

DESIGN & ACCESS STATEMENT



DEVELOPMENT: Erection of a Free Range Egg Production Unit

including silos and associated works

LOCATION: Celyn Mawr

Llanwddyn Oswestry SY10 ONN

CLIENT: T H G Davies & Sons

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1. Background

Celyn Mawr is currently run as a sheep and beef farm. The land extends to approximately 335 acres of owner occupied and rented agricultural land. Celyn Mawr is located about 8 miles from the rural settlement of Llanwddyn and 21 miles from Oswestry.

The farm business is run by T H G Davies, and although the business has been successful there is a need for further expansion of the business to supplement the marginal farm profits.

Please see below an aerial view of Celyn Mawr and the surrounding area:



2. Business Evolution

Celyn Mawr is a 335 acre working farm. It is farmed in partnership by THG Davies and Sons.

The partners of the business want to create a sustainable farming business and they feel that by diversifying into free range egg production it will allow the business to do this. It would create another stream of income at a time when the agricultural industry is uncertain as to what may happen post Brexit. The diversification would allow all partners to stay farming at Celyn Mawr, otherwise one of the partners may have to leave the farm in order to supplement the income.

However after much research and investigation, an attractive option was to invest into Free Range Egg Production.



This investment into the free range egg sector – will hopefully enable Celyn Mawr to become a sustainable, viable unit – providing an income that will be sustainable to provide for succession for the current and the future generation.

Farm diversification is promoted continually by the unions and government and the current circumstances within the sheep sector, diversification is critical to allow survival – we at Celyn Mawr do not want to give up farming and let the land, we have the entrepreneurial intention to create a sustainable, viable farm business allowing for investment and in-term sustaining the unit for the future generations. The addition of another enterprise will ensure stability and diversity for the business.

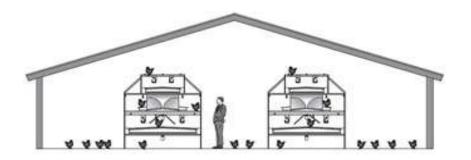
Diversifying into the Free Range Egg sector will provide the family with means of carrying on farming the land in the way generations have done before, creating 1 full time and 1 part time role. It will enable us in a sustainable manner to provide food for the nation; this is what they as farmers are meant to do.

3. Proposal

The proposal is for a free range bird egg laying unit. The building will be located on existing agricultural land and accessed using the existing access off the B4393. The building will be approximately 140m x 19.5m which will house 32,000 birds. EIA regulations have a minimum bird threshold of 60,000 birds and IPCC regulations have a threshold of 40,000 birds. The eggs would be conveyed into the packaging and storage area and would be packed and stored ready for collection. The birds will have direct access from pop holes on the North and South elevations of the building to dedicated pasture which will be fenced to keep out predators. The birds are brought in as young laying stock and remain in the egg production unit for some 13 months. After this time the flock is removed and the whole building fully cleaned down internally and the new flock introduced to restart the egg production cycle.



The building proposed operates a multitier system and allows a smaller shed by having two tier perching decks for the laying hens within the building and the highest level of welfare standards. These perching areas are floored with plastic slats which allow manure to drop through the flooring system. The manure from each of the tiers then falls onto an internal conveyor belt.



The conveyor belt system is operated every 10 days and removes approximately 14 tonnes from the internal conveyor belt systems via an external conveyor belt into a parked trailer outside the building. After 13 months the flock is removed and the whole building fully cleaned down internally and a new flock introduced to restart the egg production cycle.

Feed for the birds is stored in 2 external green powder coated hoppers and conveyed automatically to the building. The 2 external hoppers will be located adjacent to the building.

Adjoining the building will be a hard stoned area approximately 5m wide to allow for access for delivery and removal of the birds.

The building has a proposed roof pitch of 15° and an eaves height of 3.10m and a ridge height of 5.81m. The building is of a low profile which helps to minimize its visual impact. The proposed building would utilise 12 mechanical extractor fans which thermostatically control the building. The building roof and sides will be clad with steel box profile sheeting coloured juniper green set above a low concrete base wall.

Pop holes will run down the North and South elevations of the building to provide access for the birds to the ranging area and will be automatically controlled to open between dawn and dusk.

4. Site and Scale

Free Range Egg units have specific criteria to achieve RSPCA freedom food and Lion standard requirements. The range area provide 1 acre for every 800 birds and the range area must not extend to more than 350m from the building.

The building is situated West of the Farm and centrally within the ranging area to ensure that these specific guidelines are met.



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Consideration to the building location has been given to ensure that the building can utilise the natural contours of the land. The area selected affords a natural plateau area which minimises large levels of excavation and disruption to the landscape and allows the building to be concealed within the landscape.

The location of the building has been positioned to utilise the existing access directly off the B4393.

The building has been positioned in order to minimise and reduce visual impact to our neighbours and the general public using the B4393.

The building has been positioned to reduce visual impact from the nearby footpath.

The building will be approximately 140m x 19.5m, which will house 32,000 birds. The building has a proposed roof pitch of 15° and an eaves height of 3.10m, together with 2 feed bins, hardstanding areas and access track.

5. Landscaping

The location of the building has been carefully considered and will be well screened from all elevations, the building has been designed to have a low impact to the surrounding area due to its external colour and a low ridge line and will not be intrusive to its surroundings.

6. Building Design

The building has a proposed roof pitch of 15° and an eaves height of 3.10m. The building is of a low profile which helps to minimize its visual impact. The building roof and sides will be clad with steel box profile sheeting coloured Green set above a low concrete base wall with low level pop holes providing access for birds to ranging area.

7. Free range laying hens



The birds have a laying cycle of 56 – 58 weeks. The birds are farmed to a free range system. The system utilizes a series of perches and feeders at different levels. The maximum stocking density is 9 birds per square metre and there must be at least 250cm square of litter area/bird. Perches for the birds must be installed to allow 15 cm of perch per

hen. There must be at least 10cm of feeder per bird and at least one drinker per 10 birds.

There must be one nest for every 7 birds or 1 square metre of nest space for every 120 birds. Water and feeding troughs are raised so that the food is not scattered. The birds must have continuous daytime access to open runs which are mainly covered with vegetation and with a maximum stocking density of 800 birds per acre. Within the system the birds must be inspected at least once a day. At the end of each laying period the respective houses are completely cleared and disinfected.

8. Scratching Areas, Paddocks and Perimeter Fencing

In free range laying systems, good pasture management is essential if the ground is to remain in good condition and the problems of poaching and the build-up of parasitic intestinal worms and coccidian oocysts are to be avoided. The land surrounding the laying house will be divided into a series of paddocks which the birds are allowed to use for periods of up to 6 - 8 weeks each.

The length of time that the birds are allowed to use individual paddocks will vary depending on soil type, drainage, grass cover and weather conditions. The area immediately outside the poultry house tends to suffer the greatest amount of damage, so we propose that the ground adjacent to the pop holes should be covered with stones/pebbles. As well as providing health and welfare benefits the birds' feet will be cleaned as they enter the building providing cleaner eggs.



Free range layers are attractive to predators. Foxes are the most frequent cause of problems and can cause damage and often kill or maim large numbers of birds – far more than they are able to consume. We propose to use a 1.5m semi-permanent fence with netting.

9. Vehicle Movements

The proposed free-range egg production unit will require one feed delivery lorry of 18 tonne capacity or thereabouts three times a month. The collection of eggs is three times a week in a rigid body commercial lorry. Once in every production cycle i.e. 14 month intervals, lorries bringing fresh laying birds and a lorry for removing the old flock will need to access the site.



The main labour force to be used in conjunction with the proposed development will be THG Davies and Sons who own and already live and work at Celyn Mawr and therefore have no need to leave the holding to access the proposed development.

10. Vehicle Routing

The existing access off the B classified road will be used to provide a suitable visibility line to access and egress the site safely and easily.

11. <u>Drainage</u>

Clean surface water from the roof of the building will be collected in an underground storage tank and used for washing down purposes. The underground tank will be constructed in concrete to comply with SSAFO Regulations (Wales) 2010 Standards. Surplus clean water from the roof will be run by pipe, to existing ditches on the farm.

Construction of the floor will incorporate a damp proof membrane preventing any dirty water percolating into the ground below the building. A slump in the floor will drain to a further below ground sealed tank, which will allow collection of any dirty water primarily arising from the washing down process at the end of the production cycle. This dirty water will then be spread by vacuum tanker over the farms 335 acres (or thereabouts) of owner occupied and rented grassland as per the farm manure management plan.

We propose that the majority of the surface water is to be stored within a 2000 gallon underground holding tank, the water from which will be used for washing down purposes on a regular basis with surplus clean water being discharged through existing drainage systems, the aim is that the continuation flow will be controlled not to exceed the existing Greenfield run off rate.

12. Manure Storage & Disposal

The unit will produce an estimated 500 tonnes of poultry manure each 13 month cycle. The manure will be removed via conveyors every 10 days set below the nesting and perching areas. Due to the manure being moved every 10 days there will be minimal manure stored within the building which will result in reduced pest activity especially flies. Manure produced will be a relatively dry product of a friable nature which can be readily dumped for storage, however all of the muck will be taken off the farm and utilised on farmland. Dependant on the time of year the manure is removed from the building; it would be spread directly on the ground in accordance with good agricultural practice for soil and water and in accordance with the control of pollution, slurry and agricultural fuel regulations.

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13. Neighbourhood Notification Requirements

Verbal confirmation is given to any neighbouring properties within 200m of the fields utilised for manure spreading in advance of the date of cleaning out or spreading.

14. Cleaning Out

With reference to the cleaning, this will take place once every cycle, which will be in the 14th month and muck movement will be for approximately two days, as it is moved off site.

15. Emissions

The building design incorporates the use of mechanical ventilator extractor fans, 12 mechanical extractor fans will thermostatically control the building. Therefore they tend to operate more frequently during hot weather. Efficient design of ventilation fans has minimised the number needed for this building. Fans will be maintained and inspected in accordance with the manufacturers or suppliers instructions, this will minimise mechanical noise from the unit and also dust escape. Automated feeding by internal conveyor with augers direct from the sealed external feed hoppers will minimise dust creation. The insulated construction of the walls and roof also reduce sound transmission.

16. Noise / Odour Management

The proposed poultry unit at Celyn Mawr shall have 12 mechanical extractor fans which will be used during periods of hot weather only. The proposed poultry unit will use natural ventilation from the pop holes of the poultry unit for the majority of the year. It is paramount that mechanical fans are provided within the building as they are used to control the temperature, it is vitally important to bird welfare during periods of hot weather. The table below details the environmental sound levels dB (A) for HER710/6/1 following numerous manufacturing trails:

	Number of Fans					
Distance from Fan to Receptor - metres	1	3	10	16	20	
3	61	66	70	72	74	
6	57	61	65	68	70	
10	51	55	59	52	64	
20	45	49	53	56	58	
100	31	35	39	40	43	

200	21	27	31	33	35
400	18	23	27	29	31

The above data has been compiled in line with BS848 Part Two (1985) and using the Technical Specification of the Mechanical Fan which confirms the fan selected will operate at a level of 61 dB (A) at 3 metres. When all 12 fans are in operation, the cumulative sound level should be in the range of between 27 and 29 dB (A) at 400 metres from the unit.

The nearest receptor to the proposed poultry unit at Celyn Mawr is Tyn Y Bwlch at approximately 413 metres from the poultry unit. At this distance, the noise impact on the sensitive receptor based on 12 fans would be below the range of 27 and 29 dB (A).

In considering an operational farm unit, it is recognised that a working farm unit would have a background noise level of 42 dB (A), the development proposed therefore is not excessive and would not result in complaints or disturbance to sensitive receptors.

Mitigation:

The applicant is proposing the following mitigation as part of the proposal:

- 1) Movements of feed, birds and eggs to the site will be done so with full care and attention to all neighbours. All movements shall be restricted to daytime hours to respect neighbours thus meaning that movements shall only occur between 07:00 and 18:00.
- 2) Feed when transmitted to the feed bins is a normal occurrence on farm, however the applicant shall ensure that delivery is between 07:00 and 18:00.
- 3) All fans will be maintained by local electricians to ensure they are working properly and reducing any unplanned excessive noise.
- 4) All electrics within the poultry unit will be maintained so that they are fully operational and at no risk of failure within the unit this is vital for Animal Welfare reasons and by law.
- 5) The birds within the unit are all female and therefore very quiet resulting in no noise impact upon local neighbours especially during the egg production period. Whilst the birds are placed in the unit and taken, we will ensure the operation is smoothly undertaken to prevent stress to the birds and no noise to the neighbours.

The fans shall be in a treated chamber which will have an insulated roof and walls which will exhaust into an insulated baffle area thus limiting the noise emanating from the poultry unit proposed. The cumulative noise impact of the poultry unit at Celyn Mawr will not exceed World Health Organisation Guidelines.

The design of the unit incorporates a slatted floor and conveyor belt mechanism for waste removal. The waste is removed every 5 - 7 days, so there will be minimal manure stored within the building which will result in reduced pest activity especially flies. Manure produced will be a relatively dry product of a friable nature which can be readily dumped for storage either on external ground or within covered storage. The potential build up of manure is mitigated by the free range hen's freedom to access the adjoining fields. The surrounding paddocks are rotated and only occupied by birds for a short period of time.

17. Quality Standards

The eggs are produced and the chickens are managed to comply with the stringent conditions that are imposed by the RSPCA Freedom Food specification, which sets out the standards of welfare at all stages of the chickens life.

18. <u>Dead Bird Management & Pest Control</u>

There are several reasons why the careful disposal of dead birds is an important part of the health management of systems:

- Reduces the risk of disease spreading back to the flock and other species.
- Reduces the likelihood of carcases being removed by scavengers, which can transmit disease.
- Reduces the risk of blow flies (*Caliphora sp.*), which can also transmit disease.
- NFS company registered firm Pointins are utilised

The dead birds will be collected by an approved contractor of the National Fallen Stock Disposal Scheme. Prior to this they will be stored in a secure container in line with the animal by-products Regulations 2003. Pest control for rats will be carried out by an approved agency. Preventative measures will be used to control flies to include fly screens and fly controls replaced periodically to prevent the flies entering the building from the outside.

19. Policy Context

Powys Unitary Development Plan 2001 – 2016

Policy GP1 Development Control

Criteria of the above policy:



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- 1.The design, layout, size, scale, mass and materials of the development shall complement and where possible enhance the character of the area.
- 2. The design, layout and lighting of the development shall minimise the potential for crime.
- 3. Features and designated or proposed sites of natural, historic, archaeological or built heritage interest shall not be unacceptably adversely affected and biodiversity and wildlife habitats shall be safeguarded wherever possible.
- 4. The amenities enjoyed by the occupants of nearby or proposed properties shall not be unacceptable affected by levels of noise, light, dust, odour, hours of operation or any other planning matter.
- 5. The development shall incorporate appropriate measures to protect water and soil quality and also for energy, water and waste efficiency and conservation.
- 6. The development shall incorporate adequate provision for drainage including the use of sustainable urban drainage systems where appropriate.
- 7. The development shall not be located in a high flood risk area unless in accordance with policy UDP SP14.
- 8. Adequate provision shall be made for highway access and parking in accordance with policy GP4.
- 9. Adequate utility services shall exist or be capable of being readily and economically provided without the unacceptable adverse effect on the surrounding environment.
- 10. Important trees, hedgerows, open spaces and other local features that contribute significantly to the quality and character of the local environment shall be safeguarded and, where practicable, be incorporated within the development.
- 11. Developments shall be landscaped using appropriate indigenous species or materials, which complement and enhance the character of the locality. Planting shall be carried out in the first available planting season, or in accordance with the stated planning condition, and any plants which die or are removed within 5 years shall be replaced with similar species.

Policy EC9 Agricultural Development



- 1. The proposed development would not cause any unacceptable adverse effects on Powys' landscape: the visual impact of proposals shall be reduced as follows:
 - Buildings shall be carefully sited and designed to minimise their impact on the landscape and, wherever possible, grouped with existing buildings.
 - Buildings shall be designed and constructed of materials to take account of their surroundings. Reflective external surfaces should be avoided and roofs shall be dark coloured. Traditional building materials shall be considered in sensitive locations.
 - Roadways and other engineering operations shall be integrated with the
 existing topography and landscape features and shall be designed to
 minimise any unacceptable adverse visual impact.
- 2. Proposals should take account of existing landscape features such as hedgerows and trees, which should be retained wherever possible. Additional landscaping measures will be required such as tree and shrub planting or earth mounding in particularly sensitive situations.
- 3. The proposed development shall be in accordance with all other relevant UDP policies including conservation policies in the environment chapter and in particular GP1 in the generic policies chapter.

Policy EC10 Intensive Livestock Units

Large scale proposals for intensive livestock units or extensions to existing units, including poultry housing will be permitted only where they would comply with relevant criteria in UDP policy EC1. In particular, the cumulative impact of successive developments upon the locality shall be taken into account.

20. Access Statement

Explain the adopted policy or approach to inclusive design and how policies relating to inclusive design in development plans and relevant local design guidance have been taken into account

Access by Disabled Persons

Applications will be permitted for the development of new buildings, public amenities, recreational spaces and, where practicable and reasonable, the changes of use or alterations to existing buildings, where suitable access is made to and

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within the building or amenity and adequate facilities are provided for people with disabilities.

The Disability Discrimination Act 1995 (DDA) seeks to avoid discrimination against people with impairments and disabilities and for instance ensures that work premises do not disadvantage someone with a disability.

The access arrangements have adopted an inclusive approach and aims to ensure that all users will have equal and convenient access to the site and buildings.

Explain how any specific issues, which might affect people's access to the development have been addressed

The car parking facilities and access ways to and from the poultry building will be flat and even and unobstructed allowing the building to be accessed by all people including disabled people or people with impairments.

Detail how features, which ensure people's access to the development, will be maintained

The car parking facilities and access ways to and from the building will be maintained in such a way as to allow all people access to the building

21. Community Safety

Site Security

Site security is critical throughout day and night to prevent the theft of equipment and livestock, which may injure or adversely affect the welfare of animals. This is critical in this case given the secluded location and its proximity to the public highway.

22. Environmental Design Statement

A design statement shall accompany all detailed applications and will describe the actions taken to design and adapt the development to fit its location. Wherever practicable, developments shall be designed to reduce energy consumption and maximise energy conservation through the use of appropriate materials, design, layout and orientation.

Powys UDP sets out the policy considerations for new development and changes of use in the County and has undergone both a Sustainability Appraisal and the Strategic Environmental Assessment process in its preparation.

The proposed use is for a free range poultry unit, the building is a specialist agricultural building and is designed to meet the substantial welfare needs of the chickens, we feel that given the nature of the use of the building this won't be applicable.

Our planning application has taken into consideration the following energy efficiency measures and technologies that can be incorporated alongside wider energy efficient design principles to ensure high energy performance.

The proposed building has been positioned and orientated (as far as possible) in order to maximise the use of natural daylight and solar energy. This is achieved where possible by orientating the building in such a way to maximise the potential for solar gain and reducing the need for energy consumption.

The building will be insulated (roof, walls and floors) according to the most recent building regulation standards in order to reduce heat loss in winter and excess solar gains in summer.

Wherever possible materials will be sourced and produced locally and will come from a source that can be renewed without harm to the environment. High quality reclaimed materials can save resources and may also provide a better match with the surrounding development. The scheme will avoid the use of tropical hardwood and look for timber which is certified as coming from sustainable sources. The materials used in this development to include the steel, box profile sheeting and roof sheets, will come from a local source, using local steel fabricators and all from sources that can be renewed without harm to the environment.

The site is serviced by private water and mains electricity.

Surface water drainage will discharge into the watercourse.

Sustainable Urban Drainage Solutions (SUDS) will also be used within the development, by incorporating permeable materials for parking and other hard surfaced areas within the curtilage of the dwelling and soak-aways would be used for surface water drainage.

The use of rainwater harvesting will be investigated as part of the accommodation within the roof space.



The development of this land will contribute to the aim of sustainability through the productive use of the above mentioned features.

The above points will ensure that the properties are 'sustainable' in terms of its building design and the supply and use of energy in accordance with the Council's recommendations.

Other complimentary measures:-

We have considered that energy efficient design principles are also key to the success of schemes including if electricity is required to be supplied to the building that energy efficient light bulbs are used.

We also aim to:-

- Design out waste from the outset
- Minimise the energy used during the construction phase of the development through careful project planning
- Use reusable and recycled materials

We have also considered waste management control during the construction phase, and as far as possible all waste will be utilised on site, including all the topsoil excavated from the building site.

23. Physical Context of the Development

The location of the building has been carefully considered to give good access and be unobtrusive and positioned to allow the specific ranging area.

24. Social Context of the Development

The proposal is for a free range poultry unit for 32,000 free range birds. The new building will be located to the West of the current farmyard on land currently used for grass production. The building will be approximately 140m x 19.5m together with 2 feed bins, hardstanding areas and access track.

25. Economic Context of the Development

Poultry egg laying is becoming an important element in the Powys agricultural economy and its use in appropriate sites is supported. The farm business is run by THG Davies & Sons.



Farm businesses need to change and grow in response to market forces and legislation if they are to survive.

Planning Policy Wales is supportive of diversification of agricultural enterprises. The current market dictates that agriculture must adapt to meet consumer demands; the applicant has chosen to diversify to respond to the demand for free

range eggs.

The proposed development would accord with the requirement in Planning Policy Wales paragraph 7.1.3 to support economic growth and the guidance in paragraph 7.2.2 of Planning Policy Wales has to be taken into consideration:

'Local planning authorities are required to ensure that the economic benefits associated with a proposed development are understood and that these are given equal consideration with social and environmental issues on the decision-making process, and should recognise that there will be occasions when the economic benefits will outweigh social and environmental considerations.'

26. Conclusion

- The proposal is an economic development that is supported by both local and national policy; it amounts to sustainable development that will improve the agricultural business located on site.
- The building is sited with good access and designed to minimise the impact of the building on the landscape.
- The building is intelligently and sympathetically designed and strikes a balance between practical and economic efficiency and minimal landscape impact.
- Adequate provision is made for the disposal of foul and surface water drainage and animal wastes without risk to watercourses through a sustainable drainage technique.
- Adequate provision is made for access and movement of machinery to avert the perpetuation, intensification or creation of traffic hazard.
- The proposal is of an appropriate location, scale and type so as not to be detrimental to the amenities of any nearby existing properties.
- Please be aware that this is a free range poultry unit and <u>not</u> an intensive livestock unit (battery unit).
- This proposal has significant merit, fits within the policies of the development plan and national planning guidance, and it is respectfully requested that the submitted planning application be approved.