of the report). A 4m by 4m single storey extension is also proposed to the building and a flue will also be attached to the building. The extension will be constructed on existing agricultural land.
- 10.2 In establishing the principle of the development, considerations needs to be given to specific planning policies that relate to the change of use of buildings and also with regards to the alterations to building, within this Green Belt location.
- 10.3 In so far as the re-use of the building is concerned, the Council's development plan policies (notably Policy N33 and GB4 in tandem) are not entirely consistent with the NPPF. As the guidance of the NPPF with regard to the re-use of buildings in the Green Belt is more up to date than the UDPR policies, the guidance in the NPPF

should be preferred. The NPPF (Para 89) sets out the categories of development which are appropriate in the Green Belt. This includes the reuse of buildings in the Green Belt, provided that the buildings are of permanent and substantial construction.

- 10.5 In light of the guidance provided by the NPPF, the key consideration with regards to the proposal is whether or not the building, which is proposed to be changed in use, could be regarded as being of permanent and substantial construction. Although, a structural report has not been submitted, it is not necessary. As it is evident from the inspection made by the Case Officer during the site visit that the profile metal clad structure is of a permanent and substantial structure. Therefore, it is considered that the re-use of the building is considered acceptable.
- 10.6 In relation to the extension to the building and the addition of the flue, the NPPF allows for extensions and alterations to a building provided that they do not form disproportionate additions to the building. It is considered that the proposed extension is fairly modest in scale when compared to the overall size of the main building and will not amount to disproportionate addition to the building. Therefore, it is considered that the proposal will not be harmful to the openness or the character of the Green Belt. The extension will encroach over existing agricultural land. However, the area of open land that will be lost is a fairly small and will not cause significant harm to openness. It is considered that minimal harm may result from the loss of some open grass land, can be outweighed by the environmental benefits of the scheme.
- 10.7 On the basis of the above, it is considered that the proposed development does not conflict with Green Belt policy relating to re-use of buildings or in relation to alterations to buildings. Therefore, it is considered that the proposed development constitutes an appropriate form of development within the Green Belt and will not be harmful to the Green Belt.

#### Renewable and Low Carbon Energy

- 10.8 Weight in favour of the scheme is also given by reference to Paragraph 17 of the NPPF which sets out 12 core principles that identify the 'roles that the planning system ought to play'. The fifth principle states that the green belt should be protected and that the character and appearance of the countryside is important. The guidance contained in the sixth principle outlines that the use of renewable resources should be encouraged. National policy sets a context for a rapid transition towards renewable and low carbon energy generation.
- 10.9 Paragraphs 18 and 93 reiterate the importance of the delivery of low carbon energy and that it is essential to the three elements (environmental, economic and social) that form sustainable development. Local Planning Authorities are strongly encouraged to support energy efficiency improvements to existing buildings (paragraph 95), take positive steps towards the production of low carbon and renewable energy in plan making (paragraph 97) and should not require the applicant to demonstrate need (paragraph 98).
- 10.10 The proposed biogas generator facility is considered to be a renewable low carbon energy source. Local plan policy (the Natural Resources and Waste Local Plan (NRWLP) and the Core Strategy (CS) support the development of renewable and low carbon energy. In this case, policy Energy 3 and policy EN3 (of the CS) are relevant, which are outlined in the policy section. Tackling climate change is a strategic priority for the Council.

#### Visual Amenity/ Design/ Special Landscape Area

- 10.11 The extension and the flue are modest structures will not appear prominent from public view. Therefore, it is not considered that the proposal will harm the landscape of this special landscape area. The simple shape and form of the single storey extension and the flue, as well the use of matching materials for the construction of the extension; will ensure that it will not harm the design of the building or the character of the area.
- 10.12 The flue will be of modest dimension and will be set 1m above the ridgeline of the main building. It is considered that the flue will not appear prominent from public vantage points and will have little impact on the design of the building or the character of the area.

### Highways

- 10.13 The access will be taken off the existing access point which is considered to be suitable for use by delivery vehicles and has appropriate sightlines at the junction. Therefore, no technical highway objections are raised to the proposal.
- 10.14 It has been stated (by the applicant) that woodchip will be delivered once per month and that this is the same frequency as adjacent residents who receive monthly deliveries of oil. It is stated that the size of the vehicle is identical to oil tank refill deliveries that the other neighbours receive. The applicant also states that waste will be stored on site and removed quarterly. Given the frequency of the deliveries and waste collection, it is not considered that the movement of traffic to and from the site will be significant. Therefore, based on the information provided, it is not considered that the movement of traffic will harm neighbouring amenity through noise nor will it raise highway safety concerns. The Highways Officer has also come to a similar conclusion and in light of the suitability of the access, that vehicles can enter and leave the site in a forward gear, that adequate sightlines exist and that the speed limit on this section of road is 30mph a more frequent delivery regime could be accommodated without harming highway safety. There are however some concerns that relate to hours of delivery and condition have been imposed to address this issue.

### Impact on Neighbouring Residential Amenity

- 10.15 It is expected that some fumes and noise will be omitted by the power generated and therefore consideration needs to be given to the impact of this on neighbouring residential amenity including the residents of the Caravan Park. The building is set 53m away from the nearest neighbouring dwelling No.101 Blackmoor Lane and around 5m away from the nearest caravans.
- 10.16 Members of the public have raised concerns in relation to the noise levels emitted from the unit and from wood chip deliveries. The Ward Councillor's and objectors also comment that the unit will cause air pollution and environmental damage. It is acknowledged that due to the nature of this power generating unit which will also be generating electricity (in addition to hot water & space heating), there are likely to be noisy fans / motors / turbines and other moving parts ( auto feed system) with the potential to generate noise. There has been no noise assessment report submitted in support of the application in accordance with BS4142 :2014 "Methods for rating and assessing industrial and Commercial Sound".
- 10.17 There is, however, some basic noise data which states that the noise levels from the proposed equipment will be approximately 80dBA at 1 metre away. The nearest



noise sensitive dwelling is situated approximately 75-80 metres away from the building where the boiler will be installed. However, other noise-sensitive static caravans / pitches situated adjacent to the site are situated much closer but these are under the control of the applicant. It is, therefore in the interest of the applicant to ensure that his own clients / customers are not affected by the noise and proper noise assessment is carried out by a competent noise consultant and accordingly recommend noise mitigation measures. Condition 7 is suggested and this requires a noise assessment to be carried out and then if the results of that show it is necessary sound proofing can be installed within the building to deaden any noise impacts. The Environmental Protection Team have advised that an appropriate sound insulation scheme can be achieved at the building.

- 10.18 The Environmental Protection Team have assessed the scheme and has raised no objections and have commented that the background noise levels, resulting from the proposal, are likely to be low. However, it is recommended that a noise survey is carried out during the day time and night time in accordance with the BS4142 standard, so as to ensure noise issues do not arise. The Environmental Protection Team also recommends that in order to comply with provisions of the Environmental Protection Act 1990 to prevent Odour and smoke nuisance to the nearby properties, the boiler chimney should be constructed 1 metre above the ridge on the building to ensure that the emissions from flue are adequately diluted and dispersed to atmosphere. Environmental Protection have not recommended noise insulation scheme for the building, but it is advised that a sound insulation such a scheme can be achieved within the confines of the building and this could potentially be beneficial to neighbouring residents particularly of the caravan park. However, following the carrying out of a noise assessment it may be the case that such insulation is not necessary.

#### Public Representation

- 10.19 Comments made that the proposal in relation to the scheme being an inappropriate form of development in the Green Belt, highway safety, pollution, noise and smell have all be discussed in the report. There proposed scheme is found to be acceptable with regards to these issues.
- 10.20 The comments made that the plans fail to show how the internal layout of the building will function, is unreasonable. The layout of the scheme has been shown. The function of the site has also been described in the Design and Access statement.
- 10.21 The claims made that the walls of the building will have to be removed to install the power unit, is noted. The building features a large access door which it is considered is sufficient size for the proposed internal works to be carried out.
- 10.22 An objector has indicated that the plans fail to indicate the additional hard surfacing areas that may be required. Most of the areas of hard standing already exists within the site and therefore it is not considered that large amount of hard-standing will be required.
- 10.23 Comments have been made that further alterations to the building will be required to accommodate the power unit but these have not been shown on the plans. The applicant has indicated the alterations that are required to the building on the plans. Should any further works are required than naturally the applicant would apply for planning.

- 10.24 The claims made by the objector that there will be a requirement to employ an additional staff member to operate the power unit, is noted. Given the size and scale of the heat generating unit it is unlikely that any additional staff members would be required. However, if the power unit does create employment in this rural area then this would not necessarily be a negative point.
- 10.25 The comments made relating to the feasibility of the power unit, is not a material planning consideration.
- 10.26 The comments have been made that any conditions relating to the number of deliveries cannot be enforced. It is considered that such conditions can be enforced.
- 10.27 An objector has commented that the drainage works required within the site has not been clarified. The applicant has informed the LPA that there is no additional drainage works that are required.
- 10.28 There comments made that there are no waste disposal details submitted with the application, is not correct. The applicant has indicated that the waste will be taken from the site in a quarterly basis.
- 10.29 An objector has commented that a larger flue may be required to dispose the excess energy. It is considered that should a larger flue be required then this can be dealt with under a separate application.
- 10.30 Inconsistencies in the design and access statement highlighted by the objector's, are noted. These have not affected the manner in which this application has been processed.
- 10.31 The objectors have commented that the revised scheme, which resulted in changes being made to the description of the application, should be treated as a new application. The application was re-advertised following the change in the description of application, and it is considered that the process does not need to be re-stated.
- 10.32 With regards to noise from vehicle movement, it is considered that infrequent nature of the deliveries and waste collection, which can be controlled by condition, means that the noise from vehicle movement will not be significant.

## **11.0 CONCLUSION**

- 11.1 It is considered that the proposed development is an appropriate form of development within the Green Belt and will not harm its openness or character. The proposal does not raise highway safety issues nor will it harm neighbouring residential amenity; and whilst also considering the environmental benefits of the scheme, it is considered that the application should be approved.

### **Background Papers:**

Application files: 16/03101/FU

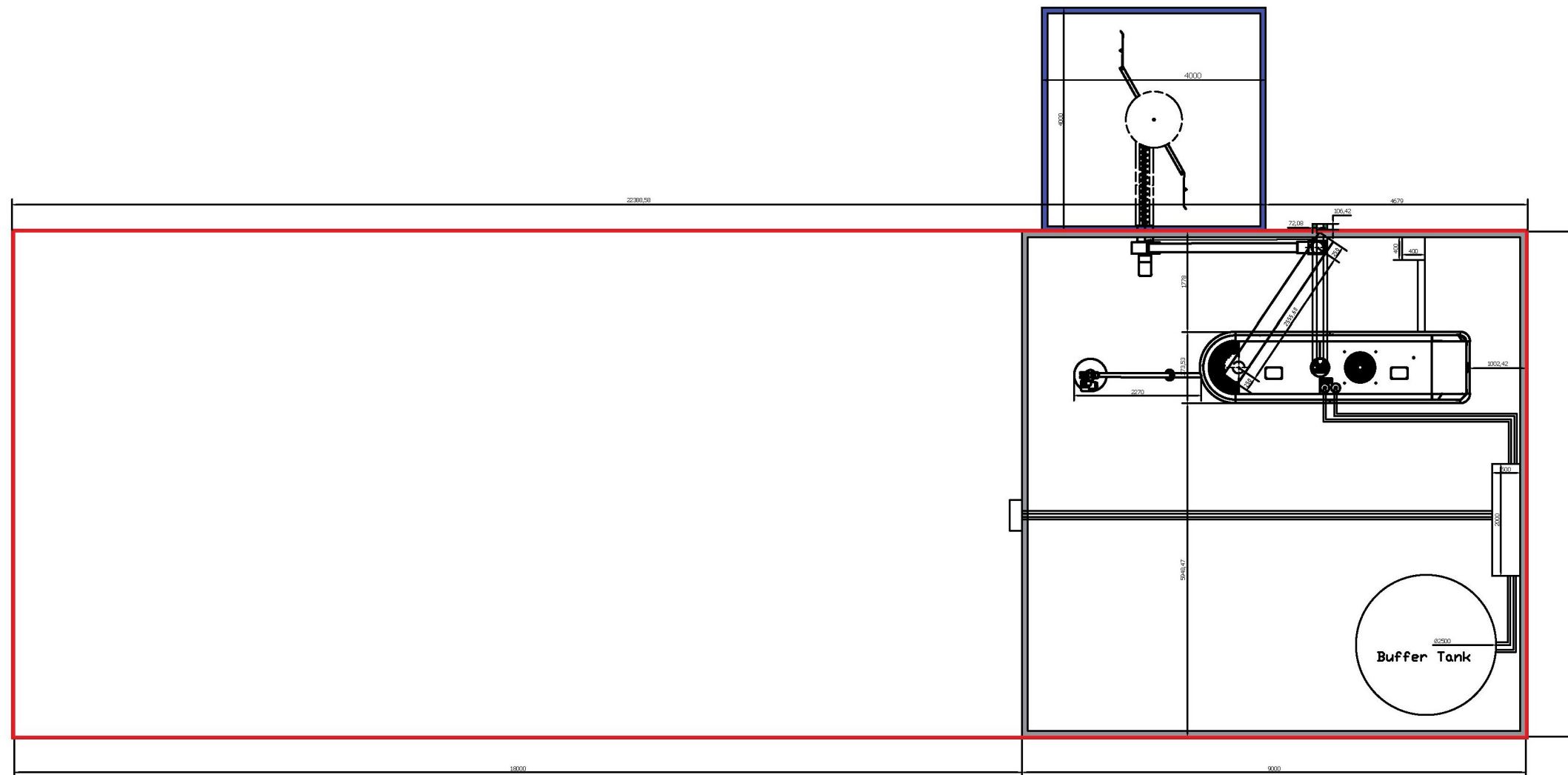
Certificate of ownership: Mr James Brown

DRAWING TITLE

# Plant Room Plan View

NOTES

- Noise insulation
- Existing building
- Proposed fuel intake hopper
- Proposed external flue



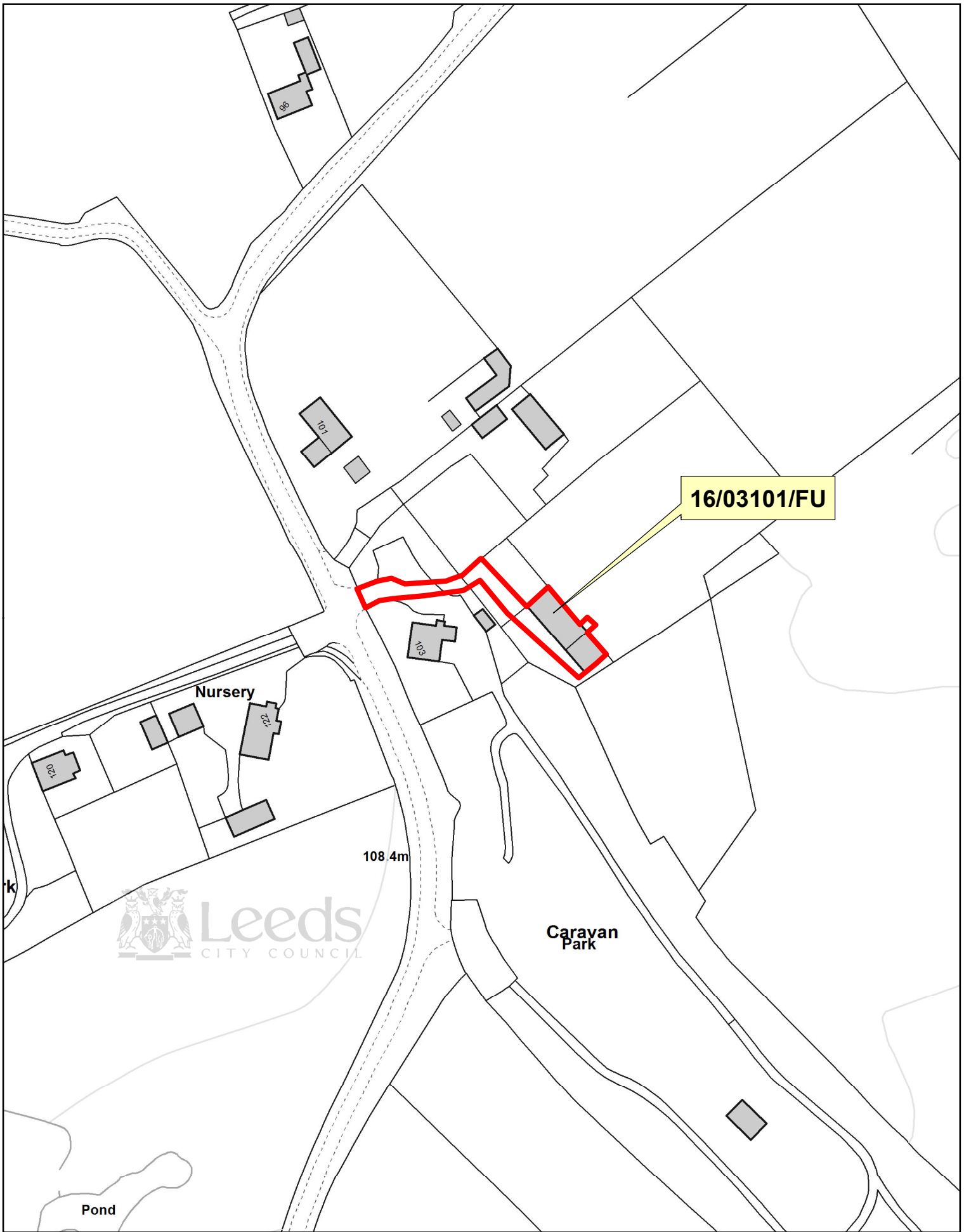
CLIENT

James Brown

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CHECKED	XX	DATE	XX/XX/XX
APPROVED		DATE	

SCALE	1:100	SHEET	1/1
PAPER SIZE	A3		

DRAWING



# NORTH AND EAST PLANS PANEL

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SCALE : 1/1500

