

Cinders Farm, Ruabon

Environmental Statement -
Volume I: Non Technical
Summary

indigo.

Cinders Farm, Ruabon
Environmental Impact Assessment
Non Technical Summary - Volume I
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Indigo

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Appendices

Appendix 1
Aerial image

1. Introduction

- 1.1. The Environmental Statement (ES) has been prepared on behalf of Soaltar Limited to accompany a planning application for agricultural buildings for rearing of poultry for broiler meat
- 1.2. The Environmental Impact Assessment (EIA) is a process which results in the publication of an ES. The ES is presented in three volumes: Volume I (Non-Technical summary), Volume II (Main Report) and Volume III (Appendices). These three volumes detail the findings of the EIA.
- 1.3. The Non-Technical Summary (NTS) outlines the findings of the ES which describes the potential likely significant environmental effects (positive and negative) that may arise from the Proposed Development. The NTS also provides details of measures undertaken to reduce the likelihood of potential environmental effects occurring and how environmental effects will be reduced.
- 1.4. The application site boundary plans for the three sites are provided at the end of this document.
- 1.5. The proposed description of development is:

Erection of four agricultural buildings for rearing livestock (poultry);
ancillary buildings and plant; associated infrastructure; and landscaping.

2. Development

- 2.1. The site would be laid out with **four livestock rearing houses** cut into the gentle slope of the site orientated north south. **Gentle ground modelling** would be located to the west and north of the site and in the adjoining field in the north-eastern part of the site.
- 2.2. A **yard area** would be to the north of the rearing houses and **ancillary buildings** will be located on or adjoin this yard: specifically **feed storage bins; energy distribution building; a water storage tank; a generator; electricity substation; and office building**.
- 2.3. The yard area would be connected to the local highway with an access track running through an existing field gateway.
- 2.4. A **biomass boiler and storage building** would be located to the north of the existing Cinders Farm and **LPG storage tanks** would be located adjoining this.
- 2.5. A **control room** would be connected to the front of each of the rearing houses.
- 2.6. A **blending shed** would be between each pair of houses.
- 2.7. **Woodland planting** and other landscape and biodiversity improvements would be located surrounding the site.
- 2.8. Two surface water **attenuation ponds** would be located to the north of the rearing houses and to the east of the biomass building.
- 2.9. **Local highway improvements** would be made to the local highway to include improvements to the visibility of the junction of the local highway with the A539 and vehicle passing places along the minor road connecting the site to the A539.

3. Site Location

- 3.1. The application site is located approximately 1.5km to the east of Ruabon. Existing features in the local landscape are illustrated on the aerial photographs at **Appendix 9.3 Volume III**, which date from June 2009.
- 3.2. The site is located in a gently undulating lowland agricultural landscape. The land across the site falls from south-west to north-east across the 100m AOD contour, as illustrated on the Existing Site Plan (Dwg no 755-0717-T).
- 3.3. The main part of the site occupies part of a larger arable field which is in arable cultivation. This part of the site is bounded by mature hedgerows to the north, south and east whilst the remainder of the arable field defines the western boundary. There are occasional mature trees in the hedgerows (mostly Oak) and a drainage ditch along the northern boundary.
- 3.4. The smaller south-eastern and north-eastern part of the site occupies part of an adjacent pasture field. This part of the site is bounded by a mature hedgerow to the north-west, the existing farm buildings at Cinders Farm to the south, and the adjacent road to the east. There is no hedgerow along the roadside boundary.
- 3.5. Current access to the main part of the site is via a farm track from the south from Cinders Farm. There is an existing public footpath (RUA/91) which runs near the western site boundary.
- 3.6. The application site is surrounded by a mix of small to medium scale fields in mixed agricultural use. The fields are generally bounded by mature hedgerows with variable hedgerow tree cover.
- 3.7. The settlement of Ruabon and the A483 dual carriageway lie approximately 1.5km to the west. The historic parkland of Wynnstay Park lies approximately 1.0km to the south-west, south of the A539.
- 3.8. Elsewhere there are scattered farmsteads and cottages served by a network of country lanes. High voltage power lines on pylons cross this landscape in a north/south direction approximately 630m to the west.

4. Approach to the ES

- 4.1. The ES has been prepared pursuant to The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.
- 4.2. The ES has had regard to all aspects of the environment likely to be affected by the Proposed Development and includes an assessment of the extent and significance of the potential environmental effects.
- 4.3. In order to carry out an assessment of the likely environmental effects of the Proposed Development, the existing or 'baseline' conditions must first be defined. The likely extent of environmental effects and their significance can then be assessed. As a starting point, this ES adopts the baseline position as being the existing site conditions. The environmental effects to be assessed are therefore the differences in effects between the existing conditions and the Proposed Development.
- 4.4. Where the assessment procedure indicates that the Proposed Development is likely to have significant adverse effects, the ES identifies appropriate mitigation measures to reduce, compensate or eliminate these effects and/or take advantage of opportunities for environmental enhancement. Such mitigation measures can either be incorporated into the proposed design and operation of the Proposed Development, or through the introduction of particular safeguards.
- 4.5. Each chapter has defined assessment criteria for establishing the significance of environmental effects.

5. Transport

- 5.1. The proposed poultry farm proposals have been carefully prepared to ensure that the development will have a minimal impact on the surrounding area. The transport chapter of the ES demonstrates that the proposals will generate a minimal amount of additional vehicular movements onto the surrounding highway network. The use of an HGV routeing strategy to and from the A539, and timing of HGV movements to and from the site will ensure that any impact on the residents living adjacent to the public highway on the HGV route are minimised.
- 5.2. The proposed poultry farm at Cinders Farm will provide continued diversity for the farm enterprise and ensure sustained economic growth in the rural area.
- 5.3. This assessment has demonstrated that whilst the proposed development will generate a marginal change in vehicle movements on the depopulation days, for the majority of days there will be minimal change in vehicular traffic to the farm when compared to the existing operation.
- 5.4. Based on the above there are no transport-related reasons why the proposed poultry farm should not be granted planning consent with appropriate traffic/transport planning conditions.

6. Noise

- 6.1. The completed assessment has considered the noise and vibration impacts, and associated effects that could arise as a result of the Proposed Development during both construction and operational phases.
- 6.2. An initial appraisal of potential impacts identified that significant noise or vibration effects are anticipated not to arise as a result of the following:
 - Traffic noise during the construction phase of the Proposed Development;
 - Noise from vehicle movements on the internal access route during the operational phase; or
 - Vibration during the operation of the Proposed Development.
- 6.3. The above aspects were therefore scoped-out of further consideration. However, the potential for significant effects was identified for the following aspects, which were subsequently assessed in more detail:
 - Construction noise affecting existing local sensitive receptors;
 - Construction vibration affecting existing local sensitive receptors;
 - Fixed plant and operational on-site activities; and
 - Operational phase road traffic noise level changes associated with the use of the Proposed Development and affecting existing local sensitive receptors.
- 6.4. The noise environment present within and surrounding the Proposed Development predominantly consists of road traffic noise from the existing local road network including the A483 and A539, occasional contributions from agricultural vehicles and activities, commercial aircraft and birdsong. There are a small number of noise and vibration sensitive receptors located within the vicinity of the Site including, existing dwellings located to the east, south and south-west.
- 6.5. With respect to noise generated during the construction phases of the Proposed Development, effects of negligible significance have been predicted when construction activities take place concurrently, and where noisiest activities are undertaken at their closest point to existing receptors. Specific mitigation has not been warranted, however, a number of good practice measures have been identified and presented in the ES Chapter.
- 6.6. For ground borne vibration associated with Site construction activities, it has been identified that effects of negligible significance may arise prior to mitigation measures when activities are undertaken at the closest points to existing receptors. Specific mitigation has not been warranted, however as with construction noise, a number of best practice measures have been presented in the ES Chapter. Notwithstanding this, vibration levels would be significantly below those required to generate even cosmetic building damage.
- 6.7. The assessment of potential noise effects associated with the operation of proposed fixed plant and operational on-site activities has identified that prior to mitigation effects of minor to major negative significance have the potential to occur at the nearest existing noise sensitive receptor. Mitigation measures have been recommended such that the procured plant and operational procedures are appropriately considered during the detailed design of these aspects of the Proposed Development to ensure that the recommended design criteria is

complied with. Following implementation of these measures, residual effects of negligible significance are predicted. It is however noted that as the development proposals progress and when more detail becomes available with respect to proposed plant, equipment, their precise location and operational characteristics, it is expected that further detailed assessments will be undertaken in order to determine potential noise effect and required mitigation.

- 6.8. The assessment of road traffic movements on agreed access routes has identified effects of negligible to minor adverse significance. Given that effects of only minor adverse significance have been predicted to arise at worse, the implementation of mitigation has not been warranted.

7. Air Quality

- 7.1. Odour emission rates from the proposed poultry houses 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 houses. 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.
- 7.2. The modelling predicts that, at one nearby residence, the farm house at Cinders Farm, the residence of the operator, the predicted 98th percentile odour concentrations would exceed the Environment Agency's benchmark for moderately offensive odours, a maximum annual 98th percentile hourly mean concentration of 3.0 ouE/m³. Having regard to the sensitivity of Cinders Farm and the magnitude of the impact the overall effect is assessed as negligible and not significant.
- 7.3. At all other receptors considered, the modelling predicts that 98th percentile odour concentrations would be below the Environment Agency's benchmark value for moderately offensive odours.
- 7.4. The poultry development will in any case be subject to an odour management plan and will be regulated and monitored by NRW under the Environmental Permit Regulations. The odour management plan has been submitted to NRW for approval as part of the application for the Environmental Permit.

8. Heritage Assets

- 8.1. The study assessed the impact of the Proposed Development upon the setting of Heritage Assets including Listed Buildings, Conservation Areas and Registered Parks and Gardens within the vicinity of the Site (for scheduled Ancient Monuments see Archaeology). The majority of Heritage Assets within the proximity of the Site are too distant or screened by topography, intervening trees, hedges and buildings for the Proposed Development to have an impact. The only Heritage Asset that could be affected by the proposed development would be Lower Moreton Farmhouse (Grade II Listed Building) due to intervisibility. The way in which the building is experienced is largely confined to its garden due to well established boundary hedge and tree screening from the wider landscape. It does not sit in a prominent or elevated location and does not provide views of the surrounding area except from upstairs rooms, only one of which faces the Site. The building also sits adjacent to its own modern farmyard complex which forms part of its setting.
- 8.2. It is considered that following completion the Proposed Development would not have a harmful impact upon the setting of Lower Moreton Farmhouse due to visually recessive design and associated landscaping. However during the construction phase there may be stages where the Proposed Development, may appear out of character with its surroundings due to bright colours, vehicles and temporary structures including cranes. The effects would be of low adverse magnitude, of minor negative significance and short term. As such the only mitigation recommended is to control the length of the construction period. This could be secured through an appropriately worded planning condition.

9. Archaeology

- 9.1. Aeon Archaeology was commissioned by Indigo Planning on behalf of Wynnstay Home Farm Partnership to carry out an archaeological assessment and field visit of a proposed development to include the erection of four agricultural buildings for rearing livestock (table fowl); ancillary buildings and plant; associated infrastructure; and landscaping in advance of planning application. The proposed development site is to be located on circa 4.8 hectares of gently sloping arable land located to the northwest of Cinders Farm, Ruabon, in the County Borough of Wrexham, North Wales.
- 9.2. The assessment has established that the Proposal will directly physically impact upon three sites – two field boundaries (features 1 and 2) and extant field boundaries (feature 5). Features 1 and 2 are considered to be of local importance and will require breaching by the proposed access road resulting in a neutral/slight significance of effect. As such recommendations have been made for a basic record of these hedgerows prior to breaching, however the record presented in this report is considered commensurate with a basic record level and as such no further recommendations are made for these features.
- 9.3. Feature 5 consists of three field boundaries now removed and as such their level of preservation is unknown but remains are likely to persist in some form at buried sub-surface level. The Proposal will result in the removal of this feature however its importance is considered to be negligible and as such will result in a slight adverse significance of effect.
- 9.4. Therefore no further assessment or mitigatory measures are made for this feature.
- 9.5. The Proposal is also expected to have a negligible to low adverse visual impact when viewing east from approximately 720.0m of the Scheduled Ancient Monument of Wat's Dyke resulting in a slight adverse significance of effect. As the expected effect level of the proposal is so slight no further recommendations for assessment or mitigatory measures are proposed aside from contacting Cadw to inform them of the Proposal.
- 9.6. It has been determined that the Site would have been conducive to habitation throughout antiquity and as such it is recommended that a geophysical survey be undertaken to ascertain whether any preserved buried remains persist at the Site. The results of the survey will inform whether any further assessment or mitigatory measures are required.

10. Landscape & Visual Impact Assessment

- 10.1. The Landscape & Visual Impact Assessment assesses the effects of the proposed development on landscape character and visual amenity.
- 10.2. The application site falls within the Welsh Maelor landscape character area. There are no national or local landscape designations affecting the countryside in the immediate vicinity of the site. The local landscape has been assessed as having Parish/Community level value.
- 10.3. The site is located in a gently undulating lowland landscape with low ground to the east/north-east and rising ground to the west/south-west which helps to provide visual containment and limit the effects of the proposed development to a localised area. It is near to the existing farm buildings at Cinders Farm and it is located in a settled landscape which includes other farmsteads with modern farm buildings. There are no particularly sensitive landscape features in the immediate vicinity of the application site. It is therefore considered to be reasonably capable of accommodating the proposed poultry development.
- 10.4. The proposed development would result in approximately 4.0ha of farmland being permanently lost from arable production. However there would be no loss of any existing trees or hedgerows on the site other than a short section of hedge where the access road enters the poultry houses field. The proposed passing bays along Cinders Lane and the visibility splays at the junction with the A539 would require the translocation some sections of existing hedgerow.
- 10.5. Detailed landscaping proposals have been submitted as part of the planning application including new hedgerows, hedgerow trees and native woodland planting. All the structures would be finished in a dark receding colour which will help to reduce their impact.
- 10.6. Whilst the proposed development will have a high and permanent adverse scale of effect on the character of the application site itself the effect on the character of the immediate adjoining countryside and the wider landscape will reduce with distance.
- 10.7. In terms of landscape character the proposed development does not raise any issues of national, regional or district level importance. The effects are therefore considered to be of minor adverse significance at a site specific level; of moderate adverse significance in terms of the immediate adjoining countryside; and of minor adverse significance on the wider landscape.
- 10.8. A number of roads, footpaths, and private dwellings have been identified as having potential views of the proposed development. The significance of the effects on visual amenity at these locations varies from moderate adverse to negligible although these effects will reduce over time as the proposed landscaping takes effect.

11. Ecology

- 11.1. Ecology survey work was carried out by BSG Ecology in 2017 and 2018. This included a desk study with the local biological records centre, an extended Phase 1 habitat survey (which included an assessment of the suitability of the Site to support protected species) and breeding bird surveys. Consultation was also undertaken with the Wrexham County Borough Council Ecologist. The ecological assessment process was undertaken with reference to the 2016 CIEEM guidelines for Ecological Impact Assessment in the United Kingdom.
- 11.2. The Site comprises an arable field and species-poor semi-improved neutral grassland with hedgerows and scattered trees forming the boundaries.
- 11.3. There are seven non-statutory sites within a 2km radius of the Site. The nearest of these, Caldecott's Wood, is 920m from the Site. There are four statutory sites located within 5km of the Site, the nearest of which is Johnstown Newt Sites Special Area of Conservation (SAC)/Stryt Las a'r Hafod Site of Special Scientific Interest (SSSI). Assessment has been undertaken of the potential impacts on air quality as a result of the Proposal on the interest of the statutory sites and further assessment will be undertaken by Natural Resources Wales.
- 11.4. Twelve of the hedgerow trees support features suitable for roosting bats and the network of hedgerows provide suitable foraging and commuting habitats.
- 11.5. There are no ponds within the Site and the majority of the Site supports sub-optimal terrestrial habitat for great crested newt. There are nine ponds within 500m of the Site. Records of great crested newt were provided for four of these ponds.
- 11.6. Opportunities for nesting birds are primarily associated with the boundary hedgerows and trees. No ground nesting birds were recorded within the Site. Skylark, a ground nesting bird, was recorded in an adjacent field.
- 11.7. No evidence of water vole, otter or badger was recorded within the Site, and the habitats are not considered to offer suitable habitat for dormouse or white-clawed crayfish. The majority of the Site is considered to offer sub-optimal habitat for reptiles. The hedgerows and associated ditches are considered to offer some suitable habitat for reptiles.
- 11.8. No invasive species, such as Japanese knotweed, was recorded on Site.
- 11.9. Ecological mitigation (including avoidance), compensation and enhancement measures are incorporated into the design of the development. This includes minimising hedgerow loss, incorporating native species into the landscaping proposals (woodland planting, hedgerow creation, rough grassland and attenuation basins), retaining all trees, minimising lighting and adopting Reasonable Avoidance Measures (RAMs) with respect to great crested newt.
- 11.10. Based on the mitigation and safeguarding measures incorporated into the design a net gain of habitat for hedgerows, woodland and rough grassland is anticipated. This will be of benefit for foraging bats and nesting birds.
- 11.11. The habitats created within the Site as part of the Proposal will be managed positively to deliver biodiversity benefits in the long-term.
- 11.12. Given the mitigation, enhancement and precautionary compliance measures incorporated into the Proposal, it is considered that the Proposal conforms to relevant national and local plan policy and relevant wildlife legislation.

12. Flooding and Drainage

- 12.1. A Flood Consequences Assessment (FCA) and Drainage Strategy has been undertaken by Waterco Consultants.
- 12.2. The site is located within Flood Zone A on the Welsh Government Development Advice Map, which is an area considered to be at little or no risk of flooding from rivers and/or the sea, with a less than 1 in 1000 annual probability of flooding. The FCA has concluded that the main source of flooding at the site is from the two unnamed watercourses adjacent to the site. The flood extent from these watercourses is minimal. No buildings will be placed in the flood extent. Furthermore, the proposed buildings will be set approximately 2m above the unnamed watercourses that border the site. This will ensure that the development is not at risk of flooding.
- 12.3. The proposed development will introduce impermeable drainage area in the form of buildings and access. This will result in an increase in surface water runoff. In order to ensure the increase in surface water runoff will not increase flood risk elsewhere, surface water runoff will be discharged to the unnamed watercourses located adjacent to the northern and south-eastern boundaries of the site and will be restricted to the greenfield, pre-development runoff rates. This will ensure that the development will have a negligible risk on flood risk elsewhere.
- 12.4. Attenuation storage will be provided in the form of attenuation ponds and french drains, which will also provide treatment to surface water runoff.
- 12.5. Foul water from the shed wash-down should be directed to a dirty water tank. The waste product will then be spread onto surrounding land. The dirty water tank will have a visual and audible high-level alarm system.
- 12.6. The production of a Construction Environmental Management Plan and Surface Water Maintenance Plan will ensure that the effect of the proposed development on water quality and flood risk is minor or negligible.

Appendix 1

Moreton Farm

Site

Site

Cinders Farm

Llwyn Howell

Park Eyton Farm

400 m



