

ENVIRONMENTAL REPORT & DESIGN AND ACCESS STATEMENT

GREYLEES LTD

PLANNING APPLICATION FOR ERECTION OF 2 No. BROILER POULTRY UNITS (MEAT PRODUCTION) WITH FEED SILOS, ROOF MOUNTED PV PANELS AND HARDSTANDING AT BOILING WELLS FARM, GRANTHAM ROAD, SOUTH RAUCEBY, SLEAFORD.

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1.0 INTRODUCTION

- 1.1 This document comprises a combined Design & Access Statement and Environmental Report produced in support of an application seeking full planning permission for erection of 2No. broiler poultry houses with roof mounted photovoltaic (PV) panels, ancillary feed silos and hardstanding upon land at Boiling Wells Farm, Grantham Road, South Rauceby, Sleaford NG34 8QX (Easting: 504041, Northing: 345828).
- 1.2 Under *Schedule 1(17a) of the Town & Country Planning (Environmental Impact Assessment) Regulations 2017*, installations for the intensive rearing of broilers will only necessitate an Environmental Impact Assessment (EIA) if the proposed unit(s) will house in excess of 85,000 birds. The total number of birds to be accommodated by the proposed poultry houses, being a combined 66,300 broiler chickens, is significantly below this threshold. However, intensive livestock units with a floor area exceeding 500 square metres are classed as ‘Schedule 2’ development within the EIA Regulations. The National Planning Practice Guidance outlines criteria and thresholds for Schedule 2 agricultural development, which indicate that ‘installations designed to house more than 60,000 broilers’ should be screened under Schedule 3 of the Regulations. Evidently, the number of bird places supported by the proposed scheme is on the cusp of this threshold. The NPPG also emphasises that: ‘...it should not be presumed that developments above the indicative thresholds should always be subject to assessment, or those falling below these thresholds could never give rise to significant effects, especially where the development is in an environmentally sensitive location. Each development will need to be considered on its merits.’ In this context, particular consideration must be given to the characteristics of the development including its impact in terms of odour, traffic and waste handling.
- 1.3 In accordance with Regulation 6(1) of the Town & Country Planning (Environmental Impact Assessment) Regulations 2017, the ‘screening opinion’ of North Kesteven District Council was sought in relation to the above. The screening opinion (23/0338/EIASCR) was issued on 7th July 2023. It duly confirmed that: ‘...the District Council’s formal view is that the proposed development as set out within the supporting statement, accompanying plans and documents, does not constitute EIA development for the purposes of the Regulations. An Environmental Statement is therefore not required to support the application.’
- 1.4 Nevertheless, this ER (which differs from an EIA Environmental Statement) examines the potential environmental effects of the development/operation in relation to water quality, air quality, ecology, noise, heritage impact, fly nuisance, traffic movements and landscape/visual impact. This document should be read in conjunction with the submitted plans and reports noted below:
- F3135-01 (Proposed site location, layout, elevation and floor plan drawing)
 - F3135-02 (BNG Landscaping Plan)
 - AS Modelling & Data Ltd, 2023, A Dispersion Modelling Study of the Impact of Odour from the Existing and Proposed Broiler Chicken Rearing Houses at Boiling Wells Farm, Grantham Road, South Rauceby near Sleaford.

- AS Modelling & Data Ltd, 2023, A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Broiler Chicken Rearing Houses at Boiling Wells Farm, Grantham Road, South Rauceby near Sleaford.
- George Shuttleworth Ltd, 2023, Flood Risk Assessment & Drainage Report;
- K. J. Ecology Ltd, 2023, Preliminary Ecological Appraisal & BNG Assessment (with BNG Metric 4.0 Calculations); and
- NerG Ltd, 2023, Energy Statement.

2.0 DEVELOPMENT CONTEXT

The Site

- 2.1 The application site occupies approximately 3.37 hectares (including existing access and area proposed for landscaping) and comprises Grade 3B agricultural land located within a wider 11 hectare field intermittently used for hay production. The area of the site that will actually be subject to construction works/host the proposed development is notably smaller, encompassing approximately 0.66 hectares. This part of the application site has not been in active agricultural use for many years. The land was last used to temporarily store materials and machinery during an earlier phase of the farm's construction. The site's eastern and southern boundaries are delineated by the periphery of the established poultry farm, which includes six poultry houses, biomass boiler heating system, ancillary buildings, hardstanding and access. The northern and western boundaries are not yet physically defined. The site's central and western confines include managed grassland proposed for biodiversity enhancing tree and meadow planting measures.
- 2.2 As evident within the aerial photograph included below, a 2.6 hectare rectilinear block of mature woodland is located to the southeast of the farm complex. With reference to the wider associated field, a linear area of woodland is located adjoining its northern confines (close to the proposed site's northern boundary). This extends from the convergence of the field's northern and western boundaries. A new landscaping scheme is being re-established (following loss of specimens due to heat stress in the summer of 2022) along the field's eastern periphery. This will essentially link the established blocks of woodland to the southeast and north of the poultry farm. A substantial surface water drainage attenuation pond is located adjoining the poultry farm complex's eastern boundary. Access to the site is facilitated by the existing private carriageway that junctures with the A153 at a point approximately 1.2 kilometres to the south of the poultry farm.



Aerial photograph (dated 2020) with plan overlay identifying proposed units with hardstanding (outlined red) relative to established farm and neighbouring land uses.

- 2.3 The majority of the farm holding was historically used for free range egg production. The operation included 43 large mobile poultry units situated to the south/southwest of the main farm complex and application site. However, the free range egg production operation ceased in 2013 and the mobile units are no longer in situ. Traces of their siting and associated farm tracks are still evident on the ground.
- 2.4 A railway line, the A153 Grantham Road (both located just under a kilometre to the south of the site) and the A15 Sleaford Bypass (situated a comparable distance to the east) are distinctive linear features within the landscape. Small woodland areas are located both within the immediate vicinity of the site and the wider area. The application site lies in a depression amidst a gently undulating landscape. The River Slea runs a course roughly southwest to northeast through the centre of the farm holding.
- 2.5 There is a Site of Special Scientific Interest (Wilsford and Rauceby Warrens SSSI) located to the southwest of Rauceby Hospital, which comprises the remnants of heathland. This designation is approximately 1.7 km from the application site. A site of Nature Conservation Interest is located adjacent to an area of historic parkland, nearly 1 km to the west of the proposed poultry farm complex.
- 2.6 The application site is located near equidistantly between the built peripheries of Sleaford (1.1 km to the southeast beyond the A15 bypass) and South Rauceby (approximately 0.9 km to the west). A number of isolated dwellings are located in closer proximity to the proposed site, though none of these will be within 400 metres of the proposed units or wider poultry farm complex.

Planning History

- 2.7 In 2010 a planning application (10/0137/FUL) was submitted seeking erection of a substantial enriched colony cage (egg production) poultry unit with ancillary structures upon a site within the southern confines of the Greylees Ltd farm holding, close to the

railway line and A153. This was refused due to concerns over: the effect of the proposal upon the character of the surrounding landscape; the question of whether the scheme would result in nuisance attributed to flies; and the suitability of the proposed access to the public highway. To address the issues noted above, a subsequent application (11/0107/FUL) was submitted in 2011 for the siting of an enriched colony cage unit close to the site now in question. This was withdrawn in April 2011 due to additional information being requested by the Environment Agency and Natural England. A revised scheme (12/0092/FUL), accompanied by an Environmental Impact Assessment, addressed these issues and gained planning permission in May 2012. However, due to changing market conditions, the approved scheme was not pursued through to the stage of commencement.

- 2.8 On 22nd July 2014, a planning application (14/0985/FUL) was submitted for erection of 2 No. broiler poultry units (accommodating a maximum of 78,000 birds) with ancillary structures and access upon the site previously subject to the above noted colony cage scheme. The application was approved on 29th of October 2014. Pre-commencement conditions were thereafter discharged and the units (referred to as Units 1 and 2) were constructed and brought into operation. This newly established poultry farming venture proved to be commercially viable, prompting an offer of a larger supply contract. This in turn led to the submission of planning application 15/12/42/FUL, which sought an additional 2 No. poultry houses with ancillary structures to the immediate east of the site now in question. Planning permission was granted on 15th January 2016 and, following discharge of relevant conditions, development commenced shortly thereafter. The poultry units (referred to as Units 3 and 4) were completed and brought into operation by the summer of 2016.
- 2.9 In early 2021, Moy Park Ltd presented the applicants' with an opportunity to enter into a contract that required broiler supply to be increased by 50%, thus providing up to a combined 234,000 birds per crop cycle. This additional capacity was addressed via planning application 21/0871/FUL, which sought the erection of 2 No. 39,000 bird capacity broiler units. Planning permission was granted on 7th October 2021 and the poultry units (referred to as units 5 and 6) were subsequently completed and brought into operation.
- 2.10 A retrospective planning application was submitted in October 2021 for retention of an agricultural storage building with ancillary diesel tank and storage container upon land to the immediate south of units 5 and 6. Planning permission 21/1647/FUL was subsequently granted on 16th December 2021.
- 2.11 In February 2022, an application was submitted seeking partially retrospective planning permission for retention and extension of an agricultural biomass heating system building with ancillary hardstanding upon land within the farm complex's northern confines (to the immediate east of the application site now in question). Planning consent (22/0267/FUL) was duly granted on the 26th April 2022.

The Development/Operation

- 2.12 The applicants' (Greylees Ltd) are established producers of higher welfare 'table chickens', which are supplied to Moy Park Ltd's local Anwick based food processing facility. The Boiling Wells Farm poultry complex, which includes six poultry units of

near identical specification, originally reared approximately 234,000 birds per crop cycle. This equated to a maximum of 39,000 broiler chickens per poultry unit.

- 2.13 However, in January 2023, Moy Park Ltd's Live Operations Manager contacted the owners/operators of farms supplying their Anwick facility to announce that the company has entered into a long term (10+ year) contract with J. Sainsbury's. To address the terms of the contract, all growers (Boiling Wells Farm inclusive) are now required to reduce stocking densities to align with new poultry welfare requirements. This has resulted in the applicants' having to implement a 15% reduction in bird numbers reared each crop cycle across all existing units. In real terms, this means that the existing poultry units, which were originally designed to accommodate up to 39,000 birds, now only have the capacity to rear a maximum of 33,150 chickens. Consequently, since March 2023, the Boiling Wells Farm broiler operation has effectively reduced in scale/intensity with a combined 198,900 chickens reared per crop cycle (a reduction of 35,100 chickens per cycle).
- 2.14 In order to increase the quantity of poultry reared to the new low density higher welfare standard, Moy Park Ltd are keen to enter into new supply contracts with growers in the Anwick catchment area. Cumulatively, this will benefit UK food security by compensating for reduced production volumes arising as a result of the welfare policy. The applicants' have accordingly been offered the opportunity to secure a contract for supplying 265,200 broilers per crop cycle.
- 2.15 To facilitate the above, 2 No. new higher welfare poultry houses will be required with ancillary feed silos and hardstanding. Each poultry house has an internal roaming area of 2193 m² (the same specification as existing units). These east to west orientated steel portal framed buildings have external dimensions measuring 97.5 metres by 23.3 metres (plus 33.8 metre wide linked front elevation control room and canopy structure). The ridge height of the units will be 5.77 metres. The combined gross external floor area of the units with integrated ancillary structures is 4725 m². Elevation cladding will comprise polyester coated profiled steel sheeting coloured 'Moorland Green'. Pitched roofs will be coloured Olive green. Ridge mounted ventilation fans (efflux velocity of 11m/s) will assist with climate control and odour reduction. Existing biomass heating systems will regulate the internal temperature of the units. The units' integrated climate control system will minimise levels of odour emissions by ensuring that the poultry litter has a low moisture content (which also prevents flies from breeding). The units will therefore have dry environments conducive with low ammonia levels.
- 2.16 Ancillary development will include 3 no. freestanding feed silos, which will be sited adjoining the poultry houses and connected via chutes thus allowing automatic distribution of feed therein. As noted above, heating is to be provided via an existing biomass boiler, which is located to the north of the established complex/east of the application site. The biomass boiler system has sufficient spare capacity to address the proposed development's requirements (i.e. extension of the biomass boiler building is unnecessary). In combination with the above, the poultry farm's electricity supply will be facilitated through on-site generation by roof mounted Photovoltaic (PV) panel arrays (to be fitted to the proposed units). Whilst assisting with combatting climate change, the combination of PV panels and existing biomass boiler heating systems will significantly reduce farm business overheads, thus improving the

viability/competitiveness of the broiler farm. This in turn helps to provide the consumer with more affordable food during a period of inflation.

- 2.17 With regard to external lighting, low output lamps will be installed above the poultry units' eastern elevation doorways. The luminaire aiming angle of the lamps will be less than 70 degrees, the intensity of the light spill will therefore be very low beyond the immediate confines of the site.
- 2.18 Under new welfare conditions, a maximum of 33,150 birds will be accommodated within each unit. In total, the proposed 2 No. poultry units can accommodate up to 66,300 birds. At this low density chickens will benefit from ample internal roaming space, thereby ensuring good physiological and psychological welfare (which assists in producing high quality meat). Poultry will be reared within the units for an average duration of 40 days. Thereafter, the 'harvested' broilers are transported from the site via HGV for processing at the Moy Park Anwick facility. The units will then be cleaned and maintained, typically over the course of 7+ days (sometimes longer if maintenance is required), until the next rearing cycle commences. This results in approximately 7.5 to 7.6 crop cycles per annum.
- 2.19 After each crop of birds is raised, the units will be cleaned and poultry manure will be sold as fertiliser. It is not stored on-site/within the farm holding. Poultry manure will be transported via HGV or tractor with covered trailer (to minimise odour release) then spread upon outlying arable land in accordance with the Code of Good Agricultural Practice (DEFRA, 2009). The new poultry houses/operation will produce approximately 94 tonnes of manure per crop cycle (roughly 714 tonnes per annum). Greylees Ltd have established a network of local customers for the manure fertiliser, which has become a sought after commercial product. The amount of manure fertiliser produced by the farm has recently fallen as a result of the reduced stocking density. The proposal will bring quantities back up to a level roughly commensurate with that produced by the farm operating under the old higher stocking density.
- 2.20 It is anticipated that the proposed development/operation will require 2 No. new full time employees. In addition, a number of part time jobs will be created to address the requirements of certain phases during each crop cycle. It is also anticipated that additional off-site jobs will be created indirectly by virtue of the multiplier effect (i.e. jobs associated with haulage, construction/manufacturing, food processing, administration etc., arising as a result of the poultry farm development/operation).

3.0 PLANNING POLICY CONTEXT

- 3.1 The statutory 'Development Plan' includes the replacement Central Lincolnshire Local Plan, which was formally adopted at the Central Lincolnshire Joint Strategic Planning Committee (CLJSPC) meeting on 13 April 2023. The Central Lincolnshire Local Plan was produced following a partnership between North Kesteven District Council, West Lindsey District Council and City of Lincoln Council. Its provisions are therefore applicable across these three jurisdictions. It should be noted that the Central Lincolnshire Local Plan 2023 now entirely supersedes the previous Central Lincolnshire Local Plan adopted in 2017. Significant weight is also given to the updated National Planning Policy Framework (NPPF) 2021.

Central Lincolnshire Local Plan (2023)

- 3.2 **Policy S1** can be considered a ‘keynote policy’ that details the Central Lincolnshire Local Plan’s ‘Spatial Strategy and Settlement Hierarchy’. The overarching objective of the policy is to: ‘...*focus on delivering sustainable growth for Central Lincolnshire that meets the needs for homes and jobs, regenerates places and communities, and supports necessary improvements to facilities, services and infrastructure.*’ In order to deliver a sustainable distribution of new development across the Central Lincolnshire Area, the various settlements therein have been categorised within an eight tier hierarchy. The first tier concerns the most sustainable location for new development whilst the eighth tier is considered to be the least sustainable. The application site is technically located beyond the confines of South Rauceby’s ‘developed footprint’ and is therefore classed as land within the countryside (tier 8). With specific regard to tier eight land, Policy S1 states that unless allowed by: ‘...*any other policy in the Local Plan (such as Policies S4, S5, S34, or S43) or a relevant policy in a neighbourhood plan, development will be regarded as being in the countryside and as such restricted...*’ As outlined below, the proposed agricultural development is considered to accord with the requirements of Policy S5. Despite the site’s countryside location the proposal does not therefore conflict with strategic provisions of Policy S1.
- 3.3 **Policy S5** concerns 'Development in the Countryside' and is thus of particular relevance to the proposed scheme. With specific reference to 'non-residential development, ‘Part E’ states: ‘*Proposals for non-residential development will be supported provided that:*
- a) *The rural location of the enterprise is justifiable to maintain or enhance the rural economy or the location is justified by means of proximity to existing established businesses or natural features;*
 - b) *The location of the enterprise is suitable in terms of accessibility;*
 - c) *The location of the enterprise would not result in conflict with neighbouring uses; and*
 - d) *The development is of a size and scale commensurate with the proposed use and with the rural character of the location.*’
- 3.4 With reference to the above criteria, it is emphasised that:
- a) The proposed development will essentially expand the established broiler farming operation, increasing production by approximately 25%. A precedent has clearly already been established for poultry farm development in this location. The new poultry units will be physically and operationally closely integrated with the existing units/buildings and make use of the existing site access and hardstanding. The proposed development site therefore maximises existing resources and avoids profligate land use, formation of excess hardstanding etc (concrete having a high embodied carbon content). In terms of landscape and visual impact, it is desirable to integrate the proposed development with the established site as opposed to forming a new separate farm complex. The proposal avoids the perceived proliferation of agricultural development within the countryside.
 - b) The accessibility of the proposed site is considered to be excellent. The development will maximise use of existing hardstanding and private carriageway that provides direct access via a high specification junction to Grantham Road (A153).

- c) As discussed within the latter Environmental Effects sections of this statement, the proposed development will not have any adverse impact upon neighbouring land users, including land in residential use. The new poultry units will feature modern climate control and aviary systems that have been engineered to avoid adverse effects arising from fly nuisance or odour. The poultry house ventilation systems have also been designed to achieve low decibel outputs in order to avoid noise pollution. The development will not require notable external lighting and traffic generation will not be significant. Regardless, the application site is remote from sensitive receptors.
- d) In relation to the above it is emphasised that the size and scale of the proposed development follows a series of functional requirements. The size and scale of the proposed development effectively mirrors that of the existing poultry units, which are of identical design. Though the proposal will expand the established farm complex, the size and scale of the scheme is considered to be entirely commensurate with both the proposed use and the character and appearance of the surrounding countryside.

3.5 Part F' of Policy S5 specifically refers to farm diversification. Though the proposed scheme comprises the expansion of an established operation as opposed to commercial diversification, it can be noted that this policy provision states that farm businesses should be supported in principle. The sub criteria of 'Part F', which effectively mirror the key provisions of 'Part E' discussed above, also indicate that the proposed development is spatially and environmentally acceptable in the selected location.

3.6 Part G of Policy S5 specifically concerns 'agricultural, forestry, horticultural or other rural land-based development'. It stipulates: *'Proposals which will help farms modernise and/or adapt to funding changes or climate change will be supported in principle and any such proposals will be considered against relevant design, landscape and natural environment policies in this plan.'*

Where permission is required, development proposals for buildings required for agriculture or other rural land based development purposes will be supported where:

- a) It is demonstrated that there is a functional need for the building which cannot be met by an existing, or recently disposed of, building;*
- b) the building is of a scale that is proportionate to the proposed functional need;*
- c) the building is designed specifically to meet the functional need identified;*
- d) the site is well related to existing buildings in terms of both physical and functional location, design and does not introduce isolated structures away from existing buildings; and*
- e) significant earthworks are not required, and there will be no harm to natural drainage and will not result in pollution of soils, water or air.'*

3.7 With regard to criteria a) to d), it is emphasised that the proposed development self-evidently addresses a functional need. It is simply not possible to ethically/contractually rear an additional 66,300 broiler chickens per crop cycle within the existing poultry units or other outlying farm buildings. The proposed units have been designed to precisely address operational and functional requirements. Their scale is directly proportionate to the required stocking density and necessities of access, ventilation and

storage. The site affords an excellent spatial relationship with the established farm complex, avoiding profligate use of land and minimising landscape/visual impact. In relation to criterion e), it is demonstrated within the 'Environmental Effects' chapter of this ER that the proposal will not give rise to drainage problems or lead to the pollution of soils, water or air. On this basis, the proposed broiler poultry units with ancillary structures are considered to achieve accordance with the strategic direction and qualifying criteria of Policy S5.

3.8 **Policy S6** outlines 'design principles for efficient buildings'. It stipulates that: '*When formulating development proposals, the following design expectations should be considered and in the following order:*

1. *Orientation of buildings – such as positioning buildings to maximise opportunities for solar gain, and minimise winter cold wind heat loss;*
2. *Form of buildings – creating buildings that are more efficient to heat and stay warm in colder conditions and stay cool in warmer conditions because of their shape and design;*
3. *Fabric of buildings – using materials and building techniques that reduce heat and energy needs. Ideally, this could also consider using materials with a lower embodied carbon content and/or high practical recyclable content;*
4. *Heat supply – net zero carbon content of heat supply (for example, this means no connection to the gas network or use of oil or bottled gas);*
5. *Renewable energy generated – generating enough energy from renewable sources on-site (and preferably on plot) to meet reasonable estimates of all regulated and unregulated total annual energy demand across the year.'*

3.9 It should be noted that the new poultry houses exhibit operational attributes that are quite distinct from other forms of development such as housing, commercial buildings, office blocks etc. In order to regulate internal moisture content (and in turn, odour and ammonia emissions), the poultry units require high velocity ventilation systems designed to provide a constant large volume air flow through the entire internal aviary area. This necessity in no small part reduces the impact of energy efficiency measures such as building orientation and insulation. In this context, the above energy efficiency design principles are addressed as follows:

1. The orientation of buildings does indeed have an impact upon solar gain and heat loss. In this case, it should however be observed that the poultry units do not feature large areas of glazing and heat loss, which is desirable in summer will be little affected by orientation in this case. The orientation of the poultry units does however need to satisfy a number of objectives in addition to energy efficiency. It is highly desirable for operational reasons to construct the proposed units in alignment with the east to west orientation of the existing adjacent units. This allows a spatially efficient nucleated layout designed to provide ease of access by servicing vehicles and efficient connection to the proposed surface water drainage and biomass boiler heating pipelines. With reference to Policy S67 below, a north to south orientation (i.e. at 90 degrees to the existing units) would create a less nucleated layout prompting the loss of more Grade 3 arable land (strategically undesirable). Such would also increase the development's visual prominence, increasing the perceived cumulative scale of the farm complex and requiring substantive engineering to 'terrace' the new units into a sloping landform. The development's magnitude of landscape and visual impact would increase

accordingly. For these reasons, the orientation of the proposed buildings is regarded as striking an appropriate balance between energy efficiency objectives and other material considerations.

2. The form of the proposed development is primarily dictated by function. Each poultry unit is designed to provide the required aviary space in a manner that allows the most efficient ventilation and ease of livestock monitoring whilst minimising the development's visual impact. Resultantly, the poultry units are relatively long, narrow low profile structures. Nevertheless, the form of the buildings also accords with Policy S6, criterion 2 for reason that it is a very thermally efficient design (as expanded upon within Section S6.2 of the Energy Efficiency Design Guide 2023). The simple rectilinear form of the proposed buildings strongly aligns with the design principle of achieving a small surface area to floor area ratio.
3. Each of the proposed units roofs feature thermally efficient layers comprising external profiled steel sheeting cladding with 280mm of loft roll insulation installed thereunder beneath steel rafters. The internal layer includes 20mm PIR board (to prevent cold bridging the steel) with 0.4mm steel sheeting (polyester coated) attached thereto in order to form the ceiling surfacing. The low stature elevations feature profiled steel sheeting external cladding with insulated 100mm rigid cavity battens. Windows are TUF gas filled double glazed units with 'anti-sun grey' coating complemented by insulated 30mm PIR board automated blinds. The above construction accounts for the roof comprising the majority of each unit's external surface area. A substantial level of insulation to minimise heat loss in winter and reduce excessive solar gain in summer is therefore included in the roof structure.
4. The proposed scheme will utilise renewable energy technology. This includes connection to the farm's established biomass boiler heating system. The boilers are fuelled by renewable woodchip produced as a byproduct from forestry operations.
5. Electricity requirements are to be met on-site by roof mounted photovoltaic (PV) panel arrays. The PV panels will generate a combined output of 132,049kWh annually (or 30.1 kWh/m²/yr for each unit). As detailed within the accompanying 'Energy Statement' (note policy S8 below), this is predicted to address average annual electricity demand on-site, thereby negating reliance upon the National Grid.

3.10 **Policy S8** details measures for 'Reducing Energy Consumption' in 'Non-Residential Buildings'. It stipulates that: *'All new non-residential development proposals must include an Energy Statement which confirms that all such non-residential development proposals:*

1. *Can generate at least the same amount of renewable electricity on-site (and preferably on-plot) as they demand over the course of a year, such demand including all energy use (regulated and unregulated), calculated using a methodology proven to accurately predict a building's actual energy performance; and*
2. *To help achieve point 1 above, target achieving a site average space heating demand of around 15-20kWh/m²/yr and a site average total energy demand of 70 kWh/m²/yr. No unit to have a total energy demand in excess of 90 kWh/m²/yr,*

irrespective of amount of on-site renewable energy production. (For the avoidance of doubt, 'total energy demand' means the amount of energy used as measured by the metering of that building, with no deduction for renewable energy generated on site).'

- 3.11 To demonstrate compliance with the above, Policy S8 requires that the Energy Statement must include: '*...details of assured performance arrangements. As a minimum, this will require:*
- a) The submission of 'pre-built' estimates of energy performance; and*
 - b) Prior to each building being occupied, the submission of updated, accurate and verified 'as built' calculations of energy performance. Such a submission should also be provided to the first occupier (including a Non-Technical Summary of such estimates);*

Weight will be given to proposals which demonstrate a deliverable commitment to on-going monitoring of energy consumption, post occupation, which has the effect, when applicable, of notifying the occupier that their energy use appears to exceed significantly the expected performance of the building, and explaining to the occupier steps they could take to identify the potential causes of such high energy use.'

- 3.12 In this context, attention is drawn to the submitted 'Energy Statement', which was produced in association with renewable energy specialists NerG Ltd. As expanded upon therein, for reason that the proposed broiler poultry units require constant high volume ventilation to deliver necessary levels of animal welfare and avoid adverse environmental effects, the operation exhibits high levels of energy usage. It will not therefore be possible to achieve compliance with Policy S8 criterion 2 because each unit exhibits a total energy demand in excess of 90 kWh/m²/yr (comparative analysis of existing units predicts a total energy usage of approximately 322.1 kWh/m²/yr per unit.

- 3.13 However, Policy S8 does outline two 'Exceptional Basis Clauses'. It stipulates that there are: '*...two potential clauses allowing certain developments to not meet in full the policy requirements above, though in all cases the energy performance arrangements of points a) and b) are still required.'* Clause 1, which is applicable to the proposed development, concerns 'technical or policy reasons' for not satisfying criterion 1 and 2 noted above. It states: '*Where, on an exceptional basis, points 1-2 cannot be met for technical (e.g. overshadowing) or other policy reasons (e.g. heritage) or other technical reason linked to the unique purpose of the building (e.g. a building that is, by the nature of its operation, an abnormally high user of energy), then the Energy Statement must demonstrate both why they cannot be met, and the degree to which each of points 1-2 are proposed to be met.*

Where this exceptional basis clause is utilised, and where it involved the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more, then the applicant must either:

- a) enter into an appropriate legal agreement which will either provide renewable energy infrastructure offsite equivalent to at least offsetting the additional energy requirements not achieved on site; or,*
- b) enter into an appropriate legal agreement to provide a financial contribution to the applicable LPA of a value sufficient to enable that LPA to offset (via off site*

renewable energy infrastructure or other offsite infrastructure to deliver a reasonable carbon saving) the remaining performance not achieved on site (with this being a minimum contribution of £5k and a maximum of £100k per 1,000 square metres); or

c) demonstrate that the building/s will be connected to a decentralised energy network or combined heat and power unit, in accordance with Policy S9 below.'

3.14 As detailed within the submitted Energy Statement, although the combined building floor areas are significantly in excess of 1000 m², the implementation of renewable technology (including a combined roof mounted PV panels and connection to existing biomass boiler system) will allow the proposed units to meet (and exceed) annual energy demands through on-site renewable generation. Indeed, there is potential for electrical power to be exported to the National Grid when surplus is produced during summer months. It is therefore evident that the proposal achieves compliance with Criterion 1 of Policy S8 on the basis that the development can generate at least the same amount of renewable energy on-site as it demands over the course of any given year. It is not therefore necessary for the applicants' to make contributions to the LPA for off-site infrastructure under Policy S8 'Exceptional Basis' Clause 1. For these reasons, the proposed development is considered to align with the strategic intention of Policy S8.

3.15 **Policy S9** concerns 'Decentralised Energy Networks and Combined Heat and Power.' It states that: '*Where an existing decentralised energy network exists in the locality, and such a network is likely operational in the long term (i.e. minimum 30 years), then development proposals in the vicinity can consider connection to such an existing energy network provided that in doing so it does not require the network as a whole to increase its fossil fuel consumption (i.e. it should be demonstrated that the network either has spare and wasted capacity, or demonstrate that the energy in the decentralised network is sourced from renewable sources).*

Any proposal for a new or extended combined heat and power network will only be supported if the power source of such a network is renewable or very low carbon based.'

3.16 As expanded upon within the 'Development Context' section of this ER, the proposed scheme will utilise an existing biomass boiler heating plant. This includes two boilers with combined 1.8 MW output. This has sufficient spare capacity to address the heating demands of the new poultry units. The biomass boiler will essentially pipe hot water through heat exchangers in each unit during the cooler months of late autumn, winter and early spring. This works in tandem with the ventilation systems in order to ensure temperatures do not drop below the required threshold irrespective of air flow/ambient temperatures. The biomass boiler system can be regarded as a decentralised renewable energy network for reason that it allows heating to be provided 'off-grid' through combustion of renewable wood chip fuel. The biomass boiler system will not however produce 'combined heat and power'. Electricity will be generated from an independent network of roof mounted PV panels. These will ordinarily meet the proposed units' annual electrical requirements. The development will nevertheless be connected to the National Grid to address gaps in self-generated renewable power (particularly during winter months) and allow any excess to be exported (such as when power demands are lower during unit cleaning and maintenance phases). These elements of the proposed development are considered to align with the strategic intention of Policy S9.

3.17 **Policy S53**, which concerns matters of ‘design and amenity’, stipulates that: ‘*All development, including extensions and alterations to existing buildings, must achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all.*’ In order to ensure that this overriding objective is achieved, Policy S53 outlines a number of criteria relating to considerations of: context; identity; built form; movement; nature; public spaces; uses; homes and buildings; resources; and lifespan. Given that the proposed scheme comprises a specialised form of intensive livestock development, a number of these criteria are of limited applicability. Nevertheless, key relevant provisions are discussed below:

1. ‘*Context: a) Be based on a sound understanding of the context, integrating into the surroundings and responding to local history, culture and heritage; b) Relate well to the site, its local and wider context and existing characteristics including the retention of existing natural and historic features wherever possible and including appropriate landscape and boundary treatments to ensure that the development can be satisfactorily assimilated into the surrounding area; c) Protect any important local views into, out of or through the site;*’ The proposed development adjoins an established contemporary broiler poultry farm situated amidst a rural landscape characterised by agricultural use. The proposed poultry units and ancillary development have been designed and sited in a manner that achieves a very close spatial relationship with the existing farm complex, thus making efficient use of land and minimising prominence within the landscape setting. The development will not compromise any important views into, out of or through the site. Mitigation will be provided in the form of screening planting designed to reinforce and expand upon surrounding woodland and hedgerow features. Such is expanded upon in detail within the latter ‘Landscape and Visual Impact’ section of this ER.
2. ‘*Identity: a) Contribute positively to the sense of place, reflecting and enhancing existing character and distinctiveness; b) Reflect or improve on the original architectural style of the local surroundings, or embrace opportunities for innovative design and new technologies which sympathetically complement or contrast with the local architectural style; c) Use appropriate, high quality materials which reinforce or enhance local distinctiveness; d) Not result in the visual or physical coalescence with any neighbouring settlement nor ribbon development;*’ Evidently, criterion 2 was drafted primarily in mind of more conventional residential and commercial development and it is thus perhaps of limited applicability to a scheme concerning livestock units. Nevertheless, it is emphasised that the proposed poultry houses and ancillary structures will directly reflect the appearance of the existing units, including inconspicuous ‘Moorland Green’ coloured elevation and roof cladding. The proposal will clearly be agricultural in character and therefore consistent with its farmland setting. The site is remote from outlying settlements and the scheme will not result in the coalescence of urban areas or the creation of ribbon development.
3. ‘*Built Form: a) Make effective and efficient use of land that contribute to the achievement of compact, walkable neighbourhoods; b) Be appropriate for its context and its future use in terms of its building types, street layout, development block type and size, siting, height, scale, massing, form, rhythm, plot widths, gaps*

between buildings, and the ratio of developed to undeveloped space both within a plot and within a scheme; c) Achieve a density not only appropriate for its context but also taking into account its accessibility; d) Have a layout and form that delivers efficient and adaptable homes in accordance with Policy S6 and Policy S20.' Though of lesser applicability to agricultural schemes such as that in question, it should nevertheless be noted that the proposed livestock development has been carefully designed to make very efficient use of land. The new units and ancillary structures have been aligned parallel with the existing units and sited in close proximity, thereby creating a nucleated layout that minimises the development's visual impact and avoids profligate use of materials (such as extensive areas of concrete hardstanding with a high embodied carbon content).

4. *'Movement: a) Form part of a well-designed and connected travel network with consideration for all modes of transport offering genuine choices for non-car travel and prioritising active travel and where relevant demonstrate this through evidence clearly showing connectivity for all modes and a hierarchy of routes (also see Policy S47 and Policy S48); b) Maximise pedestrian and cycle permeability and avoid barriers to movement through careful consideration of street layouts and access routes both within the site and in the wider context contributing to the delivery of walkable and cyclable neighbourhoods in accordance with Policy S48; c) Ensure areas are accessible, safe and legible for all including people with physical accessibility difficulties; d) Deliver well-considered parking, including suitable electric vehicle charging points, with appropriate landscaping provided in accordance with the parking standards set out in Policy NS18 and Policy S49; e) Deliver suitable access solutions for servicing and utilities;'* It is emphasised that the proposed development/poultry farm complex will not be accessible to the general public and no rights of way pass through or adjacent to the site. Considerations of vehicle, cycle and pedestrian permeability are therefore of limited relevance to the proposal. Future employees living locally can feasibly commute to and from the site via bicycle. Pedestrian access is realistically more limited due to travel distances from the most proximate settlement and public transport infrastructure. The proposed scheme does not include car parking areas, though the applicant intends to install an EV charging point adjacent to the site office in order to support low/zero emission private and light commercial vehicles. As expanded upon within the latter 'Transportation' section of this ER, the proposal will not have any significant impact upon the safety and capacity of the local highway network
5. *'Nature: a) Incorporate and retain as far as possible existing natural features including hedgerows, trees, and waterbodies particularly where these features offer a valuable habitat to support biodiversity, aligned with policies in the Natural Environment chapter of the Local Plan; b) Incorporate appropriate landscape and boundary treatments to ensure that the development can be satisfactorily assimilated into the surrounding area, maximising opportunities to deliver diverse ecosystems and biodiverse habitats, strengthening wildlife corridors and green infrastructure networks, and helping to achieve wider goals for biodiversity net gain, climate change mitigation and adaptation and water management;'* As detailed within the latter 'Ecology and Nature Conservation' section of this ER, the proposed development will safeguard natural features including all existing outlying trees and hedgerows. The proposal also includes extensive landscaping measures designed to provide both visual screening and ecological enhancement.

By linking woodland and hedgerow habitat with new planting, the proposal will form movement corridors for wildlife around and through the application site. As expanded upon within the context of Policy S61 below, mitigating landscaping measures will provide in excess of 10% biodiversity net gain.

6. *'Public Spaces: a) Ensure public spaces are accessible to all, are safe and secure and will be easy to maintain with clear definition of public and private spaces; b) Form part of a hierarchy of spaces where relevant to offer a range of spaces available for the community and to support a variety of activities and encourage social interaction; c) Be carefully planned and integrated into the wider community to ensure spaces feel safe and are safe through natural surveillance, being flanked by active uses and by promoting activity within the space; d) Maximise opportunities for delivering additional trees and biodiversity gains through the creation of new habitats and the strengthening or extending wildlife corridors and the green infrastructure network in accordance with policies in the Natural Environment chapter;'* The application site comprises private land and, not least for reasons of biosecurity, the development will not introduce open spaces to the public domain or create new public rights of way. Criterion 6 is not therefore considered to be directly applicable to the proposed scheme.

7. *'Uses: a) Create or contribute to a variety of complementary uses that meet the needs of the community; b) Be compatible with neighbouring land uses and not result in likely conflict with existing uses unless it can be satisfactorily demonstrated that both the ongoing use of the neighbouring site will not be compromised, and that the amenity of occupiers of the new development will be satisfactory with the ongoing normal use of the neighbouring site; c) Not result in adverse noise and vibration taking into account surrounding uses nor result in adverse impacts upon air quality from odour, fumes, smoke, dust and other sources;'* The proposed scheme seeks expansion of an established broiler poultry farm. The new poultry units and ancillary structures are remote from sensitive receptors such as land in residential or recreational use. As demonstrated within the 'Environmental Effects' chapter of this ER, there is every reason to believe that the development will achieve a high level of land use compatibility. The broiler poultry farming operation is regulated under the Environment Agency IPPC permitting system and it will not result in any significant adverse cumulative impact upon air quality or baseline noise conditions experienced by neighbouring occupants/outlying sensitive receptors.

8. *'Homes and Buildings: a) Provide homes with good quality internal environments with adequate space for users and good access to private, shared or public spaces; b) Be adaptable and resilient to climate change and be compatible with achieving a net zero carbon Central Lincolnshire as required by Policies S6, S7 and S8; c) Be capable of adapting to changing needs of future occupants and be cost effective to run by achieving the standards set out in Policy S20; d) Not result in harm to people's amenity either within the proposed development or neighbouring it through overlooking, overshadowing, loss of light or increase in artificial light or glare; e) Provide adequate storage, waste, servicing and utilities for the use proposed;'* Though only elements of criterion 8 are of relevance to the proposed scheme, it is nevertheless reiterated that the development is adaptable (withing reason given the specialised nature of use) and resilient to climate change.

Alignment is achieved with the strategic intention of policies S6 and S20. The development will not harm levels of amenity afforded by outlying occupants through overlooking, overshadowing, loss of light or increase in artificial light or glare (or indeed any other adverse effect). The scheme incorporates provision for ample ancillary storage space, waste management measures (including sealed drainage system), facility for operational/building servicing and utilities.

9. *‘Resources: a) Minimise the need for resources both in construction and operation of buildings and be easily adaptable to avoid unnecessary waste in accordance with Policies S10 and S11; b) Use high quality materials which are not only suitable for the context but that are durable and resilient to impacts of climate change in accordance with the requirements of Policy S20;’* As previously noted, the proposed development features a spatially nucleated layout designed to minimise requirements for new hardstanding. This in turn avoids profligate use of concrete, which has a high embodied carbon content. The new units utilise materials efficiently and construction techniques designed to resist a range of climatic conditions and achieve excellent longevity.

10. *‘Lifespan: a) Use high quality materials which are durable and ensure buildings and spaces are adaptive; and b) Encourage the creation of a sense of ownership for users and the wider community with a clear strategy for ongoing management and stewardship.’* Again, this provision is of lesser relevance to the proposed broiler poultry farm development. Notwithstanding the above, the scheme has been designed to achieve a degree of visual congruity (low profile design with inconspicuous Moorland Green cladding) and the extended farm complex will be complemented by extensive landscaping. This will be managed over the lifespan of the operation, thereby maturing and reducing the long term prominence of the development within the setting of the locality.

3.18 **Policy S61** relates to ‘biodiversity opportunity and delivering measurable net gains’. It notes that: *‘Following application of the mitigation hierarchy, all development proposals should ensure opportunities are taken to retain, protect and enhance biodiversity and geodiversity features proportionate to their scale, through site layout, design of new buildings and proposals for existing buildings with consideration to the construction phase and ongoing site management.’* In this context, Policy S61 states that: *‘Proposals for major and large scale development should seek to deliver wider environmental net gains where feasible.’*

3.19 With particular regard to ecological enhancement, Policy S61 notes: *‘All development proposals, unless specifically exempted by Government, must provide clear and robust evidence for biodiversity net gains and losses in the form of a biodiversity gain plan, which should ideally be submitted with the planning application (or, if not, the submission and approval of a biodiversity gain plan before development commences will form a condition of any planning application approval), setting out:*

- a) information about the steps to be taken to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat;*
- b) the pre-development biodiversity value of the onsite habitat;*
- c) the post-development biodiversity value of the onsite habitat following implementation of the proposed ecological enhancements/interventions;*
- d) the ongoing management strategy for any proposals;*

- e) any registered off-site gain allocated to the development and the biodiversity value of that gain in relation to the development; and
- f) exceptionally any biodiversity credits purchased for the development through a recognised and deliverable offsetting scheme.

Demonstrating the value of the habitat (pre and post-development) with appropriate and robust evidence will be the responsibility of the applicant. Proposals which do not demonstrate that the post-development biodiversity value will exceed the pre-development value of the onsite habitat by a 10% net gain will be refused.

3.20 To address these objectives, consultants' K. J. Ecology Ltd were commissioned to undertake a preliminary ecological appraisal and assessment of Biodiversity Net Gain identifying baseline conditions and mitigating measures required to achieve a biodiversity enhancement of at least 10%. As expanded upon within the latter 'Ecology & Nature Conservation' chapter of this ER, it is evident that the area of land that will be subject to new development is of very limited biodiversity value and the ecological impact of the construction works will be *de minimis*. The proposed scheme will nevertheless include nearly 1.2 hectares of meadow habitat and planting of a new 0.4 hectare woodland area (located within western confines of application site). In combination, this will deliver a biodiversity net gain of 17.53%. The new planting scheme is detailed upon the submitted 'BNG Landscaping Plan' and such will be sustained and managed for a minimum period of 30 years, thus complying with Policy S61.

3.21 **Policy S66** pertains to 'Trees, Woodland and Hedgerows'. It is emphasised that the proposed scheme will not have any impact upon existing trees and hedgerows. However, of particular relevance to the development, Policy S66 states that: '*Where appropriate and practical, opportunities for new tree planting should be explored as part of all development proposals (in addition to, if applicable, any necessary compensatory tree provision). Where new trees are proposed, they should be done so on the basis of the five Tree Planting Principles. Proposals which fail to provide practical opportunities for new tree planting will be refused.*

Planting schemes should include provision to replace any plant failures within five years after the date of planting. Planting of trees must be considered in the context of wider plans for nature recovery which seeks to increase biodiversity and green infrastructure generally, not simply planting of trees, and protecting / enhancing soils, particularly peat soils. Tree planting should only be carried out in appropriate locations that will not impact on existing ecology or opportunities to create alternative habitats that could deliver better enhancements for people and wildlife, including carbon storage. Where woodland habitat creation is appropriate, consideration should be given to the economic and ecological benefits that can be achieved through natural regeneration. Any tree planting should use native and local provenance tree species suitable for the location.'

3.22 As expanded upon within the latter 'Ecology & Nature Conservation' and 'Landscaping' sections of this report, the proposed development will include formation of a new 0.4 hectare tree belt. This will effectively extend an existing block of woodland located to the north of the site and comprise a mix of evergreen and deciduous native species including a high percentage of Common Oak. The woodland presents a range

of benefits including enhancing the site's biodiversity value, providing visual screening, sequestering CO₂ emissions and enriching the character of the countryside environment. The landscaping measures will be safeguarded in accordance with a management plan that includes provision for the replanting of any failed specimens within the first 5 years. On this basis, the proposal is considered to accord with Policy S66.

- 3.23 **Policy S67** concerns 'the best and most versatile agricultural land'. It stipulates that: '*Proposals should protect the best and most versatile agricultural land so as to protect opportunities for food production and the continuance of the agricultural economy.*

With the exception of allocated sites, significant development resulting in the loss of the best and most versatile agricultural land will only be supported if:

- a) The need for the proposed development has been clearly established and there is insufficient lower grade land available at that settlement (unless development of such lower grade land would be inconsistent with other sustainability considerations); and*
- b) The benefits and/or sustainability considerations outweigh the need to protect such land, when taking into account the economic and other benefits of the best and most versatile agricultural land; and*
- c) The impacts of the proposal upon ongoing agricultural operations have been minimised through the use of appropriate design solutions; and*
- d) Where feasible, once any development which is supported has ceased its useful life the land will be restored to its former use (this condition will be secured by planning condition where appropriate).*

Where proposals are for sites of 1 hectare or larger, which would result in the loss of best and most versatile agricultural land, an agricultural land classification report should be submitted, setting out the justification for such a loss and how criterion b has been met.'

- 3.24 In light of the above, Natural England's Agricultural Land Classification map identifies that the application site is located within a wider area of Grade 3 (good to moderate) arable land. It should be noted that Grade 3 land encompasses two subgrades: Grade 3a (good); and Grade 3b (moderate). It is understood that the application site comprises Grade 3b 'moderate' quality arable land. Furthermore, the land and wider associated field is effectively 'set-aside' and has not been in cultivation for many years.
- 3.25 With regard to Criterion a) of Policy S67, it is emphasised that the proposed scheme seeks agricultural development (poultry rearing operation) designed to facilitate intensive food production. The rhetoric of Criterion a) suggests that the intention is to safeguard productive agricultural land from larger scale non-agricultural development (such as new housing or industrial units) as opposed to schemes such as that in question. Regardless, it is evident that subgrade 3b land is the lowest available classification within the farm holding/wider geographic area. Siting the proposed development thereon is sequentially preferable.
- 3.26 In relation to Policy S67 Criterion b), the proposal will allow complete operational and spatial integration of the 2 No. new poultry units with the established poultry farm. The arrangement avoids profligate land use utilising existing ancillary buildings and

proposed renewable energy systems in a manner that benefits both the existing and proposed poultry units. This avoids replication of structures and a consequent larger developed footprint, which would arise if the proposed units were sited in a remote location upon lower grade arable land (if such was available within the farm). The spatial, operational, economic, environmental and energy efficiency benefits of the proposal arguably outweigh the loss of subgrade 3b arable land, not least given that the proposal will enable intensive food production. In this context, and with reference to Policy S67 Criterion c), the proposal's nucleated site layout and high level of integration with the established poultry farming operation will prevent the scheme from negatively impacting arable farming within neighbouring field systems.

- 3.27 The new poultry units with ancillary feed silos and hardstanding are essentially bespoke to the broiler poultry rearing operation. Were the operation to permanently cease, the buildings would be of limited adaptability. The poultry units and ancillary structures would accordingly be dismantled and sold prior to remediation works necessary to restore the land to arable use (or habitat enhancement dependent upon policy/market requirements). Compliance can therefore be achieved with Policy S67 criterion d).
- 3.28 It is emphasised that the new poultry units, feed silos and associated hard standing will only occupy 0.66 hectares of agricultural land. The area of land actually subject to development has also previously been used for the temporary storage of building materials associated with an early phase of the farm's development and agricultural machinery (now moved to barn). It has been in excess of 20 years since the land was last subject to arable cultivation. The remaining area of the site (1.65 hectares) merely comprises grassland (occasionally cut for hay) that will be enriched with additional planting to enhance biodiversity. If necessary, the land subject to landscaping measures could theoretically be put back to arable use with relative ease. For these reasons, submission of an 'agricultural land classification report' in support of this application is not considered to be either beneficial or necessary. The proposed scheme achieves compliance with Policy S67.

National Planning Policy Framework (2021)

- 3.29 **Paragraph 8** expands upon the term 'sustainable development' in light of its economic, social and environmental components: *'Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):*
- a) *an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*
 - b) *a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*

c) *an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy*

3.30 The proposed scheme is considered to address the economic, social and environmental dimensions of 'sustainable development' for reason that it will assist an established farming operation to increase its long term functional and financial efficiency, which in turn allows the business to remain competitive and continue to support a number of employees. The application site comprises an area of disused arable land adjacent to the existing farm complex. It is not considered to be an environmentally sensitive location. The proposal will not have any adverse impact upon land of notable habitat or biodiversity value. The Moorland Green coloured profiled steel sheeting clad poultry units will appear visually congruous against the backdrop of the existing farm complex and outlying countryside. Indeed, one would typically expect to see poultry farm development in a location such as that in question. The development is arguably sustainable for reason that it will meet the social and economic demands of the present without compromising the ability of future generations to meet their own needs. On this basis the proposed scheme should be considered to accord with the strategic emphasis of Paragraph 8.

3.31 **Paragraph 84** outlines objectives for 'supporting a prosperous rural economy' and, of particular relevance to the proposed scheme, states that: *'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;*

3.32 The proposed development will facilitate expansion of an agricultural enterprise required to address increased market demand for UK produced higher welfare table fowl. The proposal will compensate for the recent reduction in the number of chickens reared at Boiling Wells Farm following Moy Park Ltd's implementation of lower stocking densities for all poultry growers supplying their Anwick food processing facility. The scheme will bolster the local economy by creating new jobs, both directly (jobs associated with the poultry operation) and indirectly (jobs associated with construction, haulage requirements, farming, equipment manufacture, and food processing). It is important to emphasise that the UK farming industry has come under increasing pressure to remain commercially viable in recent years. Specialist farming operations such as that in question are crucial in sustaining many agricultural enterprises, including that of Greylees Ltd. Farm businesses help to underpin the social and economic fabric of local communities whilst acting as custodians of the countryside. The proposal is considered to achieve strong alignment with the intention of paragraph 84.

4.0 MINERALS ASSESSMENT

4.1 The application site is located within a 'Minerals Safeguarding Area', as identified within the *Lincolnshire Minerals & Waste Local Plan 2016*. The proposed development

is therefore subject to the provisions of Policy M11, which specifically concerns the safeguarding of minerals resources.

- 4.2 The Lincolnshire Minerals Safeguarding Areas Map (Figure 1 of the Minerals & Waste Local Plan) identifies that the application site is situated within an area host to limestone deposits (note Figure 1 extract below).



Figure 1 Extract: Application site (red) situated amidst limestone mineral deposits.

- 4.3 Lincolnshire Minerals & Waste Local Plan **Policy M11** emphasises that the identified limestone resources ‘...will be protected from permanent sterilisation by other [non-mineral extraction] development.’ In light of this objective, the Policy states that: ‘Applications for non-minerals development in a minerals safeguarding area must be accompanied by a Minerals Assessment. Planning permission will be granted for development within a Minerals Safeguarding Area provided that it would not sterilise mineral resources within the Mineral Safeguarding Areas or prevent future minerals extraction on neighbouring land.’
- 4.4 In context of the above, it is emphasised that there are no active minerals extraction developments/operations within the wider locality of the application site. Furthermore, there are no plans for minerals extraction development upon the application site or neighbouring land. The existing broiler poultry farm and additional proposed units technically afford a relatively high level of compatibility with other land based primary industries such as quarrying/mining so there is no reason to suspect the development will prevent future minerals extraction on adjoining or outlying sites.
- 4.5 It should be noted that the proposed scheme comprises agricultural development upon agricultural land currently used for a combination of arable and poultry farming. The development scheme is not therefore a significant departure from the established land use. The new poultry houses will only be required for the duration of the broiler production operation. The structure will not entail notable intrusive groundworks. Only modest foundation pads are required to support the unit’s steel portal frame. The development will not therefore require the removal of any significant volume of minerals deposits. The poultry houses, ancillary feed silos and hardstanding could also

be dismantled and cleared with relative ease in order to facilitate future minerals extraction operations.

- 4.6 On this basis, it is concluded that the proposed development will not sterilise limestone minerals resources or prevent future minerals extraction on neighbouring land. The proposed scheme achieves compliance with the provisions of Lincolnshire Minerals & Waste Local Plan Policy M11.

5.0 ENVIRONMENTAL EFFECTS

- 5.1 The following sections detail analysis of the various cumulative environmental effects of the proposed poultry farm development/operation and any mitigation measures considered necessary to avoid identified adverse impacts.

Landscape & Visual Impact

- 5.2 This section considers the physical and visual impact of the proposed development upon the landscape. The assessment process adheres to general principles outlined by the Landscape Institute and Institute of Environment Management publication '*Guidelines for Visual and Landscape Impact Assessment*' (2013) (GLVIA3) and The Countryside Agency's '*Landscape Character Assessment - Guidance for England & Scotland*' (2002) publication. However, it is not considered necessary for the following appraisal to provide the level of detail one would typically associate with a full Environmental Impact Assessment.
- 5.3 The GLVIA notes that landscape and visual assessment are technically separate procedures. However, the assessment of how a development might impact upon the landscape inevitably forms a baseline for visual assessment. The 'landscape' is regarded as an environmental resource and the 'effect' of a development upon it is primarily assessed in light of physical changes and the manner in which these alter established attributes/characteristics. 'Visual impact' is essentially a term used to describe the aesthetic consequences of changes to the landscape, i.e. how people might perceive changes to a view or the visual amenity/value of a site and its surroundings.

Landscape Baseline & Characteristics

- 5.4 The application site comprises Grade 3 agricultural land that forms part of the Boiling Wells Farm holding. The immediate setting is partially defined by the established adjoining poultry complex (comprising 6 No. Poultry houses with ancillary buildings). Several years ago, the farm holding was in use for free range organic egg production, which included 43 large mobile poultry units situated to the south/southwest of the main farm complex and application site. However, the majority of the farm holding is now subject to arable use or 'set aside'. A farm complex, which includes a number of steel portal framed agricultural storage buildings, is situated approximately 400 metres to the southeast of the application site. A railway line, the A153 road (both located just under a kilometre to the south of the site) and the A15 Sleaford Bypass (situated a comparable distance to the east) are distinctive linear features within the landscape. Small woodland areas are located both within the immediate vicinity of the site and the wider area. The application site lies in a depression amidst a gently undulating landscape. The River

Slea runs a course roughly southwest to northeast through the centre of the farm holding.

5.5 The European Landscape Convention (ELC) defines the term 'landscape' as: '*...an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*' (Council of Europe, 2000). To understand the application site within its wider landscape context, regard was had to the North Kesteven Landscape Character Assessment, which was produced in 2007. The application site is identified as being within the Slea Valley Landscape Character Sub-Area. The key characteristics of this area have been identified as:

- *The area is low at the valley bottom (approx 20m) and rises gently on both sides to 25m before rising to the adjoining landscape character sub-areas.*
- *The area is dominated by the main road, the A153, and the railway line which follow the line of the valley along its whole length.*
- *A watercourse known as the Beck, which later becomes the River Slea, also follows along the length of the valley but is not an obvious feature in the landscape.*
- *In the centre of the valley are several small lakes reflecting past gravel working.*
- *The land use is generally arable agriculture, though there is evidence of set-aside and grazing.*
- *Few hedgerows but some dry stone walls.*
- *The valley sides are generally open with little woodland cover. There are some distinctive willow trees lining the Beck at Wilsford and some stands of poplar.*
- *On the valley floor to the centre of the area, around Sleaford golf course, unimproved heathland with pine trees and gorse bushes is present.*
- *The village of Wilsford stands partly in the valley but also rises up into the Upland Plateau fringe. It has attractive limestone buildings with a distinctive church.*
- *The other main settlement is around Rauceby Station where there is new development within the former Rauceby Hospital, characterised by woodland including distinctive fir trees.*

5.6 Paragraph 8.4.8 of the LCA makes reference to the Slea Valley (which defines part of the farm holding) and notes that: '*Due to the surrounding landform, views out from within the valley are limited at the western end. Neither the railway nor the River Slea are significant visual features within the valley at its western end.*' This description appears consistent with observations made within the southern confines of the farm holding. It can be noted that the existing poultry farm is not readily evident within views of or from the Slea Valley due to the screening effect of the subtly undulating landform.

- 5.7 The assessment also notes that the A15 Sleaford Bypass cuts across the valley on the embankment over the railway and river, making it a significant feature within the flood plain and providing extensive views along the valley. However, dense roadside planting along the A15 Sleaford Bypass is now well established, thereby limiting intervisibility between road users and the outlying countryside.
- 5.8 There is a Site of Special Scientific interest (SSSI) to the southwest of Rauceby Hospital which comprises the remnants of heathland. This designation is adjacent to the Sleaford Golf Course and is approximately 1.7 km from the application site. There is a historic park and garden associated with Rauceby Hall to the north of South Rauceby. This parkland and two listed buildings (Hall Farmhouse and associated farm buildings – Grade II) are located approximately 0.7+ km from the application site. An area of land designated as a site of Nature Conservation Interest is situated adjacent to the parkland. This ecological receptor, which is also of aesthetic merit/visual amenity value, is located 1 km to the west of the application site.

Landscape Impact

- 5.9 The impact of a development upon the fabric of the landscape is effectively appraised in light of the degree to which the resultant changes will alter the perceived landscape character and landform.
- 5.10 The area of land to be subject to the siting of new buildings and structures (i.e. excluding existing access and biodiversity enhancing landscaping) occupies a relatively small area of just 0.66 hectares. The site essentially comprises an area previously used to store construction materials located adjoining the north-western corner of an established farm complex. The scheme will not result in significant loss of farmland or land of habitat value. The fabric of the landscape will nevertheless be subtly changed as a result of the proposal. This is inevitable given that the presently undeveloped application site will be subject to the erection of two 2362.5 sq metre (approx) poultry houses and ancillary structures. However, the application site and surrounding landscape is considered to exhibit a low to moderate sensitivity to change. Landscape features/characteristics are robust and unlikely to be impacted by the proposed development, which has a very close spatial relationship with the established farm complex. One would typically expect to see agricultural buildings in a location such as that in question.
- 5.11 The new poultry houses will integrate cohesively with the existing poultry farm, which partially defines the character and setting of the application site and its immediate surroundings. The geographic extent of the development's landscape impact is effectively limited to the immediate setting of the application site. The perceptual/aesthetic qualities of the local landscape would only be marginally affected by the proposed scheme. Though the development will increase the perceived scale of the existing poultry farm, the cumulative impact of the development will not fundamentally change the landscape character. The impact will also be lessened by the proposed biodiversity enhancing screening landscaping scheme, which comprises a dense belt of tree planting adjoining a hedgerow to the west of the existing complex. This will serve to further limit the geographic extent of landscape impact in the medium to long term.

- 5.12 On the basis of the above, the overall landscape impact of the proposed development when perceived in cumulation with the established poultry farm complex is considered to be of **small magnitude**. Effects can be broadly mitigated by virtue of screening landscaping measures.

Visual Context & Receptors

- 5.13 The gently undulating nature of the landscape surrounding the application site means that some long distance vistas can be experienced. However, such also means that views can easily be restricted by buildings, topographical features and vegetation.
- 5.14 The visual influence of a development is assessed by identifying its connection with the surrounding environment and its range of intervisibility. Such is referred to as the Zone of Visual Influence (ZVI). The ZVI is determined by the presence of screening features (be they terrain, buildings or vegetation) and the manner by which these serve to restrict the line of sight potentially gained from the surrounding area. Theoretically the ZVI perimeter will demarcate the furthest possible views of a site/development.
- 5.15 However, in reality the ZVI frequently varies according to climatic conditions and both minor and major changes to the built environment and wider landscape. For example, the felling of certain trees could potentially increase the ZVI of a building from several metres to several kilometres in a given direction. Equally, a prominent feature with a large ZVI could be almost entirely obscured by the erection of a large building or tree planting on adjacent land.
- 5.16 A distinction has been made between 'obscured' and 'unobscured' views of the new building and structures. Viewpoints from where 25% or more of any given building/structure elevation is clearly visible (unobscured) are encompassed by the first zone of visual influence (ZVI1). Viewpoints from where less than 25% of a building/structure elevation is visible (obscured) typically fall within the second zone of visual influence (ZVI2). This distinction avoids particularly obscured views of new development being misrepresented as 'readily visible' from the surrounding landscape. Views that fall within ZVI2 are typically long range, predominantly obscure and/or very 'fleeting' in nature, i.e. limited views of the site gained from a distant elevated vantage point or through small gaps in otherwise dense foliage cover. Intervisibility achieved within ZVI2 is usually considered to be of low significance.
- 5.17 The following diagram illustrates the indicative boundary for ZVI1. Unobscured views of the proposed buildings and/or structures can be gained from (with a few localised exceptions) any point within the blue delineated perimeter during the months of winter. However, during spring, summer and early autumn, foliage cover provided by trees and hedgerows acts to significantly reduce the ZVI1 area.



Diagram depicting ZVI1 (blue perimeter) and location of identified visual receptors (1 & 2)

5.18 Views within ZVI1 were considered in light of sensitive visual receptors and the identified landscape character. Regard was given to the potential dominance and screening effect the proposal might impart upon views of and from residential and recreational areas, the public highway, public footpaths and sites of visual amenity and/or historic value such as conservation areas and listed buildings. However, the area only proved host to two sensitive receptors:

1. *Public Footpath network (SRau/3/1)*: the most proximate section achieving intervisibility with the proposed units is situated 360 metres to the south. Due to the undulating nature of the landform, the proposed units will not be readily visible from this receptor. The section of footpath within ZVI1 is relatively short (approximately 20 metres) and, even with seasonally reduced field boundary hedgerow vegetation cover, views of the proposed units in cumulation with the existing poultry farm will be very limited therefrom (existing units 5 and 6 nearly obscure the proposed units making their presence difficult to perceive). Views of the development will also be transient (for reason that people will be travelling along the footpath) and predominantly oblique to the main angle of view obtained from the receptor, though generally experienced at short range (0 to 0.4 kilometres). The views attainable are only valued locally and are not of wider importance. The receptor is therefore considered to have a moderate susceptibility to change. With regard to change sensitivity, the views afforded of the application site's locale may play a limited part in a person being present at this receptor, but are unlikely to be the principal reason. The footpath network does not comprise a well-known visitor attraction and views of/across the site gained therefrom, though not unattractive, are unlikely to be a key part of the receptor experience. It can also be observed that the existing poultry farm forms part of the backdrop within vistas attainable from this receptor, thus views of the site are already partially characterised by agricultural development. For these reasons, the receptor is considered to exhibit a low sensitivity to change.
2. *Permissive Private Footpath*: The most proximate section is located over 0.5 kilometres to the west of the proposed units. This receptor comprises part of the 'Stepping Out' route located around the periphery of South Rauceby, Rauceby Hall

and farmland to the east. Approximately 300 metres of this private permissive footpath are located within ZVI1. Medium range (0.4 to 1.0 kilometres) transient views of the proposed units will include roof sections and western gable ends. Such will partially obscure the existing units located to the east, which already feature within the available vista. The proposed units will therefore be viewed in cumulation with the established farm from this receptor, though changes might not be readily apparent (i.e. views of existing poultry unit gable ends will be partially obscured and replaced by views of comparable proposed unit western gable ends). This section of footpath network sees intermittent use predominantly by people local to the area. It cannot be described as a well-known visitor attraction and views of/across the application site gained therefrom, though not unattractive, are unlikely to be a key part of the receptor experience. For these reasons, vistas including the application site available from this receptor are considered to exhibit a moderate susceptibility and moderate sensitivity to change.

- 5.19 Intervisibility within the second zone of visual influence (ZVI2) is variable, of lesser significance and difficult to accurately calculate on a theoretical basis. It is reasonable to predict that elements of the proposed development, particularly roof sections of the poultry houses, will be visible to a minor degree from remote vantage points/gaps in otherwise dense foliage etc located within the surrounding countryside beyond the confines of ZVI1. ZVI2 views to the north, west and south of the site are limited due to the nature of the landform and the presence of screening structures and vegetation. A survey of outlying receptors to the northeast and east of the site, including, Field Farm, PROW Sleas/5/2 and PROW Sleas/6/1, highlighted that a combination of the established poultry farm, existing outlying vegetation and the gently undulating landform serve to obscure potential views of the proposed units. The development will not therefore be readily viewed either in isolation or cumulation from these outlying receptors. ZVI2 views cannot be gained from any conventional vantage point beyond the western verge of the A15. Long range views of the poultry units' are not discernible from the A153 and adjacent railway line to the south.

Visual Impact

- 5.20 Visual impact is assessed in light of the degree to which a view from identified receptors will change. The contrast of this change is in turn appraised against the significance of these receptors and backdrop of the existing environment. The geographic extent of the development's zone of visual influence and the duration of the identified impacts are also taken into consideration.
- 5.21 The proposed poultry houses and ancillary structures are clearly agricultural in character and one would typically expect to see buildings of this nature within a remote farmland setting, particularly given the presence of the existing adjoining poultry farm. The appearance of the proposed development is therefore arguably consistent with its land use context. The new poultry houses will not restrict important views of areas of special landscape value (e.g. Conservation Areas or AONB's) or heritage assets. There is no evidence to suggest that the proposal will unacceptably compromise visual amenity to the economic and/or social detriment of any neighbouring land use. The proposed poultry houses have been orientated and sited in a manner that integrates with the existing complex through creation of a nucleated layout. This arrangement minimises the cumulative visual impact of the scheme. The increased scale of the

poultry farm will only be relatively apparent when viewed from receptors to the west and south of the site. However, the cumulative visual effect is not significant for reason that views are either limited to a small geographic area (receptor 1) or changes to visual baseline conditions will not be readily apparent (receptor 2) by virtue of the proposed units partially obscuring, and effectively being of the same appearance to, the existing units.

- 5.22 Views of the new poultry houses will be difficult to attain from outlying countryside due to the screening effect of the existing units, undulating landform and woodland/mature hedgerows. On balance, the geographic extent of the visual effect is typically small and views of the proposed units in cumulation with the existing poultry farm are very limited.
- 5.23 It is accordingly concluded that, based on GLVIA3 assessment criteria, the proposed development's cumulative visual impact will be of **small magnitude**. Though this level of magnitude is a consideration material to the determination of the planning application, it would not ordinarily be regarded as sufficient to justify the refusal of planning permission.

Transportation

- 5.24 This section concerns the means of access to the application site and levels of vehicular activity generated by the proposed units/broiler rearing operation in cumulation with the established poultry farm.
- 5.25 Access to the site will be facilitated by existing private carriageway that extends approximately 1.2 kilometres southwards in order to juncture with Grantham Road (A153). The access was designed for HGV use and can accommodate increased traffic arising from the proposed development. The farm access benefits from excellent visibility at its point of juncture with Grantham Road. It should also be noted that Grantham Road was previously upgraded to include a dedicated right turn lane to prevent HGV's obstructing the highway when entering the farm. For reasons noted below, it is considered that the public highway can amply accommodate the level of vehicular activity arising from the proposal without adverse effects upon highway safety or traffic congestion.
- 5.26 Vehicular activity is essentially orientated around an average of 7.6 crop cycles per annum. Each cycle incurs the following operations:
- Delivery of woodchip bedding;
 - Delivery of biomass fuel;
 - Delivery of feed;
 - Delivery of chicks
 - Crop thinning/removal of deceased birds;
 - Catching of reared birds; and
 - Removal of waste.
- 5.27 It is anticipated that the proposed 2 No. units will need to be serviced by approximately 28 goods vehicles (HGV's)/tractors with trailers per crop cycle. Accounting for access and egress (two-way), each 46 day crop cycle will therefore generate 56

goods/agricultural vehicle derived trips. On this basis it is reasonable to assume that the proposed units will account for approximately 425.6 (two-way) delivery vehicle trips per annum. It should be noted that the established Boiling Wells Farm poultry complex generates approximately 1276.8 return trips per annum. This includes ancillary biomass fuel deliveries, which typically equates to 30 goods vehicles accessing the site each year (approx. 60 trips accounting for return journeys). It is emphasised that the biomass boiler is only activated during the colder winter months. The figures noted above are perhaps misrepresentative in so far as they are based upon an assumption that the biomass boiler is active every crop cycle. This is not however the case. 'Table 1' included below outlines vehicle trip data in relation to the proposed poultry houses in isolation and in combination with the established poultry farm.

Operation	Vehicle Type	Vehicle Numbers Required Each Crop Cycle	Anticipated Days of Trip Occurrence During 46 day cycle	Vehicle Trips Per annum (two way trips - access and egress)	Vehicle Trips Per Annum for existing units in combination with proposed units. (two-way)
Delivery of Chicks	16 tonne HGV	2.5*	Day 1	19 (38)*	76 (152)*
Delivery of Feed	38 tonne HGV	8.5*	Approximately every 7 days	64.6 (129.2)*	258.4 (516.8)*
Delivery of Bedding	38 tonne HGV	1	Day 45	7.6 (15.2)	30.4 (60.8)
Removal of Deceased Birds	16 tonne HGV	1	As necessary from days 1-40	7.6 (15.2)	30.4 (60.8)
Catching of Birds	25 tonne HGV	11	Day 40	83.6 (167.2)	334.4 (668.8)
Removal of Waste	Tractor & trailer	3	Days 41-43	22.8 (45.6)	91.2 (182.4)
Biomass Fuel Delivery	25 tonne HGV	1 ¹	As necessary from days 1-46	7.6 (15.2) ¹	30.4 (60.8) ¹
Total		28		212.8 (425.6)	851.2 (1702.4)

Table 1: Operational Vehicle Trip Data. * indicates sharing of vehicle capacity/logistic efficiencies.

¹Signifies winter activity only (November to March)

- 5.28 The vehicle trip data included in Table 1 does not account for employee derived commuter traffic. It should be noted that the proposed operation will require the equivalent of 2 No. full time employees (with possible support from part time staff) working on-site 7 days per week. These trips will however be made via smaller class vehicles (such as LCV's, car, Bicycle etc) and potentially negated if car sharing is an option.
- 5.29 The operational trip generation data does not take into account the proposed development's construction phase. This will be a short term event (estimated 17 weeks). Accurate trip data is however currently unavailable.
- 5.30 As a result of the recent 15% reduction in stocking density required to address animal welfare provisions of the Moy Park Ltd long term supply contact with J. Sainbury's, the proposed development will actually only increase levels of cumulative annual trip generation by approximately 11% compared to when the established poultry units were

operating at their original higher stocking density in late 2022. In reality, the proposed scheme will cumulatively result in an average of approximately 2.3 HGV's/agricultural vehicles accessing the site each day.

- 5.31 On this basis, it is considered that the public highway can amply accommodate the increase in trip generation outlined above without adverse effects upon highway safety or traffic congestion.

Noise

- 5.32 Operation of the proposed poultry units will give rise to various potential sources of noise. These include: vehicular activity; climate control and ventilation fans; feed silo operation; and noise generated by the actual poultry. Baseline sound levels attributed to vehicular activity, feed silo operation and poultry noise can be ascertained through appraisal of the existing adjoining units within the poultry farm complex.
- 5.33 Each of the proposed poultry units will have 12 No. roof mounted electrical fan housings, which have been engineered to generate very low levels of noise. In cumulation with the existing poultry units, a total of 96 No. roof mounted fan systems will be operating across the farm complex. The fans are on an automatic climate control system that regulates temperatures in the buildings. The units also include gable end fans, though these are only activated during periods of extreme hot weather (they were only activated on three occasions during the heatwave of 2022). The fan manufacturers (Ziehl-Abegg) specify that the sound level of 55dBA will be emitted at a distance of 7 metres from each fan when operating at maximum capacity.
- 5.34 It should be noted that a noise impact assessment was undertaken in support of planning application 21/0871/FUL (which secured units 5 and 6). The report Sharpes Redmore, 2021, Plant Noise Assessment stated that: *'Based on the noise survey undertaken, predicted noise from the existing poultry units at the nearest residential property is 21 dBA (see para 3.12). The cumulative noise for the existing and proposed poultry units therefore equates to 26 dBA (24 dB + 21 dB), which does not exceed the existing background noise climate.'* The noise report accordingly concluded that: *'Based on the surveys and assessment undertaken, the predicted cumulative noise from both the existing and proposed poultry units does not exceed the existing typical background noise climate, which in accordance with BS 4142:2014, is also considered to be a low impact.'*
- 5.35 It should be noted that the above level of acoustic output was based upon a scenario whereby all fans are operating at maximum capacity. However, for reason that the poultry units can now only be contractually stocked to accommodate a maximum of 33,150 birds (as opposed to their original 39,000 bird capacity), fewer ventilation fans will ordinarily be operational and the units will seldom ventilate at maximum rate. Even in cumulation with the established poultry farm, the proposed development's ventilation systems are not therefore anticipated to have any tangible impact to occupants of outlying dwellings.
- 5.36 Noise attributed to vehicles and operations such as restocking, cleaning, loading of feed silos etc., will be relatively infrequent in nature. The proposed development will contribute but a small and arguably insignificant addition to the established vehicle

derived noise baseline. The actual poultry housed within the proposed units will technically generate noise, though the building provides a high level of attenuation and the typical decibel output of such is considered *de minimis* and thus of no significance.

- 5.37 The proposed development will not change the noise signature associated with various systems/operations at the established farm complex. The site is also remote (0.5+ kilometres) from sensitive receptors, such as dwellings in conventional (non-agricultural) residential use. It is not therefore predicted that the proposed scheme will give rise to noise related disturbance either in isolation or cumulation with the established poultry farm.

Air Quality

- 5.38 The proposed development will facilitate expansion of an established broiler poultry farm. In order to examine the feasibility of the proposed scheme, an assessment of air quality that accounts for the cumulative impact of both the existing and proposed poultry units was undertaken at the outset. It should be noted that the broiler rearing farm is a specialist closely managed operation synonymous with the highest standards of animal welfare, climatic regulation, cleanliness and biosecurity. In terms of air quality, such operations typically achieve good levels of environmental compatibility.

- 5.39 Adverse impacts upon air quality arise from gaseous, particulate and volatile organic compounds. All of these can result in foul odour and pollution. Odour, gaseous and particulate emissions from poultry units typically derive from a number of sources. Primarily, they are caused by the breakdown of faeces and urine in combination with waste food spilt onto floors, the scent glands of animals and the actual animal feed. The following factors also typically contribute to gaseous, odorous and particulate emissions from poultry units:

- Any build-up of manure on concrete areas around buildings;
- The removal and disposal of dead animals;
- The maintenance of drains;
- The cleanliness of bedding;
- The cleanliness of the poultry house;
- The management of drinking systems, with particular emphasis on frequently adjusting nipple and drip cups to birds eye level to avoid spillage and wet litter;
- The stocking density;
- The moisture content of the litter;
- The insulation of the buildings and the long-term maintenance of that insulation;
- The ventilation system;
- The type of heating; and
- The composition of the feed, particularly its oil and fat content.

- 5.40 In light of the above, it can be noted that the floor of the proposed unit will be constructed of impermeable concrete and poultry litter accumulating thereon will be removed at the end of each rearing cycle. The unit will be automatically temperature controlled via a series of vents and roof mounted ventilation fans, which are designed to regulate air flow through the unit. The twelve electrical fans integrated into roof mounted chimney stacks will facilitate high velocity extraction. This system reduces

the levels of odour and ammonia emissions by ensuring that the litter has low moisture content of below 40%.

- 5.41 Particulate matter/dust pollution will be minimised by 'control at source' measures. In accordance with EA guidance, these include: the use of wood shaving bedding (as opposed to wheat or barley straw); use of feed pellets (where ingredients are less dusty by virtue of being bound together), and good management including rigorous cleaning of units at the end of cycles and, when birds are in situ, via regular use of industrial vacuum cleaner systems to remove dust build up. DEFRA guidance on local air quality indicates that, given the cumulative scale of the proposed development/operation and the application site's remoteness from sensitive receptors, adverse effects arising from release of particulate matter are considered to be highly improbable.

Odour Impact

- 5.42 Air quality specialists AS Modelling & Data Ltd were commissioned at the project's inception in order to assess the potential cumulative odour impact of the proposed development/operation upon outlying sensitive receptors. The following should be read in conjunction with the accompanying report: *AS Modelling & Data Ltd, 2023, A Dispersion Modelling Study of the Impact of Odour from the Existing and Proposed Broiler Chicken Rearing Houses at Boiling Wells Farm, Grantham Road, South Rauceby near Sleaford.*
- 5.43 As previously stated, until new contractual animal welfare requirements came into force, the established poultry farm reared up to 234,000 broiler chickens per crop cycle (39,000 birds per unit). However, the 6 No. existing poultry houses are now only able to accommodate up to 33,150 broiler chickens at the new lower stocking density, thus only 198,900 birds are present within the farm over the course of each 38 to 40 day rearing cycle. The proposed 2 No. 33,150 bird units will operate over the same crop cycle and increase the farm's capacity to a maximum of 265,200 broiler places. The cumulative odour impact of the proposed scheme was accordingly assessed on this basis.
- 5.44 Odour emissions anticipated to arise from the poultry farm development/operation were applied to an Atmospheric Dispersion Modelling System (ADMS 5 - which utilises the latest generation Gaussian plume modelling system) in order to accurately predict distribution and concentrations around the locality of the application site. As noted within section 4.4 of the appended report, twelve discrete receptors have been defined at a selection of nearby residences and commercial properties. The receptors are defined at 1.5 m above ground level within ADMS and their positions may be seen below (where they are marked by enumerated pink rectangles).

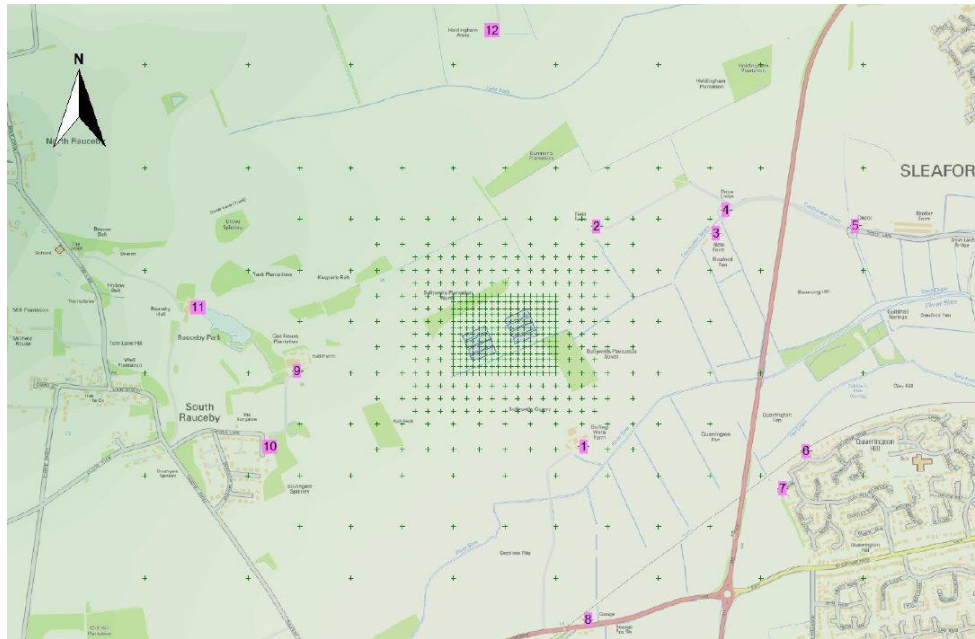


Diagram indicating locations of 12 identified sensitive receptors

- 5.45 With regard to the evaluation of odour impact, Section 3.4 of the appended report states: *‘Odours from poultry rearing are usually placed in the moderately offensive category. Therefore, for this study, the Environment Agency’s benchmark for moderately offensive odours, a 98th percentile hourly mean of 3.0 ouE/m³ over a one year period, is used to assess the impact of odour emissions from the proposed poultry unit at potentially sensitive receptors in the surrounding area.’*
- 5.46 The results of the ADMS analysis are detailed within Section 5 of the appended odour impact assessment. For ease of reference a copy of Figure 7, which depicts the maximum spatial distribution/concentration of odour emissions in the locality of the application site, is included below. It can be noted that this scenario accounts for cumulative odour emissions arising from both the existing and proposed poultry houses.

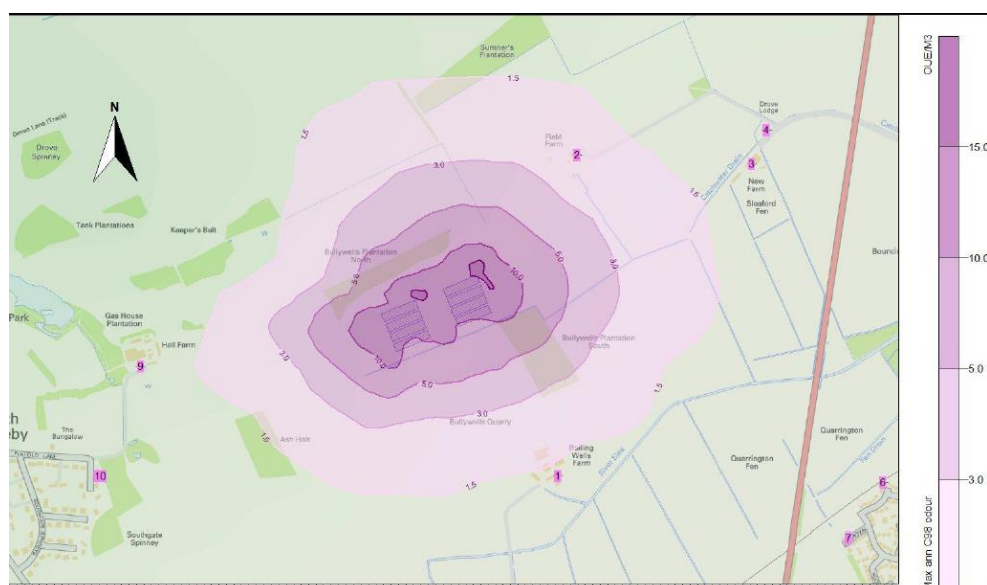


Figure 7 Extract: Predicted maximum annual 98th percentile hourly mean odour concentration in area surrounding existing/poultry units.

- 5.47 In light of the above, Section 6 of the odour impact assessment concludes: '*At all nearby residences considered, the odour exposure surrounding the proposed poultry unit would be below the Environment Agency's benchmark for moderately offensive odours, which is a maximum annual 98th percentile hourly mean concentration of 3.0 ouE/m³.*'
- 5.48 It is emphasised that the recently implemented lower stocking density has a significant impact upon odour emissions. Even though the proposed development will result in a net increase of 31,200 broiler chickens being reared across the existing/proposed units per crop cycle, the odour signature is essentially identical to that exhibited by the six existing poultry units when stocked to the original 39,000 bird/unit density. The proposal will not therefore result in any tangible change relative to historic odour baseline conditions. There will be **no significant cumulative odour impact in the short, medium or long term.**

Ammonia Impact

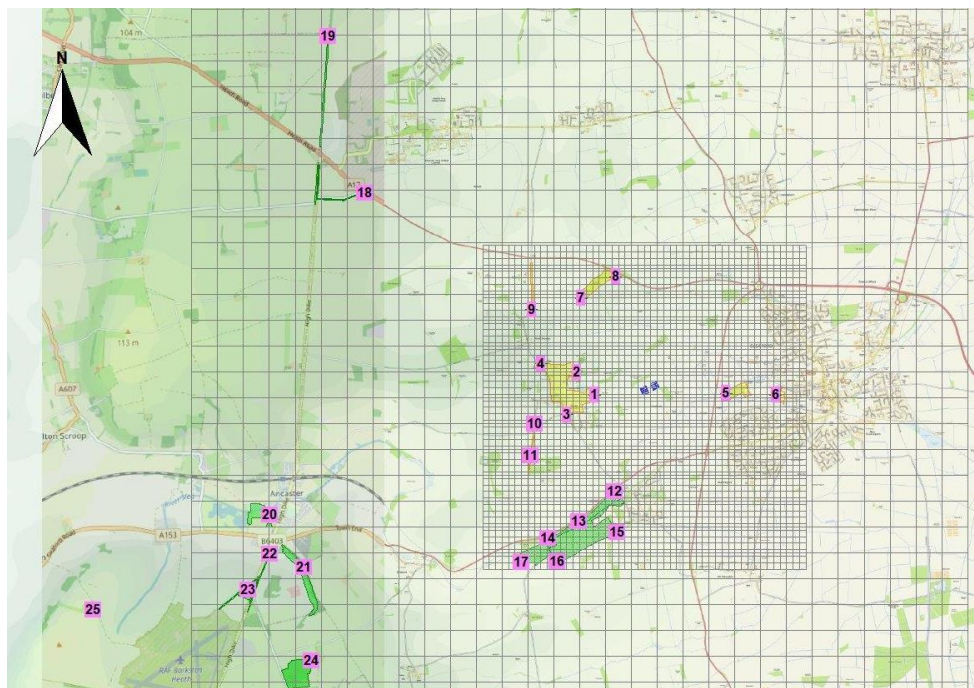
- 5.49 The release of ammonia (NH₃) is a well-known by-product of poultry farming. Concentrations of gaseous ammonia are hazardous to both human health and the welfare of flora/fauna habitats. Factors leading to the production of ammonia are noted to comprise: the amount of degradable nitrogen in the litter which is influenced by the rate of conversion of feed based nitrogen to muscle; and the conditions within the litter to facilitate microbial activity, which is influenced by the moisture content of the litter as well as temperature.
- 5.50 Ammonia emissions have the potential to adversely affect areas of ecological/habitat value. As aforementioned, a site of Special Scientific Interest (Wilsford and Rauceby Warrens SSSI) is located to the southwest of Rauceby Hospital. This designation is approximately 1.5 km from the application site. A site of Nature Conservation Interest is also located adjacent to an area of historic parkland, nearly 1 km to the west of the proposed poultry farm complex. A number of other potentially sensitive receptors are also situated within the site's wider locality. It was therefore considered appropriate to undertake an ammonia impact assessment as part of the project's preliminary screening process. Air quality specialists AS Modelling & Data Ltd were accordingly commissioned to investigate whether cumulative ammonia emissions arising from the existing poultry farm and proposed units would give rise to adverse environmental effects. The following should be read in conjunction with the accompanying report: *AS Modelling & Data Ltd, 2023, A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Broiler Chicken Rearing Houses at Boiling Wells Farm, Grantham Road, South Rauceby near Sleaford.*
- 5.51 With reference to the quantification of ammonia emissions, Section 3.5.1 of the ammonia impact assessment report states that: '*Ammonia emission rates from poultry houses depend on many factors and are likely to be highly variable. However, the benchmarks for assessing impacts of ammonia and nitrogen deposition are framed in terms of an annual mean ammonia concentration and annual nitrogen deposition rates. To obtain relatively robust figures for these statistics, it is not necessary to model short term temporal variations and a steady continuous emission rate can be assumed. In fact, modelling short term temporal variations might introduce rather more uncertainty than modelling continuous emissions.*'

5.52 Both Ammonia emission rates were calculated in light of a maximum stocking number of 33,150 birds per poultry house. In combination with the existing poultry houses, the proposed development will result in a maximum total of 265,200 birds being reared within the poultry farm each crop cycle. This equates to the maximum supply of 2,015,520 birds per annum. Section 3.5 of the ammonia assessment notes that: ‘*The Environment Agency provides an Intensive Farming guidance note which lists standard ammonia emission factors for a variety of livestock, including poultry. For broiler chickens, the Environment Agency figure is 0.034 kg-NH₃/bird place/year. The emission model is “tuned” to produce very similar emissions to a continuous steady emission rate and in this case, the average emission rate expressed as an annual figure is calculated to be 0.034128 kg-NH₃/bird place/year. Details of the poultry numbers and types and emission factors used and calculated ammonia emission rates are provided in Table 2’ (extract included below).*

Source	Animal numbers	Type or weight	Emission factor (kg-NH ₃ /place/y)	Emission rate (g-NH ₃ /s)
Poultry houses	265,200	Broiler Chickens	0.034128	0.286801 †

Table 2: Details of poultry numbers and ammonia emission rates

5.53 With regard to assessing the impact of ammonia emissions upon outlying habitat land, twenty-five discrete receptors have been defined: eleven at the Local Wildlife Sites (receptors 1 to 11) and fourteen at the Sites of Special Scientific Interest (receptors 12 to 25). These receptors are defined at ground level within ADMS. The positions of the discrete receptors may be seen in Figure 5 of the accompanying ammonia impact assessment report (extract below), where they are marked by enumerated pink rectangles.



Extract from Figure 5: Diagram indicating geographic positions of identified sensitive receptors

5.54 Ammonia emission rates derived from the existing and proposed broiler poultry units 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

for an atmospheric dispersion and deposition model, which calculates ammonia exposure levels and nitrogen and acid deposition rates in the surrounding area. Section 5 of the submitted ammonia impact assessment includes full data for the model runs undertaken and subsequent results. It should be noted that detailed modelling has been carried out over a high resolution 5 km x 5 km domain covering Boiling Wells Farm and Wilsford & Rauceby Warrens SSSI. The primary purpose is to determine the magnitude of deposition of ammonia and consequent plume depletion close to the sources where it is of the greatest importance.

- 5.55 In context of the above, Section 6 of the submitted report concludes with regard to the cumulative impact of the proposed development: *‘At all the wildlife sites considered, the process contribution to ammonia concentration and nitrogen deposition rate would be below the Environment Agency lower threshold percentage of Critical Level or Critical Load for the site (20% for a SSSI and 100% for a non-statutory site).’* This indicates that the proposal will have no significant impact upon outlying sites of ecological value. Section 6 also states that, in cumulation: *‘At Wilsford & Rauceby Warrens SSSI, the process contribution to ammonia concentration would exceed 1% of the Critical Level of 1 µg-NH₃/m₃ and over a small part of the SSSI, 1% of the Critical Load of 10 kg-N/ha/y.’* This indicates the level at which nitrogen deposition can tangibly occur (thus triggering AS Modelling & Data Ltd to undertake detailed assessment), though such is not ordinarily considered to have any negative effects until exceeding 4% of the Critical Level of 1 µg-NH₃/m₃. Detailed atmospheric dispersion modelling highlighted that, in cumulation, the development will not approach the 4% Critical Level.
- 5.56 On the basis of the above it can be concluded that **ammonia emissions arising from the proposed development/operation in cumulation with the established poultry farm will have no significant environmental impact** in the short, medium or long term.

Drainage & Flood Risk

- 5.57 The Environment Agency flood risk map indicates that the site is located within Flood Zone 1 (note extract below). It is not therefore identified as being at risk of fluvial or sea flooding. It should also be noted that the locality has not historically been subject to localised flooding or surface water drainage issues. However, paragraph 167 (and footnote 55) of the National Planning Policy Framework 2021 stipulates that a site specific flood risk assessment will be required when an application site exceeds an area of 1.0 hectares. Though the area occupied by the proposed poultry units and hardstanding only comprises 0.66 hectares, the entirety of the application site, which includes the existing access and farmland proposed for landscaping, encompasses an area of 3.37 hectares. Accordingly, a Flood Risk Assessment (FRA) has been undertaken in order to inform the surface water drainage scheme and demonstrate that the proposed development will not give rise to localised flooding/drainage problems. Attention is drawn to the appended document: *George Shuttleworth Ltd, 2023, Flood Risk Assessment & Drainage Report.*



Extract from EA Flood Map depicting location of proposed units in Flood Zone 1 (clear). Flood Zone 2 is (light blue) and Flood Zone 3 is (dark blue).

5.58 The National Planning Policy Framework 2021, Annex 3 categorises agricultural development as being ‘less vulnerable’ to flooding. With reference to the National Planning Practice Guidance (2014), Table 3, which identifies the flood risk vulnerability and potential compatibility of new development within the various flood zones, it can be noted that ‘less vulnerable’ agricultural development is considered strategically acceptable within Flood Zones 1 to 3a subject to passing the ‘Sequential Test’. Sequentially, flood zone 1 land is clearly the most preferential location for new development, thus indicating the strategic acceptability of the proposed site.

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	x	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	x	x	x	✓*

NPPG Table 3 extract outlining development vulnerability to flood risk classifications

5.59 The Environment Agency define Flood Zone 1 land as having a ‘low risk’ of flooding, indicating that ‘...in any year land has a less than 0.1% chance of flooding from rivers...’ Section 5 of the submitted FRA identifies that, given the lack of coastal and fluvial sources and the absence of local drainage problems, the potential flood risk comprises:

- Flooding from surface water;
 - Flooding from groundwater sources;
 - Flooding from drainage systems serving the development; and
 - Flooding from burst water mains or sewerage infrastructure.
- 5.60 Each of the above sources of flood risk are accordingly evaluated within section 5 of the submitted *Flood Risk & Drainage Assessment Report*.
- 5.61 With a lack of mains water and sewerage infrastructure in the locality of the site, the latter source of flood risk is considered to be relatively improbable. The topography of the site and surrounding landscape also makes flooding from ground water sources unlikely, as noted within paragraph 5.5 of the FRA: *‘The site is within a ground water protection zone for a water abstraction point within the Lincolnshire Limestone aquifer. Although we are unaware of the range of the variation in the water table at this location, given the elevation and topography of the site, the risk of flooding from high groundwater levels is minimal.’*
- 5.62 The most probable source of flood risk is therefore identified as excess surface water runoff from the poultry units’ roofs and hardstanding. To avoid this adverse impact, the proposed units will integrate with the established poultry farm’s surface water drainage and attenuation system. In this context, paragraph 5.6 of the FRA notes that: *‘The surface water system will be designed to attenuate flows for a range of storms up to the 1 in 100 year plus climate change event. The attenuation pond will be located adjacent to the existing watercourse and provided with overflows such that the risk of flooding due to a surcharged attenuation pond is minimal.’*
- 5.63 As detailed within Section 8 of the FRA, consideration was given to the implementation of a ‘Sustainable Drainage System’ (SuDS). In accordance with the drainage hierarchy details within the SuDS Manual and Building Regulations Part H, the possibility of using infiltration drainage systems was initially explored. However, based on data/experience gained from construction of the established poultry farm, it was evident that the second tier of the hierarchy ‘discharge to watercourse’ would be the only viable option for addressing clean surface water arising from the poultry unit roofs and hardstanding.
- 5.64 It can be observed that a drainage ditch is situated adjacent to the poultry farm’s southern periphery. This will theoretically serve both the existing and proposed poultry units. However, as indicated above, it is necessary for surface water discharge from the poultry farm to be attenuated via a substantial drainage pond. Paragraph 8.5 of the accompanying FRA notes: *‘Six poultry sheds have now been constructed along with an oversized attenuation basin that is understood to be 3.0m below the ground level at the southern end and at least 1.0m below the base of the ditch. There is an overflow pipe to the ditch around 2.75m above the base of the attenuation basin. The attenuation basin is founded on weathered Lincolnshire Limestone.’* The attenuation pond design partly responded to existing site topography and the natural gradient of the application site’s surroundings. Resultantly, the pond has a capacity significantly in excess of that required by the poultry farm. It has proven to function in a manner akin to a substantial soakaway as noted within Paragraph 8.6 of the FRA: *‘It is understood that flows from the four poultry sheds have been attenuated in the basin over the past six year,*

increasing to six units for the last two years and the overflow to the ditch has not operated in that time.'

- 5.65 The existing poultry unit roofs and hardstanding areas have impermeable areas of 13920 m² (square metres) and 2950 m² respectively equating to a total impermeable area of 16970 m². The new development will add a further 4640 m² of roof area and 750 m² of concrete hardstanding (5390 m² combined). The cumulative impermeable area requiring drainage will therefore be 22,360 square metres. This data enables calculation of surface water run-off and the required level of attenuation. Section 9 of the FRA identifies that the following attenuation volumes (in cubic metres) will be required to address storm events ranging up to extreme 1 in 100 year scenarios.

Storm Event	Attenuation Volume (m3)	% of Volume to Overflow
1 in 1 year	359	5
1 in 30 year	1129	16
1 in 100 year	1558	22

Extract from FRA, Section 9 outlining surface water attenuation volumes for various severities of storm event

- 5.66 The volume of the existing attenuation pond (below the level of the outfall pipe) is 7300 m³. It is also conservatively assumed that the base of the pond will have a percolation rate of 50 mm per hour. Paragraph 8.11 of the FRA states that a 6 hour duration 1 in 100 year plus 40% climate change storm event would generate a cumulative (existing and proposed units) surface water run-off volume of 1903 m³. In light of this data, paragraph 8.12 of the FRA observes '*...it can be seen that less than 22% of the storage volume provided will be utilised for the eight poultry sheds and associated hardstanding areas now proposed.*'
- 5.67 Section 12 of the accompanying FRA specifically concerns measures to prevent contamination of ground water. In addition, it is emphasised that all water used for cleaning out the proposed units will be collected and stored on site in a sealed subterranean tank. It will then be collected by a specialist contractor who will dispose of the dirty water at an authorised site. With specific reference to the cleaning of external hardstanding, FRA paragraph 12.7 states: '*The external concrete slabs will be designed such that they will fall towards collection drains to prevent any spillages passing onto to the adjacent ground. The drains will have diverter valves that, during the periodic cleaning operations, will divert flows to suitably sized watertight collection chambers, from where the contents will be removed off site by tanker.*' The management of foul water, which accords with engineering solutions and management procedures already implemented in the existing poultry farm, will prevent ground water contamination issues such as nitrate derived eutrophication. There is no reason to believe that the proposed development/operation will lead to contamination of the underlying limestone aquifer. It should also be observed that the site will operate under an Environment Agency IPPC permit, which provides a control mechanism for monitoring the site and preventing potential pollution.
- 5.68 In conclusion, Section 13 of the accompanying FRA states that: '*The existing surface water attenuation system has sufficient capacity to attenuate the surface water discharges and discharge via infiltration so that **the proposed development will not cause flooding elsewhere in the catchment.***' It is also stipulated that the proposed

development will not give rise to groundwater pollution. In terms of identified flood risk and water resource protection, the application site is considered to be an appropriate location for the proposed broiler poultry units.

Ecology & Nature Conservation

- 5.69 The area of the application that will be subject to new development (i.e. construction of poultry units, feed silos and hardstanding) occupies approximately 0.66 hectares. It should be noted that this part of the site was previously used to temporarily store construction materials and machinery during an earlier phase of the poultry farm's development and it has effectively remained as an area of informal hardstanding to the present day. The remainder of the site (excluding existing access) encompasses approximately 1.65 hectares of managed grassland used for occasional hay production. As expanded upon within the 'Planning Policy Context' section of this report, it is necessary to include this adjacent grassland within the site boundary in order to secure ecological enhancement required under CLLP Policy S61 and emerging national requirements following introduction of the Environment Act 2021.
- 5.70 The proposed development will not result in the loss or harm to any significant habitats or sites of ecological importance. The site is devoid of existing trees and hedgerows and no such features will be lost or affected by the development scheme. As detailed within the 'Air Quality' section of this report, an ammonia impact assessment has been undertaken (*AS Modelling & Data Ltd, 2023, A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Broiler Chicken Rearing Houses at Boiling Wells Farm, Grantham Road, South Rauceby near Sleaford*) in order to establish levels of nitrogen and acid deposition at a number of remote receptors including the Wilsford and Rauceby Warrens SSSI. Atmospheric dispersion modelling indicates that ammonia concentrations and resultant nitrogen deposition rates arising from the cumulative poultry farming operations will not be sufficient to cause any tangible adverse effects upon identified ecological receptors.
- 5.71 With regard to pollution prevention measures and the avoidance of ground water contamination, it is emphasised that all foul water arising from cleaning of the poultry houses will be contained within a sealed drainage system. The proposal will not therefore have any impact upon the surrounding arable land, neighbouring woodland or aquatic habitat (including drainage ditch to south of the complex).
- 5.72 It is emphasised that the proposed development will facilitate the introduction of landscaping designed to both enhance the site's biodiversity and visual amenity value. These measures follow an ecological appraisal and biodiversity net gain assessment. The following should accordingly be read in conjunction with the submitted report *K. J. Ecology Ltd, 2023, Preliminary Ecological Appraisal & BNG Assessment* and the accompanying 'BNG Metric 4.0 Calculations'.
- 5.73 As stated within Section 1.1 of the submitted report, a Preliminary Ecological Appraisal (PEA) was undertaken to: identify the likelihood of any protected species being present on the site; identify any features, habitats or species which would constitute potential constraints to any development which might take place; and to make recommendations for mitigation and/or further survey work, as appropriate. In addition, a Biodiversity Net Gain (BNG) assessment was undertaken in accordance with CLLP Policy S61. The

strategy of facilitating BNG is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. This means protecting existing habitats and ensuring that lost or degraded environmental features are compensated for by restoring or creating environmental features that are of greater value to wildlife and people. It does not change the fact that losses should be avoided where possible, a key part of adhering to a core environmental planning principle called the mitigation hierarchy (DEFRA, 2018).



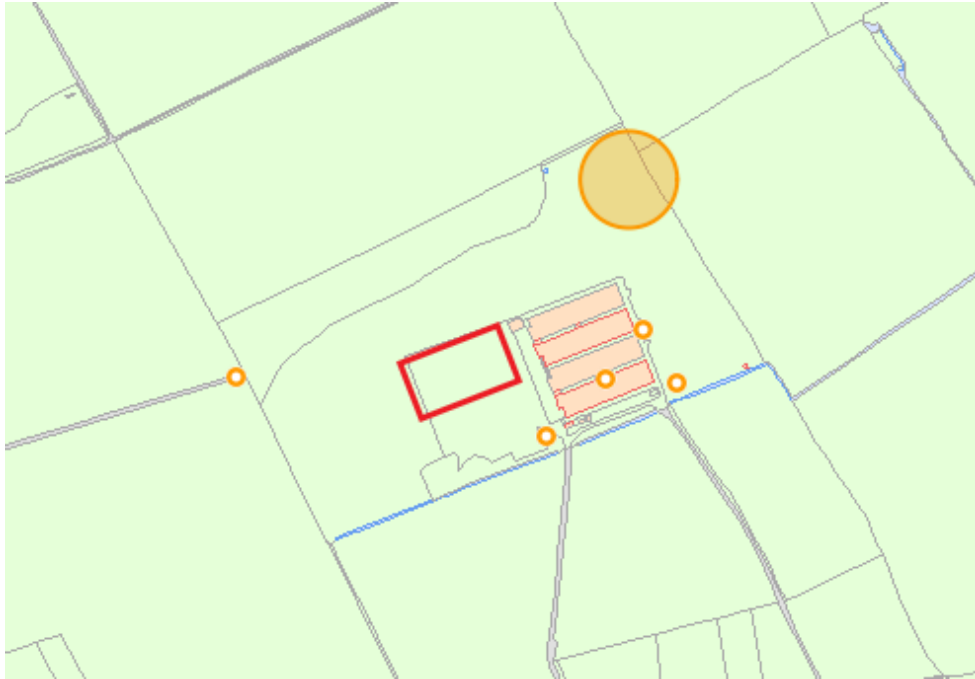
Extract from Appendix 2 identifying survey area with identified modified grassland (green) and sparsely vegetated land (grey) habitat areas.

- 5.74 The PEA followed a site survey undertaken on 10th November 2023. The survey area is included within Appendix 2 of the submitted report and replicated above for ease of reference. As detailed within section 3.2.1 of the submitted report, in the area of the application site that will be host to the proposed poultry units: ‘...the ground is a mixture of stone and sub-soil. There are materials stored in this area and there are mounds of soil. There are various herbaceous plants such as Prickly Sow-thistle (*Sonchus asper*) growing in the area, so giving the area a classification of Sparsely vegetated area.’ Land to the north and west of the proposed units is to be made available for habitat enhancing landscaping measures. As such, this was included within the PEA survey: ‘To the North and West of the site is a Modified grassland which is mainly Perennial Ryegrass (*Lolium perenne*) with sporadic herbaceous plants including Common Vetch (*Vicia sativa*). There were no rare or Invasive Non-natives plants on site.’ There were no signs of fauna including nesting birds, roosting bats or badgers. The wider grassland element of the application site does have potential to support small mammals such as voles, shrews and wood mice. These will not be affected by the development.

- 5.75 With specific reference to achieving Biodiversity Net Gain, section 3.3.1.1 of the submitted report notes with regard to habitat baseline conditions across the application site (and adjacent grassland made available for landscaping), as assessed through use of the Biodiversity Metric 4.0 Calculation Tool, that: *‘The proposed development is on a sparsely vegetated area with patches of vegetation and is classed Sparsely vegetated land – Tall forbs (Line 1). This development area covers 2.634ha and is in Poor condition – see Appendix 4. This created 5.27 habitat units. The grassfield to the North and West of the site is a Perennial Ryegrass field so is categorised as Modified grassland. This is in Poor condition – See Appendix 4 and this 3.685ha produced 7.37 habitat units. 2.1ha of this grassland will be retained and 1.185ha will be enhanced. Overall, there are 12.64 habitat units on site.’* In order to deliver a substantive BNG, it was considered appropriate to provide a combination of ‘habitat creation’ and ‘habitat enhancement’ landscaping measures.
- 5.76 With specific regard to habitat creation, it is proposed that the development will be complemented by the planting of a new 0.4 hectare woodland area that includes a mix of native tree species. This is depicted upon the submitted drawing F3135-02 - BNG Landscaping Plan. In this context, Section 3.3.1.2 of the submitted report states: *‘The proposed layout of the site is shown in the accompanying proposed site layout plan. The two broiler poultry units and the concrete aprons, are labelled as Urban – developed land; sealed surface. The crushed stone perimeter is classed as Urban – Artificial unvegetated; unsealed surface. None of these have any wildlife value. A new Woodland shelter belt will be created along the Western boundary of the site. This 0.4ha will attain a Poor habitat condition over the 30 years of Biodiversity Net Gain and will produce 1.34 habitat units.’*
- 5.77 In relation to on-site habitat enhancement, Section 3.3.1.3 of the submitted report states: *‘1.185ha of the grassfield is to be enhanced with a wildflower/grass mix to create Other neutral grassland. With good management this should easily reach a good habitat condition and produce 9.31 habitat units.’* In light of the above, an area exceeding 1.185 hectares located to the immediate west of the proposed units will be set aside for sowing of a wildflower grass mix.
- 5.78 Section 3.3.2 of the submitted report summarises in relation to delivering biodiversity net gain that: *‘The initial baseline gave 12.64 habitat units and no habitat units will be created with the new broiler poultry units. The retained grassland and the newly created grassland and woodland habitats will produce 14.85 habitat units. This is a 2.22 habitat unit gain or 17.53% net gain. This means that the plans have reached the required 10% net gain.’*
- 5.79 In order to ensure implementation of the above, the application site boundary was amended to encompass the areas proposed for woodland planting (0.4 hectares) and meadow mix planting (over 1.185 hectares). The biodiversity enhancing landscaping measures, which are detailed upon the accompanying drawing F3135-02 - BNG Landscaping Plan, will be sustained and managed for a minimum period of 30 years, thus complying with CLLP Policy S61. Further details are provided within the latter ‘Landscaping’ section of the Design & Access statement below.

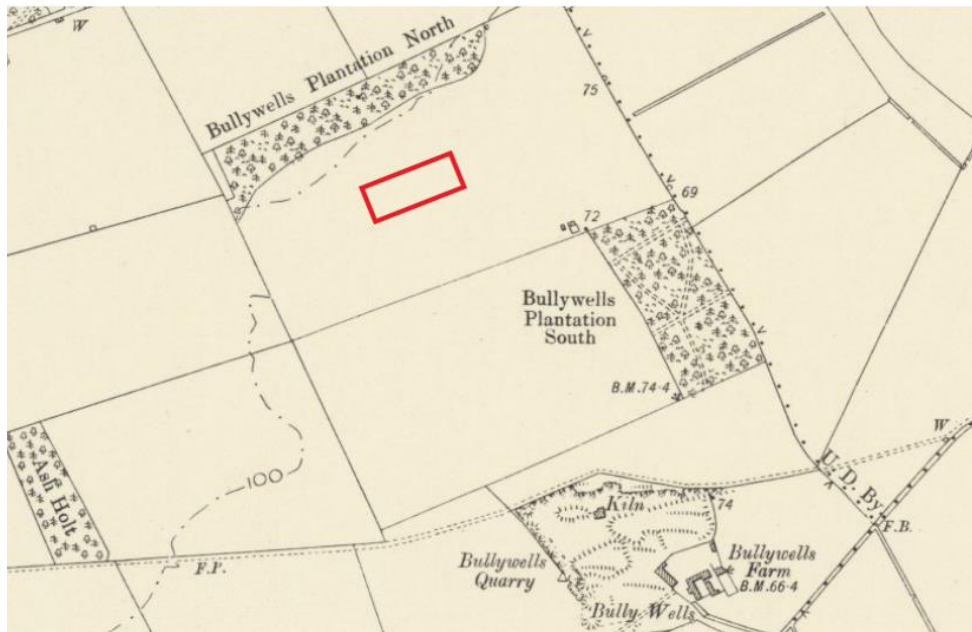
Archaeology & Heritage

- 5.80 The following comprises an appraisal of the proposed development's impact upon identified heritage assets. Such has been undertaken in accordance with paragraph 194 of the National Planning Policy Framework (2021), which stipulates that: *'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.'*
- 5.81 A search of Historic England's database has indicated that the application site is remote from designated heritage assets such as Conservation Areas, Listed Buildings and Scheduled Ancient Monuments. The most proximate listed building comprises Hall Farmhouse (Grade II - List Entry Number 1168560), which is situated approximately 700 metres to the west of the application site. A scheduled ancient monument (LEN: 1004940) documented as traces of a settlement and enclosure are located 500+ metres to the southeast of the proposed site. Neither of these designated heritage assets are within the development's primary zone of visual influence (i.e. no intervisibility between the heritage assets and poultry farm). The new poultry units and ancillary structures will not therefore intrude or impact upon the setting of any building/area of historic importance.
- 5.82 The Lincolnshire Historic Environment Record (HER) has identified a number of archaeological finds within the immediate locality of the proposed development. These include Romano-British coins and greyware pottery shards. The locations of these are delineated by the orange circles identified within the 'Heritage Gateway' online database mapping system (extract included below).



Extract from Heritage Gateway database identifying Romano-British archaeological finds (orange) relative to application site (outlined red).

- 5.83 However, the immediate locality of the application site has previously been subject to archaeological investigation. In order to discharge pre-commencement Condition 5 of planning permission 14/0985/FUL (which established the original poultry farm adjoining the application site), a freelance field archaeologist was commissioned to produce a programme of works to facilitate archaeological monitoring and recording during the development's construction phase. These were completed in accordance with the approved document '*HALL, Neville, 2014, Specification for Archaeological Monitoring*', '*HALL, Neville, 2014, Specification for Archaeological Monitoring*'. The archaeological investigations did not reveal any significant evidence of archaeological resources/artefacts within the application site.
- 5.84 A search of cartographic databases has identified that a small structure (presumed agricultural building) is evident adjoining the northwestern corner of 'Bullywells Plantation South' upon an Ordnance Survey map of 1888-1913 (note below). The structure would have been located approximately 140 metres to the southeast of the application site.



Extract from OS '6 inch' map of 1888-1913. Application site location outlined red.

- 5.85 It is noted that the structure is not evident within the earlier 1840-1888 'six inch' OS map. The structure was thus likely to be of the late Victorian era. There was no evidence of the building prior to development of the poultry farm and it appears to have been removed many decades ago.
- 5.86 In light of the above, it is concluded that the proposed development will not directly impact upon, or intrude within the setting of, a designated heritage asset. Not least given the findings of previous archaeological field investigations, it is also considered that there is low potential for the development to impact upon archaeological features/remains. Further field evaluation is not therefore considered appropriate in this case.

Population

- 5.87 A concern commonly associated with intensive livestock units is their potential impact upon levels of residential amenity afforded by surrounding occupants. Under normal conditions, the effects of pollution typically diffuse as the distance from the source increases. Though controls (regulated in accordance with the site's EA permit) will be in place to minimise adverse effects, it is reasonable to state that potential impacts will be more tangible in closer proximity to the development scheme. The proposed site is therefore considered to exhibit preferential spatial attributes by virtue of its remote location. No dwellings or other sensitive receptors (schools, places of employment etc) are located within 400 metres of the site. The most proximate settlement comprises the village of South Rauceby (0.9+ kilometres to the west). The town of Sleaford, which is over 1 kilometre to the east of the proposed site, is similarly remote. The most proximate sensitive receptor comprises an isolated dwelling (non-agricultural) located adjoining the Boiling Wells Farm arable complex 500 metres to the south of the proposed units. A second isolated dwelling is also located over 500 metres to the northeast of the proposed poultry houses. As detailed within the 'Air Quality' and 'Noise' sections of this Environmental Report, the remoteness of these receptors indicates that

the development/operation is unlikely to have any tangible impact upon existing levels of residential amenity.

- 5.88 With regard to concerns over potential nuisance arising from flies, it is emphasised that the poultry units will be regularly cleaned at the end of each cycle and fly infestation is not considered to be an issue in modern poultry units (of the type proposed). No problems of this nature have arisen from the established broiler rearing operation. The litter will have a low moisture content (particularly in light of the new lower stocking density) which will reduce the ability of flies to breed. Flies require a source of food, water and an organic substrate to lay their eggs. This organic matter needs to have a moisture content of between 40% and 70% in order for their eggs to be viable and allow for metamorphosis from egg to larva, pupa and adult fly to progress normally. The climate controlled units will achieve a bedding/litter moisture content of less than 40%. This environment is therefore unsuitable for fly breeding.
- 5.89 In context of the above, it is reasonable to state that the proposed development is not anticipated to give rise to any cumulative environmental effects that might prove detrimental to levels of residential amenity or human health.

6.0 DESIGN & ACCESS

Use

- 6.1 The proposed scheme, which seeks the erection of 2 No. poultry houses (for higher welfare meat production) with ancillary feed silos and hardstanding, comprises agricultural development upon agricultural land. The proposal will not give rise to significant adverse environmental effects. Levels of amenity and environmental quality afforded by neighbouring land users will not be compromised as a result of the development/operation. The new poultry units will achieve high levels of compatibility with the established adjoining poultry farm complex and surrounding agricultural land uses. The proposed development is considered to be entirely appropriate within a countryside location.
- 6.2 Furthermore, the application site is not located within or adjoining a Conservation Area, AONB, SSSI, Site of Nature Conservation Importance, national park or any other area of special landscape designation. Its development will not therefore compromise important heritage assets, archaeology, landscape features or habitat resources. As demonstrated within the Planning Policy Context section of this statement, the proposed agricultural use is considered strategically acceptable in light of the Development Plan, national planning policy and other material considerations.

Amount

- 6.3 The application site occupies an area of approximately 3.37 hectares (including existing access and land proposed for ecological enhancement). The proposal seeks expansion of the existing poultry farm complex (which includes 6 identical poultry units) through development of an additional 2 No. poultry houses with ancillary structures, hardstanding and access. This 'amount' of development is necessary to accommodate crop cycles of up to 66,300 birds (33,150 birds per poultry house), thereby addressing a new higher welfare 'table chicken' meat supply contract with Moy Park Ltd. Details

and specifications of the various buildings/structures requiring planning consent are outlined below:

- 2 No. Poultry units: These east to west orientated steel portal framed buildings each have external dimensions measuring 97.2 metres by 22.3 metres (plus 33.8 metre wide linked front elevation control room and canopy structure). The ridge height of the units will be 5.77 metres. The gross external floor area of each unit is 2362.5 m² including the canopy structure and linking corridor (combined 4725 m²). Each unit will have a gross internal floor area of 2193 m². Elevation cladding will comprise polyester coated profiled steel sheeting coloured 'Moorland green'. Pitched roofs will be coloured Olive green. Ridge mounted ventilation fans (efflux velocity of 11m/s) will assist with climate control and odour reduction. Existing biomass heating systems will help regulate the internal temperature of the units. The design and construction of the units promotes high levels of functionality, energy efficiency, longevity and environmental control.
- Subterranean foul water storage tank: with 15,000 litre capacity required for storage of foul water resultant from cleaning of units prior to collection by a specialist contractor who will dispose of it at an authorised site.
- 3 No. Feed silos: Comprising cylindrical structures measuring 8.0 metres high and 2.5 metres in diameter supported by steel frames mounted on concrete plinths. The silos are integrated with the poultry houses, releasing food via chutes as required.
- Hardstanding: will be necessary to facilitate vehicular access to the site and manoeuvring therein. This will be surfaced with concrete and effectively extend the existing adjoining hardstanding to the east.

Layout

- 6.4 The layout of the proposed development seeks to achieve: efficient use of land; visual/landscape integration; good accessibility; and high levels of functionality. The proposed poultry houses and ancillary structures are arranged in a compact nucleated layout adjoining the western periphery of the existing poultry farm. This avoids profligate use of arable farmland whilst minimising landscape impact.
- 6.5 The layout of the development scheme seeks to minimise the required area of surfaced hardstanding by siting and orientating the poultry units in a manner that readily allows access via extension of the existing concrete surfaced manoeuvring/loading area. This arrangement also allows couplings associated with foul water storage tanks installed beneath the carriageway to be accessed efficiently. By siting the proposed units to the northwest of the established poultry farm, the screening effect imparted by the existing farm buildings and a wider a natural depression in the landscape has been exploited in a manner that reduces the development's zone of visual influence.

Scale

- 6.6 Considerations of scale are multifaceted for reason that they relate both to the proportions of the various buildings/structures proposed and the overall size of the

development scheme. In addition, scale is a relative term. The perceived scale of a development is usually appraised against the baseline of existing built surroundings.

- 6.7 In this context, it should be noted that the existing poultry houses to the south and east of the application site are of identical dimensions to the proposed units. It is therefore reasonable to state that the scale of the proposed development will appear commensurate with the scale of existing adjacent structures. The proposed scheme entails peripheral expansion of the poultry farm complex. The development will therefore increase the perceived size/scale of the building cluster by approximately 25% when viewed from receptors located within the new poultry houses' zone of visual influence (particularly to the west of the site). However, the development is considered to be of modest scale relative to established poultry farms in the wider surrounding landscape (poultry farms located off Mareham Lane to the southeast of Sleaford typically include between 12 and 16 poultry houses). On balance, the scale of the proposed development is considered to be proportionate to site baseline conditions and the wider agricultural setting.

Landscaping

- 6.8 The application site includes an area of grassland (approximately 1.65 hectares) located to the west of the proposed units. This will be host to a combination of habitat formation and enhancement measures designed to provide in excess of 10% biodiversity net gain. The specification of the required landscaping measures is detailed below. Reference should also be made to the submitted drawing F3135-02 - BNG Landscaping Plan. It is emphasised that the proposed landscaping measures will be maintained for a minimum period of 30 years, as required by Central Lincolnshire Local Plan Policy S61.

Woodland Planting

- 6.9 This will comprise a 0.4 hectare tree belt including the range of native deciduous and evergreen species detailed in the table below. All planting operations carried out by the appointed contractor shall be in accordance with British Standard 4428:1989 Code of Practice for General Landscape Operations.

%	Common Name	Species	Bare Root - Size
15	COMMON OAK	QUERCUS ROBUR	45-60 1+1 Transplant
15	SCOTS PINE	PINUS SYLVESTRIS	45-60 1+1 Transplant
15	GEAN CHERRY	PRUNUS AVIUM	45-60 1+1 Transplant
10	BEECH	FAGUS SYLVATICA	45-60 1+1 Transplant
15	FIELD MAPLE	ACER CAMPESTRE	45-60 1+1 Transplant
10	HOLLY	IIEX AQUIFOLIUM	45-60 1+1 Transplant
10	BIRD CHERRY	PRUNUS PADUS	45-60 1+1 Transplant
5	HAZEL	CORYLUS AVELLANA	45-60 1+1 Transplant
5	YEW	TAXUS BACCATA	45-60 1+1 Transplant

Table detailing proposed mix of tree species

- 6.10 All plants will be bare-root stock of 80-100cm in height. All trees will need support and protection from browsing in the first few years of establishment to establish an upright growth formation. Trees will be guarded by a sufficient 1.2m tube style tree guard and

supported by a stake driven into the ground and attached to the guard by cable ties. The stakes will be in place when the trees are first planted.

- 6.11 Trees will be planted during the dormant season between November and March when ground conditions and weather are most favourable. The appointed contractor shall be responsible for calculating the exact number of tree plants based on the specified density mixture. It will be the contractor's responsibility to organise plant materials along with stakes, canes, tree shelters, ties, spirals etc.
- 6.12 Trees will be planted with a spacing of 3.0 metres. Plants can be notch planted, providing a slit sufficient in size to avoid trimming of roots and unnecessary force when planting. All trees should be planted to the root collar level. Plants should be firmed in, to the point whereby a gentle tug will not remove them from the soil.
- 6.13 For the establishment of young trees, the first 5 years are most important. The young tree plants will be protected in the first instance with the use of appropriate shelters. These are ideal for small irregular shaped areas and will protect the plants from rabbit, hare and vole damage. This will also provide a micro climate condition for more favourable plant growth. The shelters will also provide the support plants need in the first few years of establishment. It is essential that the shelters are checked twice a year or following high winds to ensure they are stable and in an upright position.
- 6.14 Young plants will have to compete for water, nutrients, light and soil when growing in competition with grasses and weeds. The use of herbicides is the most cost effective way of practicing weed/grass control. April/May are the crucial months to prevent competing weed/grass from growing. At this time, contact herbicides should be applied to control weed/grass growth. Depending on conditions it may be necessary to apply further treatment in July. The herbicide treatment should be applied with the use of a knapsack sprayer, typically a 15ltr reservoir carried on the operators back. To achieve fast early plant growth the competing weed/grass growth can be eliminated with a spot spray around each young plant, until established, typically 5 years. Following planting, for the first 2 years additional maintenance will be required for beating up. Beating up is the process of replacing failed plants so that the planting density can be maintained.

Wildflower Meadow

- 6.15 The application site includes approximately 1.25 hectares of grassland. This is to be enhanced with 'meadow mix' planting in order to form a biodiverse wildflower meadow habitat (thus exceeding the 1.185 hectare minimum requirement detailed within the submitted BNG assessment report).
- 6.16 A seed blend including at least 20% wildflowers with the remainder comprising slow growing grasses is desirable. As recommended by commissioned specialists K. J. Ecology Ltd, seeds for the proposed wildflower meadow area will be purchased from reputable UK seed merchants such as:

- Landlife Wildflowers <https://www.wildflower.co.uk>
- Boston Seeds <https://www.bostonseeds.com>
- British Wildflower Seeds <https://britishwildflowermeadowseeds.co.uk>

- 6.17 To reach the required habitat units on site, the wildflower meadow area will need sowing in Springtime and will require cutting in late August with the vegetation being moved off site. If possible a second cut in November is required to reduce the vigour of the grasses. Some reseedling of flower species may be required to attain good habitat condition.

Appearance

- 6.18 The poultry house elevations will be clad in profiled steel coloured 'Moorland green'. The roofs will clad in profiled steel sheeting coloured Olive Green. The side elevations will include shuttered windows and ventilation hatches recessed into the eaves. The appearance of the proposed houses will be identical to the appearance of the existing adjoining poultry houses to the south and east (note photograph below).



Photograph depicting existing poultry unit situated adjacent to application site.

- 6.19 The contemporary agricultural architectural vernacular combined with the natural green colour of cladding material will result in the poultry houses integrating congruously with both the established farm complex and surrounding countryside. Furthermore, the development will be partially screened by planting of a new tree belt. The character and appearance of the area will not be adversely affected by the proposed development. The subject of landscape and visual impact is discussed in greater detail within the above 'Environmental Effects' section of this report.

Access

- 6.20 Access to the proposed broiler poultry houses and ancillary feed silos will be facilitated by an extension of the private service carriageway/hard standing located adjoining the application site's southern boundary. The new area of hardstanding will be concrete surfaced and sufficient in area to allow vehicle turning/manoeuvring.
- 6.21 The existing farm access, which junctures with the A153 approximately 1.3 kilometres to the south, has ample capacity to accommodate vehicular activity arising from the proposed units in cumulation with the established poultry farming operation. Levels of vehicular activity anticipated to arise from the proposed development are detailed within the above 'Transportation' section of this report.

7.0 CONCLUSION

- 7.1 The proposed development seeks erection of two 33,150 bird broiler poultry units upon land adjoining the established Boiling Wells Farm broiler complex. The development

will facilitate expansion of the applicants' poultry farm business, thus catering for increased market demand for UK derived higher welfare poultry meat.

- 7.2 Particularly given that the existing poultry farming operation has implemented a significant reduction in stocking density to address contractual requirements, it is not anticipated that the development will give rise to cumulative traffic problems or compromise highway safety. The site will be operated in accordance with Environment Agency IPPC permitting requirements. Engineering and operational measures will safeguard against adverse effects such as nitrogen deposition, odour nuisance, water/ground pollution, flooding and harm to the locality's biodiversity. Indeed, the proposal will help to deliver a biodiversity net gain. The site's remote location and the design of the proposed units combined with EA permit compliant site management will avoid problems arising from dust, odour, noise, or flies. The proposed units will have a limited zone of visual influence and surrounding landscaping can predominantly screen the poultry farm in the medium to long term. The development's magnitude of landscape and visual impact is therefore anticipated to be small.
- 7.3 The granting of planning permission would strongly accord with the provisions of the Development Plan and national planning policy. The proposal is considered to accord with the principles of sustainable development and it will cause no demonstrable harm.