



Design and Access Statement

Construction of a Multi-Tier Free Range Egg Production Unit

at

Deeping Fen Farm
Baston Outgang Road
Baston Fen
Spalding
PE6 9PU

Applicant

R.P Watts (Baston Fen) Ltd
Vine House Farm
Deeping St Nicholas
Spalding
PE11 3DG

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1. The Applicant

The Applicant is R P Watts (Baston Fen) Ltd of Vine House Farm, Deeping St Nicholas, Spalding, PE11 3DG.

The site address is Deeping Fen Farm, Baston Outgang Road, Baston Fen, Spalding, PE6 9PU. Deeping Fen Farm consists of 550 acres, with 2,000 acres as part of the Applicants wider land ownership.

The development proposed is a 32,000 bird multi-tier free range egg production unit at Deeping Fen Farm. As part of the Applicants wider free range egg business, the Applicant employs three/four full time members of staff at The Pheasantries. Subject to planning, the Applicant would have the opportunity to employ three full time members staff, as part of the development proposed.

The Applicant has secured a long-term contract with Bowler Eggs, who have agreed to purchase the eggs produced on site.

The extent of the Applicants land ownership is edged blue. The Application site is circled red.



2. The Proposed Development

The Development proposed is the construction of a Multi-Tier Free Range Egg Production Unit at Deeping Fen Farm.

The unit proposed would house 32,000 free-range laying hens.

The free range egg industry has been subject to long term growth and profitability. Consumer demand for free range eggs is increasing, which puts pressure on the major Supermarkets. Egg producers are looking to increase the production of free range eggs, in order to satisfy that demand.

3. Supporting Documents

- a) Odour Report
- b) Detailed Ammonia Modelling
- c) Manure Management Plan and supporting Plan
- d) Simple Calculation of Atmospheric Impact Limits - Data Input and Results
- e) 2,500 Gallon Underground Tank Specification
- f) Flood Risk Assessment
- g) Elevation Plan - Profile View 20/08/18
- h) Elevation Plan – Pop holes 20/08/18
- i) Elevation Plan –Bird Area 20/08/18
- j) Location Plan 20/08/18
- k) Site Plan 20/08/18
- l) Block Plan 20/08/18
- m) Landscaping and Planting Proposals 20/08/18

4. Appearance

The unit would be constructed with a wood clad exterior (Dark Teak) and profile sheeting (Slate Blue) for the roof. There would be 4 x 19 tonne feed bins. The feed bins would be a maximum height of 6.8m in galvanised steel.

5. Scale

The unit proposed would be 89m x 31m, 2.5m to the eaves and 7m to the ridge. Elevation plans are submitted with this Application.

6. Position and Landscaping

The Applicant would operate the Unit should permission be granted, in accordance with the 'RSPCA Freedom Food Regulations'.

The 'Freedom Food Regulations' dictate to a large extent, the position of a Unit on the Applicants land.

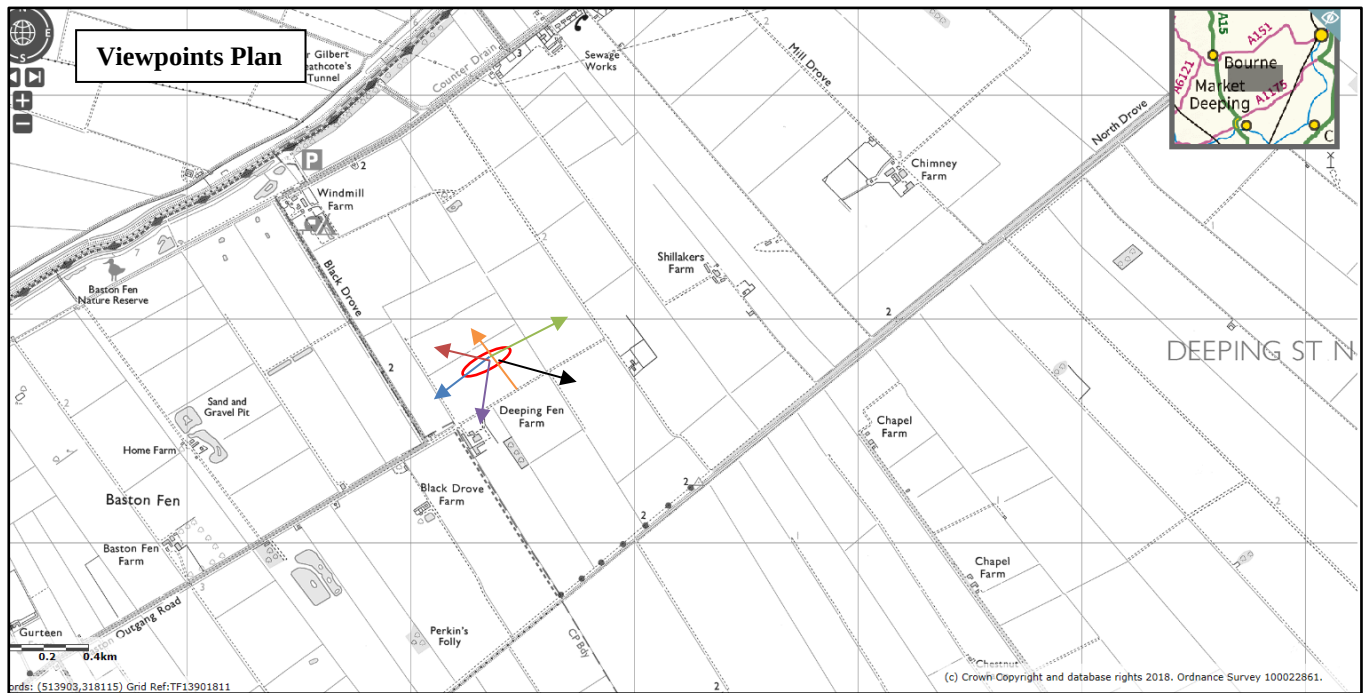
As the proposed Unit is to house free range hens, they must each be allowed access to open fields. The current regulations provide that each hectare can be used as the ranging area for no more than 2,000 birds and, in addition, no part of the ranging area may be more than 350m from the Unit.

The site at Deeping Fen Farm has been chosen due to the surrounding modern farming environment. The configuration of the land use as ranging area for the birds is ideal for the use proposed. The proposed Unit would be sited in close proximity to the existing wind turbines, which are within the Applicants ownership.

There are no existing buildings on site which would be sufficient to house the number of birds proposed.

As part of the development proposed, a scheme of landscaping and proposed planting is submitted with this Application.

7. Site Photographs



Viewpoint A

Viewpoint C

Viewpoint E

Viewpoint B

Viewpoint D

Viewpoint F

Viewpoint A - Taken from the south of the Application site looking north towards the proposed site.



Viewpoint B - Taken from the Application site looking north east/ east



Viewpoint C - Taken from the Application site looking south east



Viewpoint D - Taken from the Application site looking south/ south west towards Deeping Fen Farm



Viewpoint E - Taken from the Application site looking west





The Application site has no landscape designation however; the height, colour and materials chosen for the proposed building would help blend the proposal into the landscape.

In addition, native woodland planting (approx. 20% of the total ranging area) is proposed to the range (north, east and south of the Unit) Native planting would soften views of the Unit, whilst increasing biodiversity on site. The planting acts as a dual purpose for bird welfare under Lion Code Regulations.

Any potential views of the Unit would be seen in context with the existing wind turbines, electricity pylons and agricultural buildings at Deeping Fen Farm. Therefore, any visual impact from the proposed development would be minimal.

Tree groups and farm buildings would punctuate views of the development site from the Macmillan Way to the north of the site. From the north, the Unit would be viewed in context with the existing wind turbines with a backdrop of Deeping Fen Farm.

The existing access track would be utilised, further minimising any visual impact.

8. Local Planning Policy – South Holland District Council

The Application site is circled red on the proposals map below



SG1 - General Sustainable Development

SG4 - Development in the Countryside

SG13 - Pollution and Contamination

SG14 - Design and Layout of New Development

SG18 - Landscaping of New Development

EC4 - Farm Diversification Including Re-Use of Redundant Rural Buildings

9. National Planning Policy – NPPF July 2018

Section 6

Paragraph 83 - Supporting a Prosperous Rural Economy

Planning policies and decisions should enable:

- a) *the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well designed new buildings;*
- b) *the development and diversification of agricultural and other land -based rural businesses;*
- c) *sustainable rural tourism and leisure developments that benefit which respect the character of the countryside; and*
- d) *the retention and development of accessible local services and community facilities, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and place of worship .*

10. Flood Risk Assessment – Surface Water Run-Off

A Flood Risk Assessment is submitted with this Application. The summary to the report reads:

The site has been identified in an area that is at risk from flooding, however national planning policy emphasises the need for a balanced flexible approach, which addresses the risks of flooding whilst recognising the benefits of development. It is considered that the risk of flooding is real but relatively low. Flooding events are generally predicted with a two hour warning being given on pending events.

7.3 This report demonstrates the proposed development is compliant with the sequential and exception tests set out in the NPPF and therefore, it is considered, planning permission should not be refused on flood risk grounds.

Surface water run-off from the hardstanding impermeable areas would be controlled by rainwater gutters, downpipes and gullies managed using a combination of infiltration and attenuation.

Foul water from clean-out would be captured and discharged into an underground sealed tank.

11. Source Protection Zones

The development proposed is not sited within a Source Protection Zone as shown on the plan below.



12. Access and Vehicle Movements

There is an existing farm access at Deeping Fen Farm off Baston Outgang Road, with an existing access track to the proposed site. The existing access arrangements would be able to accommodate the vehicles, as part of the proposed development, during and after construction.

The vehicles* associated with the proposed development are:

- five lorries once every fourteen months to deliver the birds at the beginning of the flock cycle
- five lorries once every fourteen months to collect the birds at depletion.
- two egg collection lorries every week
- one feed delivery every week

The proposed development would create a minimal increase in traffic to the local area.

* 44 tonne articulated vehicle at 16.5m in length.

13. Inclusive Access / Disabled Access

The proposed Unit would provide adequate disabled access through the use of ramps and rails.

14. Operation and Internal Layout

The Applicant would supply the eggs produced from the unit to Bowler Eggs.

Bowler Eggs have been operating and managing Free Range Egg Production Units for 30 years.

They currently have supply Contracts in the region of 180 Producers, with over 2,500,000 birds producing up to 2 million eggs a day.

The Applicant has signed a Supply Contract with Bowler Eggs. In this contract, the Applicants agree to produce eggs in accordance with very high environmental and animal welfare standards.

Bowler Eggs will only buy eggs produced in accordance with standards set by both 'The Lion Code' and the 'RSPCA Freedom Foods Animal Welfare Regulations'.

To ensure that eggs are produced to the required standard Bowler Eggs provide every one of its Producers with a detailed Manual covering every aspect of managing and running a free range Unit.

Bowler Eggs inspect their Producer's farms once every month. If the required standards are not being maintained, Bowler Eggs can refuse to buy the Producers eggs.

15. Egg Collection

Eggs are laid in the nest boxes and moved by conveyor belt, to the end of the Unit where they are packed, ready for collection.

The eggs are packed for transport onto trays, each holding 30 eggs. The trays are placed on a pallet, which holds 360 trays (10,800 eggs). The eggs are wrapped in 'shrink wrap' and transported intact from the Unit.

16. Access to the Range

The birds gain access to and from the range through pop holes. The pop holes are located along the southern and northern side of the Unit.

The pop holes are shown on the elevation drawing submitted with this application and on the photograph below.



The pop holes are opened at 8am every day and are closed at dusk. All birds would be kept within the unit at night.

17. Manure Management

Submitted with this Application is a Manure Management Plan and supporting Plan.

A Multi-Tier Unit has a system of conveyor belts below the perching areas within the Unit.

The manure is collected on the belts and removed from the Unit every 3 or 4 days. There is in the region of 13 tonnes of manure generated each week.

The DEFRA publication 'Guidelines for Farmers in NVZ's – England' states that between 88% - 90% of the manure from free range chickens is deposited within the Unit.

The birds will be housed from 16 weeks old for a 14 month period, and are removed when they are 76 weeks old. Once the birds have been removed, the unit is cleaned out in preparation for delivery of the next flock.

The manure would be removed from site using tractor and trailer, prior to being spread on agricultural land as fertilizer.

Odour can be created by agitation of the manure during its movement. It is anticipated there will be some odour created during movement, however, the odour is no greater than would be expected from any other livestock agricultural operation.

18. Fly Control and Odour

Submitted with this Application is an Odour Study carried out by AS Modelling & Data Ltd.

The Summary and Conclusion of the report is detailed below:

AS Modelling & Data Ltd. has been instructed by Claire Preston of Bowlers Eggs on behalf of the applicant, to use computer modelling to assess the impact of odour emissions from the proposed free range egg laying chicken house at Deeping Fen Farm, Baston Fen, Lincolnshire. PE6 9PU.

Odour emission rates from the proposed poultry house have been assessed and quantified based upon an emissions model that takes into account the likely internal odour concentrations and ventilation rates of the poultry house. The odour emission rates so obtained have then been used as inputs to an atmospheric dispersion model which calculates odour exposure levels in the surrounding area.

The modelling predicts that, at all of the residential receptors considered, the odour exposure would be well below the Environment Agency's benchmark for moderately offensive odours, which is a 98th percentile hourly mean of 3.0 ou_E/m³ over a one year period.

Using a Multi-Tier system, the potential odour generated would be negligible. As manure is not stored within the Unit for more than 4 days, the risk of a nuisance from odour or flies is very low.

During the flock cycle, the majority of the manure produced is within the Unit. To minimise any odour that could be caused by the manure, great care is taken to ensure the manure in the Unit is kept dry.

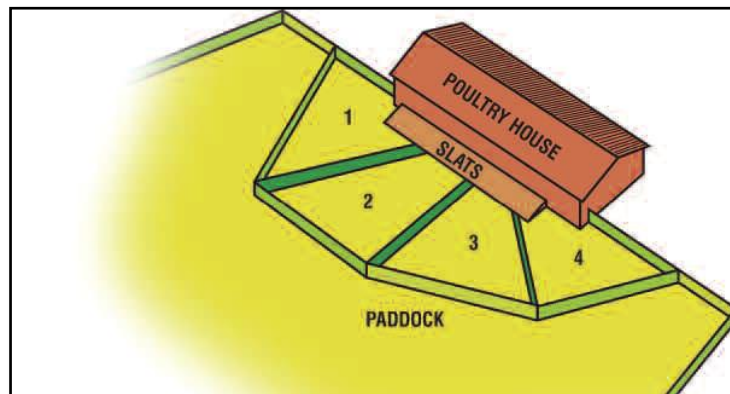
Odour during the lifetime of the flock is related to ammonia produced by decomposition of the manure should it become wet. The main source of moisture would be spillage from the drinkers.

The key to controlling both odour and flies is keeping the manure dry. The Unit is designed to achieve this.

- (a) The Unit is built on a 10 inch concrete ring beam which, in addition to supporting the walls of the Unit, provides a physical barrier to the ingress of water to the Unit.
- (b) The Unit is ventilated using roof and gable mounted fans. Along one side of the Unit are the pop-holes, which allow the birds to enter and leave the Unit. The pop-holes are shown on the elevation drawing. The roof mounted fans draw air into the Unit through the side air vents and pop-holes. The air travels through the Unit, over the litter and manure (conveyor belts), helping to keep it dry.
- (c) Farmers check daily the amount of water used within the Unit. This is used primarily to check upon the health of the birds and whether or not they are drinking too much or too little water. However, the side benefit of this daily check is that the Farmer will be aware should a leak occur in the system. If there is a water leak, it will be shown up on the regular check and immediately rectified.
- (d) There is a system of verandas in front of the pop holes to prevent the birds bringing water directly into the litter area. This is a photograph showing a typical veranda and pop holes (Fig.5).



- (e) To further prevent water being brought into the Unit, the area immediately in from the verandas is divided into paddocks. There is below a diagram showing a simplified version of the paddock system. The use of a paddock system means that birds do not have access to the range through the same area on a daily basis. This allows the unused paddock area to recover and grass within that paddock to re-grow (fig.6).



In addition to the control of moisture levels, pro-active methods are also used to control flies.

- (f) Chemical fly control is also used. This falls into two categories, larvicides and adulticides.

There are many fly control products available but the two that Bowler Eggs have found to be effective, and which are permitted by the Lion Code, 'Oxyfly' and adulticide, and 'Spy' which is also an adulticide, and 'Neporex' a larvicide.

- (g) Ultra violet light and fly paper is used within the central packing area of the Unit, Ultra Violet lights are used which attract flies and kill them on contact. Sticky fly paper is also used which is very effective at controlling flies.

19. Clean Out and Foul Water

At Clean Out, every 14 months, the interior equipment of the Unit is cleaned and sterilised in preparation for the new flock.

The Unit will have a 10 inch perimeter ring beam to prevent the escape of dirty water produced at clean out. All dirty water is directed toward a gutter, which discharges into an underground sealed tank.

The proposed Unit would require a 2,500 gallon tank. The tank type would be precast monolithically poured concrete tank. A specification for the tank is with this statement.

The dirty water tank is pumped out by a tanker and taken off site.

As with the manure, the 'Lion Code' and the 'RSPCA' Regulations prevent spreading of the dirty water on or near the range.

20. External Lights

External lighting on site would be a single bulkhead light fitment above the doors to the entrance of the unit.

The light is fitted with an 'Alto al0584' motion sensor. This will only illuminate within an 8m zone of the unit, keeping lighting to a minimum.

21. Vermin

Effective control of vermin is a vital component of compliance with both the 'Lion Code' and 'DEFRA' requirements.

The incentive to the Producer to control vermin is that vermin in and around the extension can contaminate feed, cause structural damage and gnaw electrical cables causing a fire risk.

The presence of vermin would be controlled using a professional rodent contractor.

22. Dead Birds

All dead birds would be taken off site in compliance with the 'Fallen Stock Scheme'.

23. Ventilation and Noise

Ventilation is provided by 16 fans mounted either side of the ridgeline.

There are air vents along both sides of the Unit as shown on the elevation drawings submitted with this application.

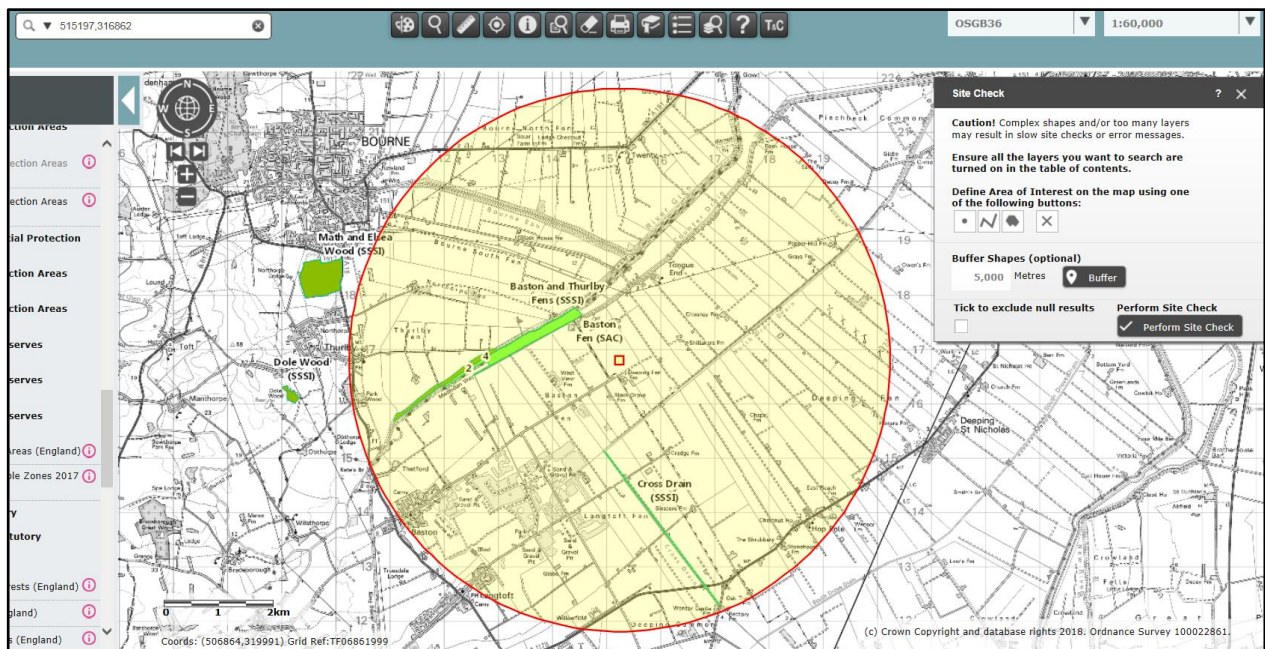
The nearest neighbour outside of the Applicants ownership, is Black Drove Farm at approximately 620m south-west of the Application site.

24. Ecology

A search for sensitive sites within a 5km radius of the Application site has been carried out using Magic Map.

Baston Fen SAC and Baston and Thurlby Fens SSSI are at a distance of 1km north west of the development site.

The next identified SSSI is 'Cross Drain' at a distance of 1.7km south west of the Application site, as shown below.



25. SCAIL and Ammonia Modelling

SCAIL (Simple Calculation of Atmospheric Impact Limits) analysis of the surrounding sensitive sites has been carried out and the results are submitted with this Application.

Detailed Ammonia Modelling, carried out by AS Modelling and Data is also submitted with this Application.

The results of the detailed ammonia modelling report are:

AS Modelling & Data Ltd. has been instructed by Claire Preston of Bowlers Eggs, on behalf of the applicant, to use computer modelling to assess the impact of ammonia emissions from the proposed free range egg laying chicken house at Deeping Fen Farm, Baston Fen, Lincolnshire. PE6 9PU.

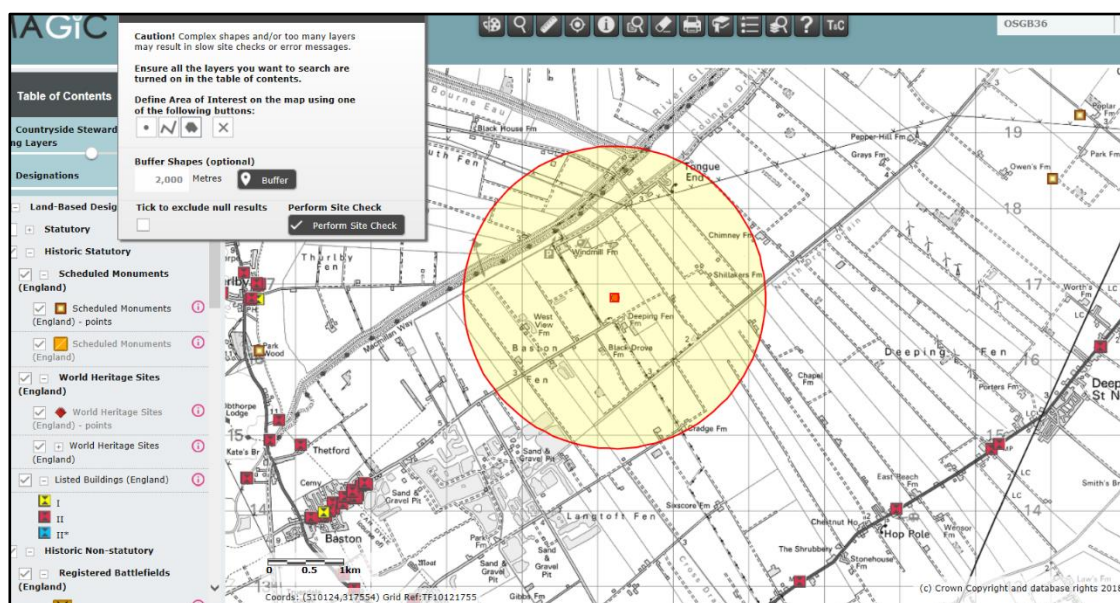
Ammonia emission rates from the proposed poultry house have been assessed and quantified based upon the Environment Agency's standard ammonia emission factors. The ammonia emission rates have then been used as inputs to an atmospheric dispersion and deposition model, which calculates ammonia exposure levels and nitrogen and acid deposition rates in the surrounding area.

The modelling predicts that the process contribution to ammonia concentrations and nitrogen deposition rates would be below the Environment Agency's lower threshold (4% for a SAC and 20% for a SSSI) of the Critical Level and/or Load at all sites considered.

26. Historic Environment

A search for Listed Buildings, Scheduled Monuments and Heritage Sites has been carried out using Magic Map.

The search has not revealed any Historic Sites, Scheduled Monuments or Listed Buildings within 2km of the development site.



27. Environmental Sustainability

The design of the building is primarily functional for the housing requirements of poultry.

Heating is not necessary within a free range Unit, as the heat generated by the livestock is sufficient to maintain the internal temperatures.

The electricity used in the extension arises from:-

1. Lighting
2. Ventilation
3. Nest Boxes
4. Conveyor Belts
5. Egg Packer
6. Automated Pop holes
7. Electric Stock fence
8. Feeder tracks

There is no gas used in the Unit, as it is powered entirely from electricity.

28. Community Safety

The Application site is not open to the public and the site is not accessible by public rights of way.

The site will operate within Health & Safety at work guidelines.

The site would be secured and locked outside of normal working hours, with the birds secured inside the building.

August 2018