



An
Bord
Pleanála

Inspector's Report ABP-302529-18

Development	Provide 2 poultry unit buildings together with underground washing tanks
Location	Corgullion Td., Carrick On Shannon , Co. Roscommon.
Planning Authority	Roscommon County Council
Planning Authority Reg. Ref.	18312
Applicant(s)	Catherine O'Beirne
Type of Application	Permission
Planning Authority Decision	Grant
Type of Appeal	Third Party
Appellant(s)	Nathan Kitchen
Observer(s)	David Lavin; Mary Cattell
Date of Site Inspection	20 th November 2018
Inspector	Una O'Neill

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1.0 Site Location and Description

- 1.1. The site is in a rural area in Co. Roscommon, approx. 5km south east of Carrick-on-Shannon and 2km southwest of Drumsna village. It has a stated area of 2.3ha, and is to form part of a larger landholding of 8.12ha.
- 1.2. The land in question is undeveloped and, upon site inspection, it was noted that rushes predominate upon the site, which was boggy underfoot, with drainage ditches/hedgerows along the site boundaries and also along a field boundary within the site. The site has c140m of frontage along a county road, L-1040-15, to the south-east. That road is straight, level and c5.4m wide, and sits above the adjoining field. The land is gently undulating and the ground on the site rises from east to west. There is no adjacent development on the county road along the front of the site. The western side of the landholding adjoins another county road where sporadic rural housing occurs within 220m of the site.

2.0 Proposed Development

- 2.1. The proposed development is for the establishment of a broiler farm comprising the following:
 - Construction of two poultry sheds/units, each 102m deep x 23m wide, each with an internal floor area of approx. 2279sqm. The sheds are 2.6m to eaves height and are 6m to the ridge height. There is an attached boiler room and two adjoining feed silos, which are 10m high. There are two underground wash water storage tanks, with capacity of 13,250 litres each (total capacity of 26,500 litres).
 - A storage building and fuel tanks.
 - A surface water system, comprising of a silt trap, interceptor and soak pit.
 - Access road and 12m wide concrete strip around the poultry sheds.
 - Levelling off of the site and landscaping to include planting of a 1.5m high berm with evergreen trees to provide screening.
- 2.2. The facility would have a capacity for 90,000 broilers. They would be delivered to the site when a day old and kept for six weeks, followed by a downtime period of

approximately two weeks. It is stated in the submitted documentation that there would be approximately 6.5 batches of 90,000 birds per year.

2.3. An Environment Impact Assessment Report (EIAR) accompanies the application.

3.0 Planning Authority Decision

3.1. Decision

GRANTED, subject to 19 conditions, including the following:

C2: Development contribution.

C3: Compliance with mitigation measures set out in the Environmental Impact Assessment Report and attachments.

C4: Entrance and sightlines.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Planning Officer's report generally reflects the decision of the Planning Authority.

3.2.2. Other Technical Reports

Environment Department – No objection subject to conditions largely relating to the management of the site.

Roads Section – No objection.

National Roads Design Office – No objection.

3.3. Prescribed Bodies

EPA – A licence will be required.

3.4. Third Party Observations

A number of third party observations were received, the contents of which are largely addressed within the grounds of appeal hereunder.

4.0 Planning History

PL20.247923 – Permission REFUSED by ABP (September 2017) for two poultry unit buildings (76,000 Broilers), storage shed, washing tanks and feed silos, for the following reason:

The proposed development would generate significant quantities of manure, the disposal of which has the potential to have a significant effect on the quality of waters. Adequate information has not been provided to enable the Board to complete an Environmental Impact Assessment of this likely significant indirect effect on the environment in relation to the proposal to spread the manure generated by the proposed development on lands that are remote from the appeal site.

Furthermore, information has not been provided on the potential for significant effects on European sites arising from such spreading, and in the absence of an appropriate assessment that deals with this matter, being an indirect effect of the proposed development, the Board cannot be satisfied that the proposed development would not have an adverse effect on one or more European sites. The proposed development would also be contrary to the advice given regarding the siting of poultry units at section 4.3 of the BATNEEC Guidance Note for the Poultry Production Sector issued by the Environmental Protection Agency in 1996, which seeks to maintain a nutrient balance within a control area, and the advice at section 4.6 of the Note that, in cases where the normal spreading area is obtained by agreement from another landowner, the owners of units should maintain a reserve spreading area. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

5.0 Policy Context

5.1. EU/National Guidance

- Commission Implementing Decision (EU) 2017/302 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs.

- ‘Best Available Techniques (BAT) Reference Document for the Intensive Rearing of Poultry or Pigs’ (2017), issued following EU Directive above.
- EU Good Agricultural Practices for the Protection of Waters Regulations (2017) S.1 605, as amended by S.1. No 65 (20180, and associated Nitrates Explanatory Handbook for Good Agricultural Practice for the Protection of Waters Regulations 2018, published by Department of Agriculture, Food and Marine, and Department of Housing, Planning and Local Government.

5.2. Development Plan

Roscommon County Development Plan 2014-2020

- **Core Policy 3.8:** Encourage the development of the Counties natural resource sectors such as Agriculture, the intensification and/or diversification of agricultural business, forestry and biomass, rural and agri-tourism, small home and farm based business start up’s, wind power and renewable energy and the extractive industry, subject to normal planning considerations.
- **Section 3.4.1:** Agriculture and Diversification of Agricultural Activity.
- **Key Action 2 Facilitate agricultural Intensification:** It is stated under Key Action 2 that agricultural intensification will be encouraged, including poultry production, subject to normal planning considerations such as groundwater protection, protection of major aquifers, and other environmental considerations.
- **Policy 3.2.3:** Facilitate the development of agriculture, agricultural practices and horticulture within the County while seeking to protect and maintain the bio-diversity and rural character of the countryside, wildlife habitats, water quality and nature conservation
- **Policy 3.25:** Encourage Specialist farming practices e.g. organic and speciality food production, fruit and vegetable/herb growing, flower growing, equine breeding, poultry and mushroom growing.
- **Objectives in relation to Agriculture and Agricultural Diversification:**
 - **Objective 3.3** Assess all proposals for intensive agricultural development in terms of its appropriateness in relation to the density of waste disposal and

the effect of this on the region.

- Objective 3.4** Ensure that all agricultural development complies with necessary regulations concerning pollution control and does not impact unduly on natural waters, wildlife habitats or conservation areas.
- Objective 3.5** Facilitate the establishment of local country markets (e.g. farmers markets) devoted to the sale of local agricultural and craft produce in the counties towns and villages and support their role as visitor attractions.
- Objective 3.6** Facilitate agricultural development whilst ensuring that development does not have a negative impact on the scenic amenity of the countryside, in particular in areas such as the Lough Key Environs, other areas identified as of exceptional landscape value or those impacting directly upon scenic views or routes as identified in the County Roscommon Landscape Character Assessment.
- Objective 3.7** Ensure the protection of soil, groundwater, wildlife habitats, conservation areas, rural amenities and scenic views from adverse environmental impacts as a result of intensive agricultural practices.
- Objective 3.8** Favourably consider the development of appropriately scaled and designed, B&B development as a contributor to agri-tourism and to the rural economy.
- Objective 3.9** Ensure that agricultural development and intensification is screened for Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive, where required.
- Policy 4.27** Ensure that all new developments have and are provided with satisfactory drainage systems in the interest of public health and to avoid the pollution of the ground and surface waters.

5.3. Natural Heritage Designations

The closest Natura 2000 sites are Annaghmore Lough SAC, approx. 12.5km to the south-west. The Cloonen Bog SAC and Lough Forbes SPA and SAC are c14km to the south-east. There are no SPAs or RAMSAR sites within 15km of the proposed development. There are fourteen proposed NHAs within 15km of the proposed development.

6.0 The Appeal

6.1. Grounds of Appeal

A third party appeal has been submitted by Nathan Kitchen and is summarised as follows:

- The original grounds for refusal by ABP still stands.
- The BANTEEC Guidelines, section 4.3, state that 'poultry units should be sited a distance of preferably not less than 400 metres from the nearest neighbouring dwelling'. There are six dwellings that fall within a 400m radius, therefore the guidelines are being contravened. There are 38 dwellings within a 1km radius. There is a school 1.5km away, a marina 1.6km away and the River Shannon is less than 1km to the north. The proposal will affect residential amenity of neighbouring dwellings and have a noise impact.
- The EIA states that litter will be hauled to Wexford and Kildare, which are not close to Roscommon, being 250km and 130km away respectively. Manure transportation will be expensive in terms of cost and CO2 output. The proposal is unsustainable. Wash waste water will also be required to be removed off site by a specialist contractor and disposed of.
- Ireland is failing to meet climate change obligations. Poultry houses emit powerful and toxic gases such as ammonia, methane, nitrous oxide, and greenhouse gases. Energy used in heating and cooling will also generate significant amounts of CO2.
- 90,000 birds x 10 fattening cycles equates to 900,000 birds and 9 million kg of CO2 per year.

- A deep bore well is proposed for the development, which will use a significant amount of water. The proposal will consume massive amounts of water. 6.5 batches of 90,000 chickens will consume 8 million litres of water per day, as per the website poultryhub.org. This is double that predicted in the EIA, which is underestimating water usage. This water will be taken from a high risk aquifer. Given that dwellings consume 90-100k litres of water a day, the development equates to 80-90 houses. How will this affect local water supply?
- The site is at increased risk of flooding from increased winter rainfall levels. There is a risk of pollution at times of heavy prolonged rainfall, or malfunction of drains and storage tanks or poor operational procedures. Soiled waters/wash waters could enter the surface water collection system or lead to pollution of groundwater reserves and cause pollution of wetlands nearby.
- There are numerous stone forts and circles in the area, including the Doon of Drumsna, which is an ancient Iron Age walled fort 2km away. An archaeological survey of the site has not been undertaken.
- An open stream runs along the southern boundary of the site. There is an open drainage channel to the eastern boundary. The site is regularly water logged. The River Shannon is less than 1km away. The proposal poses an unacceptable threat to the stability and pollution of groundwater. The site is located in an 'area of extreme or high vulnerability with risk of contamination'. The EPA maps show the site is within an area identified as 'Zone 3A High Risk for domestic waste water'. Permission has twice been refused in the area for reasons of unsatisfactory nature of the ground conditions, proximity to the River Shannon, location of a site within a regionally important aquifer of high vulnerability in terms of groundwater protection and risk of pollution arising from any malfunctions of maintenance of on-site treatment systems.
- The L1040 is a raised bog road and sits above the level of the adjoining fields. It is poor vertical and horizontal alignment and is unsuitable for heavy goods vehicles.
- The applicant is not from the rural area and does not farm in the area. There is no site specific reason why this commercial business needs to be located here. The site is not part of a farm where its visual impact would be less. A

significant amount of hedgerow is required to be removed to facilitate access. The sightlines for the proposed access extend over third party lands to the north and south. No legal agreements have been submitted from third party landowners to allow the applicant to achieve and maintain the required sightlines, as required by the development plan.

- Objectives 3.3 and 3.4 of the development plan are relevant.
- Policy 4.55 of the development plan relates to renewable energy. The proposed development does not incorporate any renewable energy sources and would be entirely reliant on a liquid petroleum gas powered water heating system. The CO2 levels would be significant.
- There are a variety of Natura 2000 sites within 15km of the site. The site is in an area of groundwater vulnerability and proximate to a number of watercourses. There are a proliferation of domestic wastewater treatment systems in the area. The potential for impacts on Natura 2000 sites are significant. The AA screening report should have been undertaken by a person with the requisite ecological expertise. Cumulative impacts have not been assessed. PL18.218658 refused permission for a poultry farm on basis of pollution and concerns related to cumulative effect of the development.
- The submitted EIS is inadequate and needs to be scrutinised. Has a scoping exercise been carried out? What are the alternatives? Assessment of flora and fauna was not carried out. Query in relation to assessment of the hydrology.

6.2. Applicant Response

The applicant has responded to the third party grounds of appeals as follows:

- In response to the previous ABP reasons for refusal, a revised Environmental Impact Assessment Report and An Appropriate Assessment Screening Report have been submitted. Changes to the site management have been included, including agreement with mushroom production facilities for acceptance of poultry litter in order to mitigate potential risks from landspreading; testing of adjacent farmlands for suitability of wash-water

landspreading; further water and groundwater assessment; and protection measures in site design etc. The reasons for the initial refusal have therefore been addressed in the new application.

- With regard to the BATNEEC guidance note and the distance to dwellings, the previous ABP inspector's report accepted that a reasonable separation distance from the houses was being achieved.
- The third party criticises the proposal to haul litter to Kildare and Wexford, contrary to BATNEEC guidance section 4.3 which states that poultry units should preferably be sited in close proximity to either mushroom compost production areas or suitable landspreading areas to reduce manure transportation costs. However, the BATNEEC guidance section 4.3 provides guidance which is intended to be considered from a site specific stand point and in the context of current industry practices. In this context, there is an established market for poultry and poultry by-products. Intensive poultry or pig production is often found in areas of poorer soil types, where production levels are low and intensive pig/poultry farming is used to improve profitability of marginal farmlands. There are several mushroom compost producing activities in the counties in the vicinity and in northern Ireland. There are also a number of poultry farms in this wider area. There is potential to approach and agree acceptance of poultry litter from any of these mushroom producers and poultry farmers, change suppliers/hauliers to minimise costs. The proposed development is located in an area in close proximity to potential poultry litter recipients.
- The water consumption figure of 7cubic metre/1000 birds per batch is based upon Irish industry practices and is deemed appropriate for the proposed development. The third party reference website is not specific to this site. Water supply for poultry/piggery/cattle operations from a deep bore well is standard practice in Ireland and issues of water supply for other users in these areas is extremely rare.
- The EIAR has assessed the issue of potential risk of flooding on site.
- The applicants have substantial experience in the poultry industry. The home house of Catherine O'Beirne is 3km from the site. The applicant's

husband prior to moving to Roscommon owned and operated a mixed farming enterprise consisting of intensive poultry production. The purchase of lands for this development would include approx. 20 acres of adjacent farmland. The applicants have considered other sites in the area which were deemed unsuitable by Roscommon County Council. For security, the applicants have opted to obtain permission prior to purchasing the land. It is a non-sequitur to assert that a lack of ownership would preclude a person from entering the agricultural industry.

- For biosecurity reasons, it is preferable the poultry farms are not co-located as part of an existing farmyard where intensive farming is conducted. It is commonplace for new intensive agricultural developments to be built on greenfield sites.
- The proposal will contribute to the local economy.
- Wood biomass fuel will be used to heat the buildings, with natural gas a secondary fuel source.
- Due to increasing costs of chemical fertilisers, poultry and piggery organic fertiliser by-products are becoming an essential part of the agricultural industry in Ireland, particularly in tillage. Poultry litter is easily handled and high in nitrates.
- There is a sufficient landbank adjoining the site suitable for the landspreading of wash waters. This is the lowest cost method of managing this by-product stream.

6.3. Planning Authority Response

None.

6.4. Observations

Two observations have been submitted, from Mary Cattell and David Lavin, the grounds of which are summarised as follows:

- Increased quantity and size of traffic using roads, which are not intended for commercial traffic.

- Potential road accidents due to access/egress of site and conflict with local road users, including cyclists and children.
- Further loss of agricultural land.
- Increased risk of pollution by proposed plant through increased waste production into the drainage system and expelling fumes into the air.
- The land has a high water content. Building will be difficult and there is a danger of the building flooding.
- The proposal is not in keeping with the area.
- Detraction from tourism.
- Increased vermin in the area.
- Detrimental impact on local wildlife and flora.

6.5. Further Responses

EPA: The development may require an EPA licence given it involves the rearing of poultry in installations where the capacity exceeds 40,000 places. A licence application has not been received to date and a determination could not be issued in relation to the development until a planning decision has been made. The EIAR will be required to be submitted as part of any licence application and will be assessed as part of that application. In relation to the site boundary, this generally relates to the site of the poultry rearing and directly associated activities which occur within that defined site boundary. Activities such as the use of fertiliser beyond the site boundary cannot be controlled by a condition of an IE licence. The recipient of organic fertiliser is responsible for the management and use of the organic fertiliser in accordance with the applicable regulations.

7.0 Assessment

7.1. Introduction

The proposed development is for the establishment of a broiler farm of 90,000 hens, kept indoor, within two newly constructed buildings. The application is accompanied

by an EIAR. This application differs from the previously refused permission (ABP ref PL20.247923) in terms of the level of information submitted in the EIAR and the submission of an Appropriate Assessment Screening Report. Changes to the site management have been included, including agreement with mushroom production facilities for acceptance of poultry litter in order to mitigate potential risks from landspreading; testing of adjacent farmlands for suitability of wash-water landspreading; further water and groundwater assessment; and protection measures in site design etc.

7.1.1. I consider that the key planning issues arising are as follows:

- Principle of Proposed Development
- Impact on Residential Amenities
- Roads and Traffic
- Surface Water Management and Flooding
- Examination of Alternatives
- Appropriate Assessment

7.2. Principle of Development

7.2.1. The proposed development is for the construction of two poultry sheds in a rural area. It is stated under Key Action 2 of the development plan that agricultural intensification will be encouraged, including poultry production, subject to normal planning considerations such as groundwater protection, protection of major aquifers, and other environmental considerations. Policy 3.25 seeks to 'Encourage Specialist farming practices e.g. organic and speciality food production, fruit and vegetable/herb growing, flower growing, equine breeding, poultry and mushroom growing'.

7.2.2. The grounds of appeal considers the proposed development is inappropriately located given the applicant is not from the area and is not part of an existing farm. The applicant in response states their home is 3km from the site and the applicant has previously been involved in poultry farming in Monaghan. It is also stated that in the interests of bio-security, it is necessary to locate poultry sheds away from existing farmyards.

7.2.3. The keeping of poultry falls within the definition of 'agriculture' set out in Section 2 of the Planning and Development Act 2000, as amended. I consider that the proposed development would generally be compatible with the policies of the development plan to support agricultural diversification and there is no requirement that a person be from an area in which a farm is proposed or be already involved in agriculture. I therefore consider the proposed development to be acceptable in principle, subject to consideration of planning and environmental issues arising.

7.3. Impact on Residential Amenities

7.3.1. The issues raised by the appellants in respect of residential amenity relate to proximity to dwellings, impact from odour, noise, and visual impact, which are discussed separately hereunder.

Odour and Proximity to Dwellings

7.3.2. The issue of odour is addressed in Chapter 6 of the EIAR, with attachments B1 and B2 containing an Odour Impact Assessment Report and Odour Management Plan.

7.3.3. The poultry operation is restricted to the interior of the building and no foraging is proposed. The main source of odour is from poultry litter and warm air from the ventilation system, as well as odour associated with loading of poultry and/or loading of litter. Poultry litter comprises a mix of bedding material, feathers and manure. This will be removed from the floor of the units every six weeks by a registered contractor and spread off site by two specified mushroom producers in Wexford and Kildare. There is therefore no odour issue from the spreading of poultry litter on the land subject of this appeal.

7.3.4. The appellant and observers raise concerns in relation to odour pollution, with reference to the EPA's 'BATNEEC Guidance Note for the Poultry Production Sector' (1998), which states poultry units should be sited a distance of preferably not less than 400 metres from the nearest neighbouring dwelling. However, I note that this Guidance Note has now been superseded by Commission Implementing Decision (EU) 2017/302, and the associated 'Best Available Techniques (BAT) Reference Document for the Intensive Rearing of Poultry or Pigs' (2017). The BAT Reference Document 2017 does not set out any specific recommendations with regard to separation distances from neighbouring dwellings, but notes in Section 4.10.1.1 that

in many Member States minimum distance regulations for the assessment of odour and the spatial separation of farms and dwellings or residential areas have been established. It notes that in Germany, for example, odour impacts are assessed as significant and legally not allowed if a frequency of odour perception of 10 % (general residential areas) or 15 % (village areas) of the time is exceeded for an odour concentration of 1 OUE/m^3 .

- 7.3.5. There are a number of rural dwellings along the local road west of the appeal site, with the nearest dwelling being 220m from the site. I note the appeal site is located within a strongly rural area, where odour emissions associated with agricultural activities are to be expected and are likely to be commonplace. Noting that more recent guidance does not specify recommended separation distances but refers to modelling techniques, I consider that the use of computer modelling is appropriate and allows for a more detailed understanding of odour impacts than may have been the case in the past. I further note there have been improvements to housing design and operation (including the dry manure system and the use of feed additives), in recent years, which further facilitates decisions in relation to the siting of a facility other than the blanket application of an arbitrary separation distance.
- 7.3.6. The Odour Impact Assessment (OIA) undertaken as part of this application utilises a predictive odour model, based on Aermid Prime dispersion modelling software and library-based emission data. Resultant cumulative ground level concentrations of compounds dispersed from the emission point source/the proposed poultry farm at sensitive receptor locations within 1km of the facility were determined. The results stated that all identified receptors located in the vicinity of the development would perceive an odour level less than the guideline odour limit of less than 3.0 OUE/m^3 (EPA guidance for odour limit) for the 98th percentile of worst case hourly averages for the meteorological year 2013 and would therefore not impact on nearby sensitive receptors with respect to odour.
- 7.3.7. A number of best practice site operation standards and mitigation measures are proposed in terms of the building design, insulation, water and feed systems, timing of emptying of poultry houses relative to the weather etc. The OIA also recommends that an Odour Management Plan (OMP) outlining various site management activities and good practice measures that will be implemented to manage odour emissions, including response to any odour complaints arising.

7.3.8. The best practice measures set out in the OMP appear reasonable. I note in particular that the manure will be removed from the site at the end of each six week cycle. On the basis of the information submitted, I am satisfied that the applicant has demonstrated that the proposed development would not seriously injure the residential amenities of property in the surrounding rural area by reason of odour emissions. I also note that the proposed development will require a Licence from the EPA, and as a result odour emissions will be subject to licence conditions and associated monitoring and reporting requirements.

Noise Impact

7.3.9. Chapter 7 of the EIAR addresses noise and Appendix E contains the outline of a Noise Management Programme. A Noise Assessment Report has been submitted as part of the EIAR. It identifies the main noise sensitive locations (NSLs) and assesses the potential impact of the proposed development at these locations. The closest noise sensitive location of five dwellings were selected for assessment and the baseline noise environment determined.

7.3.10. With regard to construction noise, the EIAR states the predicted noise levels at all sensitive locations, while audible, are below the NRA guidance limits of 70dBA for weekdays. It further states that construction is a temporary issue (4-5 months) and works would be conducted during normal working hours, reducing the risk of negative impacts. Noise measures would be put in place during the construction phase, such as the limiting of construction hours, selection of low-noise plant and machinery, and maintenance of construction equipment. I consider these to be relatively standard good practice construction measures.

7.3.11. With regard to operational noise, the EIAR highlights potential for noise from the operation of agricultural building and heavy goods vehicles within the site, and also from ventilation systems used in the buildings. Noise from the ventilation system is predicted to be inaudible at the nearest noise sensitive location. Furthermore the EIAR notes that given the noise relates to the operation of an agricultural business in a rural area, the subjective impact of such a noise would not normally result in a nuisance. Best practice noise mitigation measures are proposed, including the construction of a 1.5m noise barrier along the southwestern side of the poultry house; timing of the noisier activities of the removal of litter and the delivery of feed

to be restricted to normal working hours; implementation of a noise management programme.

- 7.3.12. Overall I am satisfied that the potential noise impacts of the proposed development have been appropriately addressed in the application and the information submitted by the applicant and that no significant adverse effect is likely to arise.

Visual Impact

- 7.3.13. The proposed buildings are located in an area where there are few other farm structures in the immediate surrounds. The development has a road frontage of 140m and it is proposed to remove some of the existing boundary hedgerow to create an improved access.
- 7.3.14. The buildings are significant in their floor area, each being 102m deep x 23m wide with an overall height of c. 6m. The feed silos are c. 10m tall. The sheds and silos are located 9.5m-10.5m from the roadside. The subject site is relatively flat, rising toward the southwest of the site. The buildings would have a significant visual impact, however, given they are agricultural buildings in a rural setting and given the topography of the land and the provision for a land berm to one side, I do not consider the proposed development would lead to a significant adverse effect on the landscape. With regard to loss of existing hedgerows along the roadside boundary and within the field, I note the proposed berm and landscaping and in my view this is sufficient to aid in the assimilation of the buildings into the environment, while being supportive of replacing a limited section of natural habitat. I further note that it is proposed to infill existing gaps in the treeline and hedgerow to mitigate further any visual impact.

7.4. Impact on Soil and Surface Water

- 7.4.1. The third parties contend that the appeal site is prone to waterlogging and flooding, and that the proposed development may exacerbate this issue. It is contended that there is a risk of pollution at times of heavy prolonged rainfall, or malfunction of drains and storage tanks or poor operational procedures. Soiled waters/wash waters could enter the surface water collection system or lead to pollution of groundwater reserves and cause pollution of wetlands nearby. It is noted that the site is in an area

of groundwater vulnerability and proximate to a number of watercourses. There are a proliferation of domestic wastewater treatment systems in the area.

- 7.4.2. The applicant states the EIAR has addressed the issue of flooding. Testing of adjacent farmlands for suitability of wash-water landspreading, in addition to further water and groundwater assessment, and protection measures in site design etc. The reasons for the initial refusal have therefore been addressed in the new application.
- 7.4.3. The EIAR states the proposed development would have potential to impact upon groundwater and surface water during construction and operational phases. During construction the risk would be due to hydrocarbon spillages. During the operational phase, the risk would be through surface water run-off emissions to ground/existing drain and spreading of wash waters. There would be no process effluent emissions from the site.
- 7.4.4. I address hereunder the issues arising from the proposed development and interactions between soil, surface water and groundwater.

Soil

- 7.4.5. The soil is classified as peat within the soil group Basin Peats with some Blanket Peats (Cut). Soil within the northern portion of the site where the soiled wash water is to be spread, is identified as mineral (mainly basic) poorly drained soil.
- 7.4.6. The EIAR states that trial holes excavated on the site indicated that soil comprised of peat to a depth of approx. 0.6m in the southern portion of the site and organic slightly clay/clay silt across the northern portion of the site and landholding. This is underlain by light brown clay and silt with sand and gravel content to a depth of approx. of 0.7m to 1.9m below ground level, with the clays and silts underlain by grey to black boulder clay with some sand partings. The depth to groundwater inflow is not stated.
- 7.4.7. The site in terms of geological heritage is identified as being within the northern portion of the Mid Roscommon Ribbed Moraines, which covers an area of 10 by 20 kilometres and is stated to be one of the finest discrete ribbed moraines in the country. The EIAR states the landholding to the north of the site (where wash water spreading is proposed) incorporates rib moraine with a hummocky topography with highest elevations of 51.8m AOD at its highest point. The site where the buildings are proposed is stated to be relatively flat at 43.3m AOD to 44m AOD.

- 7.4.8. I acknowledge, as stated in the EIAR, that the ribbed moraine landscape relates to the land north of where the buildings are proposed, therefore there will be no significant impact on the Mid Roscommon Ribbed Murraines geological heritage site.
- 7.4.9. To construct the two sheds and associated facilities, the EIAR states that the peaty soil and subsoil would be excavated to a depth of approx. 1.5m below ground level to bring the site to a consistent level and also to remove the soil that is unsuitable for foundations. The footprint of the construction area (2 units, storage shed, hardcore/concrete area) is 7745 sqm. The removed soil is to be stockpiled in a berm to the west of the poultry units to provide screening. The EIAR states there will therefore be a slight permanent impact to a portion of the soils at the site as a result of the excavation. During construction there is a risk of release of suspended solids during soil disturbance works into receiving waters, however appropriate mitigation measures during construction, such as silt control features and appropriate storage of spoil, will ensure no impact.
- 7.4.10. While the excavation material will be utilised on the site in the creation of a 1.5m high berm, 102m long, which may also have knock on benefits in protecting the surrounding streams in the case of a spill, I consider the level of excavation required to enable the construction of the building due to the inappropriateness of the soil type, to be significant.

Surface Water Drainage

- 7.4.11. There are a number of drainage ditches/channels on the site and in the wider area. There is a drainage channel along the southwestern boundary and southeastern/eastern boundary of the site and another along the northeastern boundary. The drainage ditches are connected to the Drumcleavry River, 200m east of the site, which is hydrologically linked to the Loughs listed hereunder and to the River Shannon Upper. The nearest major watercourses and lakes include the River Shannon which flows to the north and east of the site (760m at its closest point); Carton Lough and Lowfield Lough (1.8km east); and Tully Lough (3km south). Jamestown Canal, which forms a direct link between two sections of the River Shannon, is located 1.4km northeast of the site.
- 7.4.12. To mitigation potential construction and operational risks, a number of mitigation measures are proposed. It is proposed to drain the site at greenfield rates into the

existing open drain along the southeastern and southwestern boundary of the site. The EIAR states that only clean surface water runoff would be discharged from the site. Storm water from roofs and hardstanding areas is to be collected and discharged to ground/surface water (existing drain) via a newly constructed drainage system designed to SuDS/CIRIA standards, with the stormwater system comprising a silt trap, interceptor and soak pit. Remedial work is proposed to existing drainage ditches, which have not been maintained and are full. The EIAR states that as the water entering this system is uncontaminated there would be no impact on ground or surface water. In the event of a spill, the silt trap would remove solids and the interceptor would remove any hydrocarbons and fats. In addition an emergency divert valve would divert drainage from the loading area to the two wash water tanks in the event of a spill of manure or pollutant on the site.

- 7.4.13. Localised areas of the site are indicated to have a potential of pluvial flooding risk with an annual exceedance probability of 1% (1 in 100 year event), in particular along the adjoining road, L1031. The EIAR states the stormwater drainage system will be designed in accordance with SuDS to ensure that greenfield runoff rates are maintained and that adequate hydraulic attenuation is available onsite, thus minimising any potential flood risk downstream of the site.
- 7.4.14. The EIAR states infiltration of rainwater to the bedrock aquifer groundwater is low. The EIAR states that water logging of the peaty soil was noted at the site which is likely to be as a result of lack of maintenance of the drainage ditches at the site.
- 7.4.15. As per the GSI maps, I note the site is located over a karstified regionally important aquifer. Groundwater vulnerability is identified as being high, while a small section in the northwest portion of the adjoining landholding (where wash-water landspreading is proposed) is identified as extreme. The soil comprises basin peats with some blanket peats. The northern portion and adjoining landholding comprises poorly drained mineral soil. The EIAR states the installation of a stormwater drainage system designed to SUDs and CIRIA technical guidance, including attenuation measures of a soak pit, will ensure surface water is managed. I note no details of soil percolation and infiltration test results have been submitted or calculations in relation to the area of the soakpit. I further note the development also requires modifications to this natural environment in terms of the excavation of a significant area of peat soil, with resultant surface water implications, and with run-off to a currently

overloaded drainage network which is to be upgraded, with no details submitted in relation to its capacity when fully functioning.

- 7.4.16. I am not satisfied that the proposed surface water drainage network can function as intended within this soil type, or that the clearing of the ditches of overgrowth will ensure sufficient capacity to prevent additional risk of pluvial flooding. It would appear that attenuation to greenfield run off rates in this environment would be difficult, with significant rain events potentially resulting in ponding/lateral run off from the area with potential negative effects resulting from discharges to ground/surface water. The issue of landspreading on the adjoining lands is discussed further hereunder.

Impact of Poultry Litter, Wash Water and Landspreading

- 7.4.17. The development will generate two types of organic fertiliser – poultry litter from the floor of the two units, which comprises a mix of bedding material, feathers and manure; and wash water, which is generated from the washing down of the floor of the poultry units after removal of the poultry litter and from hand wash facilities.
- 7.4.18. The EIAR states 585 tonnes per annum of poultry litter will be generated. Poultry litter will be removed from the floor of the units every six weeks by a registered contractor (McCarthy Contractors Ltd.) and spread off-site by mushroom producers in Wexford (Custom Compost) and Kildare. A storage shed is to be constructed, which has a capacity for 360 tonnes of poultry litter, should exceptional weather conditions or other unforeseen circumstances arise which would prevent access to the site for removal of the poultry litter. It is a requirement of the Nitrates Regulations that storage for manure generated during a 26 week period should be available on site, therefore the proposal is in compliance with the Nitrates Regulations in this regard. Given the poultry litter is to be removed from the site, there is no risk to ground water/surface water from poultry litter. Best practice measures are to be put in place to ensure management of the removal of the litter and inclusion of a diversion value in the stormwater system should a spill occur. I consider this reasonable. It is stated that the farmers taking the poultry litter will be restricted to good agricultural practices in the spreading of manure on their landholdings, which I consider reasonable. However, I note that no documentation showing agreements with these removal contractor or landowners has been submitted and in the event of

a grant of permission a management schedule for the organic manure should be submitted to and agreed in writing with the planning authority, prior to commencement of development.

7.4.19. The soiled wash water will be stored in underground tanks and it is stated that this will be spread on adjoining lands to the north of the site. The tanks are to be inspected regularly for integrity and cleaned as necessary to mitigate potential risk of spillage. This is reasonable.

7.4.20. The EIAR states that 18m³ (18,000 litres) of wash water will be produced per batch of 90,000 broilers (120m³ per year). Grey water additions equate to 75-110 litres of grey water per batch, which results in a total generation of 18,110 litres of wash water per six week batch. Two underground water storage tanks are proposed, each with a capacity of 13,250 litres (c). It is stated storage is in accordance with the Nitrates Regulations and wash water spreading will be undertaken in compliance with the Nitrates Regulations. Landspreading is not recommended during the period October to January. It is not clear what will happen to the wash water in that timeframe.

7.4.21. Wash water is proposed to be spread on lands north of the site, within the applicant's landholding. Wash water from poultry rearing is referred to in the Department of Agriculture, Food and the Marine, 2014 guidance: Dead Birds and Poultry Litter: Legal Obligations and Good Practice Guidelines for Poultry Farmers, where it is stated that water used for cleaning poultry houses should be captured and disposed of in accordance with environmental and nitrates legislation and should not be spread on land used for grazing livestock or on land adjacent to water courses or to grazing animals. Nitrates Explanatory Handbook for Good Agricultural Practice for the Protection of Waters Regulations 2018 specifies distances to water courses and highlights as a potential issue the spreading of soiled water to land which is water logged or when heavy rain is forecast. The EIAR states that an assessment of the suitability of lands for landspreading of wash water has determined that 1.25 ha of the total 5.74 ha are suitable. The proposed maximum application rate of 15 m³/hectare is stated to be in compliance with 25 m³/hectare limit for karst areas, as required under the nitrates regulations. I note in the previous application refused on this site (ABP ref PL20.247923), the inspector's report noted that the applicant proposed the wash water would either be removed from the site or spread on the

landholding, depending on the results of a baseline assessment of water quality on the site. As per the submitted EIAR, the applicant has now assessed the ground in question and considers the adjoining lands can accommodate the wash water.

- 7.4.22. The EIAR states infiltration rates are 10% recharge coefficient where the wash water is to be spread, with the majority of effective rainfall discharging as overland flow to surface water courses. It is stated that the wash water landspreading will equate to 1% of effective rainfall, therefore there will be a negligible impact on the overall groundwater and surface water flow regime. The EIAR states there would be an additional hydraulic loading associated with the proposed landspreading of wash waters on the adjoining lands, however it is considered that there would be a negligible impact on the overall groundwater and surface water flow regime due to infiltration rates and proposed landspreading rates.
- 7.4.23. Notwithstanding the analysis in relation to the landspreading area and the fact that wash water is considered to be a relatively low risk material, there is in my view a risk to surface water from lateral run off from the area in the case of significant rainfall events, given the low infiltration rate to groundwater due to the soil type and number of drainage ditches/channels in the area. This could potentially impact on surface water quality. Overall, I am not satisfied, having regard to the regional importance of the karst aquifer, its vulnerability rating (high and in a small section extreme), and the importance of protecting surface and groundwater resources in the vicinity of the site, notwithstanding statutory controls over the use of the litter and soiled wash water, that this location is suitable for the development proposed.
- 7.4.24. While the applicant in the previous application on this site (PL20.247923) indicated that wash water could be disposed of off-site, I equally have serious reservations about disposing of the wash water off-site and, overall, question the sustainability of locating an intensive agricultural farm on wet grasslands which cannot accommodate any of the by-products of the farm in the vicinity of the site and which requires a significant level of excavation to enable the construction of significantly scaled buildings on peat soil.

7.5. Disposal of Poultry Litter Off-Site

- 7.5.1. I note that concerns raised by third parties in relation to the sustainability of disposing of poultry litter in Wexford and Kildare, which are a significant distance from the site.
- 7.5.2. The applicant states poultry and piggery organic fertiliser by-products are becoming an essential part of the agricultural industry in Ireland, particularly in tillage. Poultry litter is easily handled and high in nitrates. Intensive poultry or pig production is often found in areas of poorer soil types, where production levels are low and intensive pig/poultry farming is used to improve profitability of marginal farmlands. There are several mushroom compost producing activities in the counties in the vicinity and in northern Ireland. There are also a number of poultry farms in this wider area. There is potential to approach and agree acceptance of poultry litter from any of these mushroom producers and poultry farmers, change suppliers/hauliers to minimise costs. The proposed development is located in an area in close proximity to potential poultry litter recipients.
- 7.5.3. I accept that disposal of poultry litter off-site is possible and that this organic by-product has a market value, which displaces reliance by farmers on chemical fertilisers. The disposal is further governed by EU Good Agricultural Practices for the Protection of Waters Regulations (2017) S.1 605, as amended. I consider the disposal of such a product off-site to be acceptable in this instance.

7.6. Water Supply

- 7.6.1. The EIAR states the regionally important aquifer, from which water is to be supplied through the construction of a bore well, has a potential to yield in excess of 400 m³/day from a groundwater sources. 2760 m³/day is the proven yield which is abstracted for the public water supply scheme. The applicant proposes a back-up connection to the public water supply scheme (Boyle Rockingham) if required.
- 7.6.2. It is estimated that the proposed development would use 648.1 m³ (684,000 litres) per batch, which equates to 4215.7m³/year (approx. 4,216,0000 litres), based on 6.5 batches a year, and this would include drinking water for stock (7m³ per 1000 birds) and cleaning of the houses. The EIAR concludes there is not anticipated to be a significant demand on the groundwater resource.

- 7.6.3. The third party questions the water consumption figures used by the applicant and refers to an Australian website, which predicts double the consumption stated in the EIAR and raises concerns in relation to the potential impact of the development on water supply to houses in the area which also abstract water from the same resource. The applicant states the water consumption figure of 7cubic metre/1000 birds per batch is based upon Irish industry practices and is deemed appropriate for the proposed development. The third party reference website is not specific to this site. It is contended that water supply for poultry/piggery/cattle operations from a deep bore well is standard practice in Ireland and issues of water supply for other users in these areas is extremely rare.
- 7.6.4. I accept the evidence submitted by the applicant, in relation to water usage, which is site specific to Ireland, and consider the proposal for a borewell to be acceptable. Overall I am satisfied that the potential impacts of the proposed borewell on water supply have been appropriately addressed and that no significant adverse effect is likely to arise.

7.7. Roads and Traffic

- 7.7.1. The third parties are concerned the road is not of a sufficient size or condition to accommodate the traffic movements proposed with the poultry house.
- 7.7.2. There is an existing agricultural entrance serving the site. It is proposed to upgrade this entrance and remove existing hedgerows on either side to achieve 90m sightlines in both directions. The local roads in the vicinity are relatively lightly trafficked and are of a reasonably good standard and alignment, with good access to the Regional and National road network.
- 7.7.3. The EIAR states there would be approx. 2 truck journeys for chick delivery, 2 truck journeys for the delivery of wood shavings, 56 operator visits, 6 truck journeys for waste/carcass collection, 20 truck journeys for feed deliveries, 4 fuel deliveries, 10 hgv truck movements for broiler collection, 8 truck collections for litter removal, 1 collection for wash water, 1 visit by veterinary/dept of ag personnel, 2 visits for inspection by customer per 90,000 batch. This gives a total of 53 articulated truck and 59 car journeys per batch, equating to 345 trucks and 384 car journeys per year.

7.7.4. The proposed operation of the poultry houses will likely result in periods of very low traffic activity, with more intense 'bursts' of traffic activity approx. every six weeks when the chickens and their manure are transported out of the facility, the facility is cleaned down, and c. 90,000 day-old chicks are transported into the facility over a relatively short period. While the overall traffic generation from the proposed development will likely be concentrated into the destocking/cleaning/restocking periods, I do not consider that the average or peak level of traffic generation would be so great as to result in any unacceptable direct or indirect impacts in terms of traffic.

8.0 Environmental Impact Assessment

8.1. Introduction

8.1.1. I have carried out an examination of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application. A summary of the results of the submissions made by the planning authority, prescribed bodies, appellant, observers and applicant has been set out at Section 6.0 of this report. The main issues raised specific to the EIA can be summarised as follows:

- Impact from odour, noise and visual impact on the landscape.
- The effect of the development on surface water drainage and impact on the quality of surface water and groundwater.
- The effect of the development on traffic volumes and safety.

These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation.

8.1.2. The EIAR is laid out in one volume, including a non-technical summary, with a separate appendices. Mitigation measures are addresses within each section and alternatives have been considered in chapter 2.

8.1.3. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR adequately

identifies and describes and the effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2001, as amended.

8.1.4. This EIA has had regard to the application documentation, including the EIAR, and the observations received, as well as to the assessment of other relevant issues set out in section 7 of this report above.

8.2. Assessment of the Likely Significant Direct and Indirect Effects

The likely significant direct and indirect effects of the development are considered under the following headings, as presented in the EIAR:

- Population and Human Health
- Air Quality
- Odour
- Noise
- Landscaping & Visual
- Biodiversity – Terrestrial Environment
- Biodiversity – Aquatic Environment
- Land – Soils, Geology and Water
- Climate
- Material Assets – Agriculture
- Material Assets – Non-Agricultural Properties
- Material Assets – Natural and Other Resources
- Archaeological, Architectural, and Cultural Heritage
- Interactions and Inter-Relationships

8.3. Population and Human Health

8.3.1. Chapter 4 of the EIAR addresses population and human health, with impacts highlighted in relation to economy and employment; air, dust and odour; noise;

traffic; land-use; visual amenity; water; and major accidents and natural disasters. Impacts in relation to these headings have been addressed in more detail elsewhere in this report.

8.4. Air Quality

- 8.4.1. Chapter 5 of the EIAR relates to air quality. In terms of operational impacts, air pollutants would be from the digestive processes, poultry litter, and the burning of fuel for heating. Air emissions could result from the ventilation system and during the removal of litter. Dust levels from the poultry within the houses may be an issue and such dust could be released during clean out of the houses and when birds are moved. Dust arising from vehicle movements during the operational phase is raised, as is potential for dust arising during the construction phase.
- 8.4.2. Air emissions from fuel will be minimised through use of wood pellets. Proper cleaning regimes in terms of ventilation ducts and standard practices are considered sufficient to mitigate air emission concerns. Mitigation measures relating to litter storage and use of covered transport vehicles are proposed. It is contended that litter transport does not constitute a significant source of emissions given that it occurs in 6-8 week batches. Best practice construction measures will ensure dust during construction is not a significant issue.
- 8.4.3. The issue of odour from poultry litter is addressed further in Chapter 6 of the EIAR and is addressed under section 7.3 of this report above.
- 8.4.4. The information submitted is adequate to demonstrate that the proposed development would not be likely to have a significant adverse effect on air quality through the emission of odours or otherwise.

8.5. Odour

- 8.5.1. Odour is addressed in Chapter 6 of the EIS and Appendix 19 of the EIS Addendum contains an Odour Impact Assessment and Odour Management Plan. My assessment of this aspect of the EIAR is set out in Section 7.3 above.

8.5.2. Overall I am satisfied that the potential impacts of the proposed development have been appropriately addressed in terms of the application and the information submitted by the applicant and that no significant adverse effect is likely to arise.

8.6. **Noise**

8.6.1. Chapter 7 of the EIAR considers the issue of noise. The existing noise climate was surveyed and consideration given to potential short term construction impacts and long term impact of the operational phase. This issue is addressed in more detail in section 7.3 of the assessment above.

8.6.2. Overall I am satisfied that the potential noise impacts of the proposed development have been appropriately addressed in terms of the application and the information submitted by the applicant and that no significant adverse effect is likely to arise.

8.7. **Landscaping and Visual**

8.7.1. The issue of landscape and visual impact is addressed in Chapter 8 of the EIAR. The Landscape Character Assessment, as set out in the county development plan, indicates the development site is located within landscape character type (LCT) 'River Corridor' LCT and 'Kilglass Drumlin Lakelands', LCA4. LCA4 is classed as being of 'very high' landscape value due to its tourist amenities and extensive scenic views and is noted as being 'highly visually sensitive'. Scenic routes associated with this landscape type are remote from the site. The undulating topography in the surrounding area has the ability to shelter and absorb the visual impact of the development. Mitigation measures are proposed, in relation to the colour of the shed roofs and feed silos to be dark green; existing trees and hedgerows will be retained where possible; existing gaps in treelines and hedgerows will be filled; native species will be planted for speed of growth and level of concealment; topsoil from excavation and landscaping will be utilised to create a berm to mitigate potential visual impacts.

8.7.2. Having regard to the agricultural nature and design of the proposed development, and noting the site topography, the existing mature tree and hedgerow planting and the proposed landscaping and screening banks, I do not consider that the proposed development would be unduly prominent within this rural setting, or that it would have a significant effect on the character of the landscape.

8.8. Biodiversity – Terrestrial Environment

- 8.8.1. Chapter 9 of the EIAR relates to the impacts of the proposed development on biodiversity. The site comprises three areas of agricultural fields surrounded by boundary hedgerows/treelines, drainage ditches and an earthen bank. The dominant habitat is wet grassland comprising primarily of soft rush and various grasses and mosses. The habitats are described as being of low conservation value. The drainage ditches are noted to be limited in size and volume.
- 8.8.2. Construction impacts have the potential to impact upon biodiversity through disturbance, introduction of invasive species and a deterioration in water quality (discussed further in section 8.10 hereunder). Site clearance has the least impact on fauna if carried out in August – November period. There will be no importation of soil onto the site and vehicles entering the site will be inspected for invasive species, with standard practice of washing vehicles upon entering and exiting the site to be implemented. There will be a permanent loss of habitat in terms of the footprint of the building, however this is not considered to be significant given the low ecological value of the habitats. Some trees will be lost and tree removal should not be undertaken between 1st March and 31st August.

8.9. Biodiversity – Aquatic Environment

- 8.9.1. The drainage system on site consists of a network of small drainage ditches interlinked with other field drains in the area. The drainage from the site joins with a local drain/stream which flows to Lowfield Loguh (3.1km southeast). The Drumcleavry River flows 300m north from Lowfield Lough to Cartron Lough, before merging with Jamestown Canal 380m north. Jamestown Canal joins with the River Shannon 1km downstream. The drainage ditches on the site are limited in size and water volume and the EIAR states they have limited potential to support aquatic species.
- 8.9.2. The EIAR considers impacts in terms of process water, stormwater, sanitary waste, wash water, management and landspreading of litter, potentially polluting or hazardous materials and flood risk. There is deemed to be a minor risk of environmental impact on the aquatic environment from the operational and construction phase of the development.

- 8.9.3. With regard to the construction phase, mitigation measures are proposed including daily visual inspection of onsite drainage ditches during construction works; no earthworks should be carried out within 2m of exposed waterways; silt control features to be used; silt fencing around spoil areas where necessary; surface water run-off to be diverted where possible from areas of bare/exposed ground; planting of exposed soils as soon as possible; no wheel washing within vicinity of watercourses; use of pre-cast concrete where possible; and best practice in terms of machinery storage and refuelling.
- 8.9.4. With regard to the operational phase, mitigation measures are proposed, including good housekeeping practices during the operational phase; drainage from yard and roofs to pass through a SuDS system which is to include a silt trap, separator, and soak pit; a valve to be installed on the stormwater drainage system in the event of a spill of manure or pollutant on the site; inspection chamber to be included in the surface water drainage system and inspected daily for solids; storage shed to cater for temporary storage of litter should there be a delay in removing it from the site; removal and transport of litter not to be carried out during heavy rain which could increase risk of storm water contamination; no significant volumes of chemical or materials to be stored on site; natural gas tanks to be surrounded by protective barriers; ventilation system used is to ensure good dispersion of air, minimising the deposition of dust on roof tops.
- 8.9.5. As discussed in section 7.4 above, the prevention of pollution of the surface/ground water network during the operational, as well as construction, phases is linked to the successful development of a high quality surface water drainage network. I am not satisfied that the proposed surface water drainage network can function as intended within the soil type of the existing lands, and insufficient information in terms of the SuDS system proposed and soil/percolation testing has been submitted. I am also not satisfied that the clearing of the ditches of overgrowth will ensure sufficient capacity to prevent additional risk of pluvial flooding. Significant rain events could result in potential for ponding/lateral run off from the site with potential negative effects resulting from discharges to ground/surface water from the surface water system and also from the area where spreading of wash water is proposed. Having regard to the regional importance of the karst aquifer and its vulnerability (high and to a limited extent extreme), and the importance of protecting surface and

groundwater resources in the vicinity of the site, I am not satisfied that no significant adverse effects in respect of surface water and groundwater of the subject site are likely to arise as a result of the proposed development, with consequential impacts on the biodiversity of the aquatic environment in the area.

8.10. Land – Soils, Geology and Water

- 8.10.1. Chapter 11 of the EIAR provides information on the existing soil, geological conditions, and water on the appeal site and assesses the impact of the proposed development on these aspects of the environment.
- 8.10.2. I have addressed in section 7 above issues arising in relation to soils, geology and water.
- 8.10.3. I am not satisfied in this regard that no significant adverse effects in respect of soils, geology, and water of the subject site are likely to arise as a result of the proposed development.

8.11. Climate

- 8.11.1. The issue of climate is addressed in Chapter 12 of the EIS. The assessment considers greenhouse gas emissions and emissions from traffic. It is not considered that these are significant issues. The EIAR states the proposed broiler house and supporting systems will be designed to the highest industry standard to ensure maximum efficiency of input to product ratio. The primary source of fuel would be wood pellets. It is stated that the greenhouse gas emissions from the broilers and their litter would be typical of the industry and would be anticipated to have no significant impacts on air quality or climate in the regional context.
- 8.11.2. I note that organic fertiliser arising from the proposed development will likely replace chemical fertilisers on other farms and the reuse of this by-product is welcomed, albeit it would be preferable if such a product could be used in the more immediate area of the site rather than transported to Kildare and Wexford.
- 8.11.3. I do not consider that the proposed development would be likely to have a significant effect on climate.

8.12. **Material Assets – Agriculture**

- 8.12.1. The development would result in the loss of wet grassland involving an area of 1.9 acres (0.76 ha). The EIAR states this is considered small in a regional context. The potential for operation noise is considered to be low and the impact of vehicles is not considered significant. Impacts may arise during construction from noise, traffic and dust, however mitigation measures proposed would ensure no significant effects. The EIAR states overall the proposed development would not result in a decrease of loss of material assets with regards agriculture. Cumulative impacts are addressed with other intensive agricultural activities within 15km of the site identified. There are two pig farms, approx. 10km to the southeast and 10.6km to the southwest. These are licenced by the EPA.
- 8.12.2. I consider the issue of material assets and agriculture has been appropriately addressed and that no significant adverse effect is likely to arise.

8.13. **Material Assets – Non-Agricultural Properties**

- 8.13.1. Chapter 14 of the EIAR assesses the potential impact on non-agricultural properties, including residential, commercial, recreational and non-agricultural lands.
- 8.13.2. The potential for operation noise is considered to be low and traffic impact is not considered significant. Impacts may arise during construction from noise, traffic and dust, however mitigation measures proposed would ensure no significant effects. The EIAR states overall the proposed development would not result in a decrease of loss of material assets with regards agriculture.
- 8.13.3. I consider the issue of material assets and agriculture has been appropriately addressed and that no significant adverse effect is likely to arise.

8.14. **Material Assets – Natural and Other Resources**

- 8.14.1. Chapter 15 of the EIAR addresses the resources of land and soil, transport network and utilities. Topsoil removed from the footprint of the building would be used elsewhere on the site. Any disruption to services and existing transport networks would be minimal and of a temporary nature during the construction phase. The EIAR states the expected volume of traffic on the road would have a negligible effect

on the structural integrity of the road network and its on-going maintenance costs. In terms of water abstracted for use on site, it is considered that the abstraction rates can be achieved sustainably from the bedrock aquifer.

8.14.2. I consider the issues of material assets and agriculture have been appropriately addressed and that no significant adverse effect is likely to arise.

8.15. Archaeological, Architectural, and Cultural Heritage

8.15.1. Chapter 16 of the EIAR assesses the impact of the development on architectural, archaeological and cultural heritage. A field inspection was undertaken and review of historic mapping. None of the field boundaries are townland or parish boundaries. It is stated there is no evidence of archaeological features or architectural significance on the site. I note the third party identifies a number of archaeological features in the wider area, which are noted in the EIAR.

8.15.2. The EIAR states that considering the landscape is primarily used for grazing and other agricultural uses, it is not required to employ an archaeologist during excavation and construction. I note the number of archaeological features in the wider area and am of the view that a condition in relation to archaeology would be warranted if the Board is minded to grant permission.

8.15.3. I consider the issues of archaeological, architectural, and cultural heritage have been appropriately addressed and that no significant adverse effect is likely to arise.

8.16. Interactions and Inter-Relationships

8.16.1. Chapter 17 of the EIS relates to the interaction of effects in terms of air and soils; air and climate; air, human health and biodiversity; noise, human health and biodiversity; material assets and human beings; material assets and biodiversity; material assets and noise; material assets and air; water quality and soils; water quality and human beings; water quality and biodiversity; landscape and visual, soils and human beings; and cultural heritage, soils and human beings.

8.16.2. I have considered the interaction between the factors mentioned above and am satisfied that based on the information submitted by the applicant, including the mitigation measures put forward in relation to air quality, odour, noise, visual impact,

climate, material assets, and architectural, archaeological and cultural heritage, that the proposal is not likely to have a significant negative effect on the environment. However the interaction of soils, geology, water and biodiversity and measures put in place in relation to discharge to surface water and ground water, will in my opinion likely result in a significant adverse effect on the existing environment, in terms of surface water contamination and flooding, contrary to the proper planning and sustainable development of the area.

8.17. Reasoned Conclusion

8.17.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and other information provided by the developer, and the submission from the planning authority, prescribed bodies and observers in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Potential effect from odour and noise, which will be mitigated during construction and operation through application of best management practices including removal of poultry litter from the site every six weeks and design of the building and ventilation system,
- Potential effect on land and the landscape by the change in use and visual impact of construction of poultry sheds, which will be mitigated through low rise design of sheds, colour of materials used in the sheds and silos, replacement planting and landscaping, and construction of a berm,
- A significant indirect effect on surface water and ground water, which cannot in my view be satisfactorily avoided, mitigated through design, or otherwise addressed by the application of best management practices or by means of condition,

The likely significant environmental effects arising as a consequence of the proposed development have been satisfactorily identified, described and assessed. The effect on the environment in terms of impact on surface water and ground water, in my opinion, constitutes grounds to refuse to approve the application.

9.0 Appropriate Assessment

- 9.1.1. An Appropriate Assessment Screening Report has been submitted with this planning application.
- 9.1.2. The closest Natura 2000 sites are the Annaghmore Lough SAC (001626 and Clooneen Bog SAC (002348), located approx. 13km to the south-southwest and approx. 14km to the southeast respectively.
- 9.1.3. The AA Screening Report states the site is not hydrologically linked to Annaghmore Lough SAC. The site is hydrologically linked to Clooneen Bog SAC, however, it is a considerable distance upstream of the site, approx. 14km.
- 9.1.4. The conservation objectives for the sites are to maintain or restore the favourable conservation condition of the various habitats and/or species for which the sites were selected.
- 9.1.5. The AA Screening Report considers the potential effects of the proposed development on Annaghmore Lough SAC (001626 and Clooneen Bog SAC (002348) during construction and operation. The AA Screening Report also sets out a series of best practice design and operational measures for the poultry facility which would minimise contamination occurring. Given the distance to the sites and the nature of the proposed development which entails the indoor rearing of poultry, with no significant storage of liquid effluents, the discharge of clean stormwater to soakaways, the design of the SuDS system, low potential for contamination of wash water, the AA Screening Report states that there would be no potential for significant impacts on the Natura 2000 network as a result of the proposed development and the design and operational measures to be employed. This conclusion refers to the development by itself or in combination with other developments.
- 9.1.6. Having reviewed the EIAR and AA Screening Report, and having regard to the precautionary principle, I am not satisfied that the proposed surface water drainage system and landspreading of wash water (as discussed under section 7.4 above) will ensure no potential for significant impacts on the Natura 2000 network.
- 9.1.7. With regard to the potential for indirect effects arising from the landspreading of organic fertilisers, I note that this will occur off-site with the EIAR identifying mushroom farms in Wexford and Kildare which will utilise the poultry litter and which

are subject to compliance with the provisions of the Good Agricultural Practice for the Protection of Waters Regulations 2017, as amended, which are prescriptive with regard to spreading rates, times, prohibited areas etc.

10.0 Recommendation

10.1. It is recommended that permission is refused.

11.0 Reasons and Considerations

Having regard to the ground conditions as observed on site, the soil conditions and vulnerability rating of the site, number of drainage ditches within the site and wider area, and having regard to the proposed surface water drainage proposals, wash water proposals and level of excavation required to construct the buildings, the Board is not satisfied, on the basis of the submissions made in connection with the planning application and the appeal, that surface water from the development and landspreading of wash water can be satisfactorily managed and disposed of on site and accordingly the Board cannot be satisfied that the proposed development would not pose an unacceptable risk of environmental pollution and the Board cannot be satisfied that the proposed development would not have an adverse effect on one or more European sites. The proposed development would, therefore, be prejudicial to public health, would be contrary to policy 3.2.3 of the development plan, and would be contrary to the proper planning and sustainable development of the area.

Una O'Neill
Senior Planning Inspector

8th March 2019