



An
Bord
Pleanála

Inspector's Report ABP-305468-19

Development	Construction of 1 pig house together with all ancillary structures, (to include meal storage bins)
Location	Rossmakay, Knockbridge, Co. Louth
Planning Authority	Louth County Council
Planning Authority Reg. Ref.	19113
Applicant(s)	John Lambe
Type of Application	Permission
Planning Authority Decision	Grant Permission
Type of Appeal	Third Party
Appellants	James Carolan, Deirdre Lynch & others
Date of Site Inspection	20 August 2020
Inspector	Dolores McCague

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1.0 Site Location and Description

- 1.1.1. The site is located at Rossmakay, Knockbridge, Co Louth. The site is located to the south of the existing farm complex and house. The house is the protected structure Rossmakay House. The existing farm complex comprises numerous old stone outbuildings and newer sheds.
- 1.1.2. The site is situated on undulating ground c900m from adjoining public roads.
- 1.1.3. The site is approached by a short private road (c100m) with dwellings on either side which ends at a gateway. A laneway extends south east from the gateway providing access to a recently constructed dwelling and a dwelling under construction as well as to Rossmakay House and the farm. There are tillage lands to either side of the laneway. About half way along the laneway (c450m), where it changes direction to south west, modern farm sheds, in use as grain stores, are located east of the laneway. The laneway continues for another 250m before it divides to provide access to the front of Rossmakay House and to yards and outbuildings to the rear of Rossmakay House. Older stone buildings form the perimeter to one yard. In another yard adjoining to the north there is a weigh bridge, the sides of the stone buildings, to the south and modern farm buildings, for machinery storage and grain storage to the east and north. As it opens to the south a farm roadway extends southwards, to the east of Rossmakay House and the existing farm complex to fields. At the northern end of a large field about 60m south of the existing farm complex, is the site of the proposed development.
- 1.1.4. The site is given as 0.9207ha.

2.0 Proposed Development

- 2.1.1. The proposed development is the construction of a pig house, 1963m², together with all ancillary structures to include meal storage bins and all associated site works. The supplementary application form states that 1,850 production pigs will be housed in a building of c7m height and that the meal bins will be up to 9m height. Organic fertiliser,

of 2,246.4m³ volume will be produced; and the capacity of the slurry / effluent storage facilities is 4,723m³. The slurry to be applied on the applicant's farmland for use in accordance with SI 605 of 2017 as amended.

- 2.1.2. The application was accompanied by an AA screening report, a soakaway design report; a report pertaining to the operation and management of the proposed development, and a letter from 'College' regarding their willingness to collect (dead) pigs for delivery to their rendering plant at Nobber.
- 2.1.3. The operation and management report includes current potential customer farmer maps which are copies of maps from the department of agriculture, food and the marine for the basic payment scheme, maps of lands in the applicant's name/control, in various parcels, the area of which is stated to be 347ha.
- 2.1.4. The proposed development is located adjacent to an existing farmyard complex.
- 2.1.5. The proposed process involves rearing pigs to a proposed live weight of c110-120kg for slaughter. The pigs will be transported from the breeding accommodation to this farm at c 30-35kgs. An average load of pigs is to be moved to and from the farm on a weekly basis. The production process will be in line with the requirements of the Department of Agriculture, Food and The Marine and Bord Bia Certification. The operation of this farm will be along similar lines to other specialised growers. There will be an average of 1,800 pigs on site. Additional space has been proposed to be provided to allow for the washing and drying routines to be carried out, and to provide a number of isolation/recovery pens for any sick/injured animals. Significant attention will be paid to the genetics of the pigs produced.

Water supply and use:

- 2.1.6. Water is to be supplied from a private well located/to be located on site, and/or adjacent to the site. Water is to be stored in an overground water storage tank(s) with a capacity of at least 24 hours supply. The estimated water use per annum will be c 4,000-4,500m³. All animal drinking appliances are regularly maintained to ensure that there is no leakage to the slurry storage structures.
- 2.1.7. Water will be used for: drinking water for livestock and high pressure wash down systems: the finisher house is proposed to be washed after each batch, as the pigs are moved in an 'all in/all out' system through their growth cycle. The pressure of the washer is c3,000psi, water throughput per hour = c. 1.08m³, the power washer will

be in use for 4-8 hours per week, a weekly total of c.5-10m³ of water will be required. Soiled water from washing the house will be collected in the slurry storage tank.

- 2.1.8. The estimated manure production will be c. 2,246.4m³ and will supply <c. 20% of the applicant's existing phosphorus requirements; <20% of permitted organic N allocations and < 15% of total N fertiliser requirements on the farm.
- 2.1.9. The applicant farms c347ha, of which >300ha is tillage, available for the application of organic fertiliser.
- 2.1.10. The applicant has considered only the lands in close proximity to the proposed development as these are the most likely to receive organic fertiliser from this source, albeit that the remaining c 136ha remains available to the applicant for consideration if required. The applicant has excluded lands within the boundary of Dundalk Bay SPA/SAC (c31ha). The applicant has excluded lands classed in excess of high vulnerability (c 57ha). The remaining area c 123ha results in an application rate of c75kg Organic N/Ha, well below the 170kg N/ha limit.
- 2.1.11. At present the applicant satisfies all of his farm fertiliser P requirements from imported manures, predominantly poultry manure. The net effect of the proposed development will be to adjust the applicant's fertiliser plan to replace c300 tonnes of poultry manure and 11.5 tonnes of CAN fertiliser (calcium ammonium nitrate) with a total available N content of 4,755 kg and a total P content of 1,800kg with 2,246.4m³ of pig manure with an available N content of 4,717.44 kg N and total P content of 1,797kg P. This represents a substitution of c 20-25% of the farms existing annual poultry manure use with on farm organic fertiliser. The remaining c 75-80% of imported organic fertiliser and that arising from the applicant's existing bovine livestock will continue to be utilised.
- 2.1.12. Slurry is collected directly through slatted floors and stored in the tank located below slat level. The storage facility is of mass concrete to a specification that ensures a watertight seal (Department of Agriculture, Food and The Marine, S123, Minimum Specification for Bovine Livestock Units and Reinforced Tanks). The volume is 4723m³, depth 2.4m, freeboard 0.2m, storage 4,329m³, proposed annual slurry production 2,246.4m³ – available storage represents 23.13 month's supply. Fig 4.1.1 - 1,800 pigs, manure production 0.024m³/week/head x 52 = 2,246.4 m³ per annum.

- 2.1.13. Organic fertiliser can be applied directly from the manure storage to farmland, thus minimising any loading/handling.
- 2.1.14. While all manure from this proposed development will be allocated to the applicant lands, additional customer farmer may be supplied if, and when, they arise, if deemed appropriate.
- 2.1.15. All farmers are advised that manure from this development should be applied to land in as accurate and uniform a manner as is practicably possible. All farmers will be advised that in order to minimise any potential adverse environmental impact and to ensure that they get maximum fertiliser benefit from the organic fertiliser, that all manure from this farm should be stored, managed and applied in accordance with SI 605 of 2017 and incorporated into the soil as soon as practicable after application.

3.0 Planning Authority Decision

3.1. Decision

- 3.1.1. The planning authority decided (23rd August 2019) to grant permission subject to 5 conditions, including:

2 (a) the development shall be so operated that there will be no emissions or malodorous fumes, gases, dust or other deleterious matter such as would give reasonable cause for annoyance to any person in any residence in the vicinity.

(b) If a new well is proposed it must be kept to a minimum of 60m from the proposed effluent storage facility. This may be reduced to not less than 30m subject to a hydro-geological survey (this hydro-geological survey must be submitted to the Planning Authority for written approval prior to the commencement of development). In vulnerable situations this distance shall be increased to 300m.

(c) If a well exists close to the proposed effluent storage facility (approx. 30m) the same requirements will apply as described in part (b).

Reason: In the interest of public health and orderly development.

3 All management practices as submitted and Department of Agriculture requirements shall be implemented and adhered to in full.

Reason: To protect the residential amenities of the area.

4 Development contribution €11.778.

5 (a) full visibility of 75m from a setback of 4.5m from the edge of the public road over a height of 1.05m – 0.6m above road level shall be made available and maintained in each direction at the entrance to the development onto the public road.

No impediment to visibility shall be placed, planted and/or allowed to remain within the visibility triangle.

If/where it is necessary to remove hedges/banks/walls to provide adequate sightline visibility, this work must be completed prior to the commencement of any development on site and comply with the current Departmental Environmental Regulations.

Any proposed new boundary hedge/wall shall be located behind the visibility splay. Any pole, column, vegetation, tree or sign materially affecting visibility must also be removed with consent from the relevant authority to do so.

(b) No work shall commence on site until the visibility splays have been provided. If/where applicable, the area within the visibility splay shall be cleared to provide a level surface no higher than 250mm above the level of the adjoining carriageway and shall be retained and kept clear thereafter.

(c) Entrance gates (if any) into the development, shall be set back at least 5.5m from the public road edge. Wing walls or fence shall be splayed at an angle of 45 degrees, and the gates shall open inwards. The gradient of the access road servicing the development shall not be greater than 2%, for a distance of 5 meters from the junction with the public road.

(d) Surface water from the site shall be disposed of within the boundaries of the site and shall not discharge onto the public road or adjoining property. Surface water attenuation and disposal must be carried out in accordance with the submitted soakaway design report and as detailed on the submitted proposed site plan drg no. PL02.

(e) The applicant/developer shall liaise with statutory bodies and public authorities and carry out all diversions, re-routing, modifications, etc as required during the

construction works. The applicant/developer shall arrange to carry out any works required by statutory bodies and the public utility authorities.

(f) The applicant/developer shall make all necessary arrangements to apply for and obtain a road opening license(s) from Lough County Council in respect of all openings in public areas and shall pay road opening license fees and road restoration costs. The applicant shall abide by the conditions as set out in the said license(s).

(g) The applicant/developer shall be responsible for the full cost of repair in respect of any damage caused to the adjoining public road arising from the construction work and shall either make good any such damage forthwith to the satisfaction of Lough County Council or pay to the Council the cost of making good any such damage on a demand thereof being issued by the Council.

(h) All necessary measures, as may be determined by the Planning Authority, shall be taken by the developer/ contractor/ servants/ agents to prevent the spillage or deposit of clay, rubble or other debris on adjoining public roads or footpaths during the course of the development works. The developer shall ensure that all vehicles leaving the development are free from any material that would be likely to deposit on the road in the event of any such deposition; immediate steps shall be taken to remove the material from the road surface. The developer shall be responsible for the full cost of carrying out of road/footpath cleaning work.

Reason: In the interests of traffic safety and orderly development.

3.2. Planning Authority Reports

3.2.1. Planning Reports

There are two planning reports on the file, the first planning report recommending further information includes:

- Development plan policies.
- Departmental reports
- Responses from prescribed bodies: IFI - no objection subject to conditions.

- The existing farm comprises of 347ha. Activities principally involve tillage farming with some additional bovine livestock. The location is 550m from the closest third party dwelling, 100m from any well and 250m from any watercourse.
- It is acceptable in principle.
- Given proximity to the White River and the necessity to ensure protection of Natura sites, the applicant is requested to proceed to Stage 2 NIS.
- The OPW preliminary flood risk assessment maps (PFRA) indicates that very small portions of the proposed site is vulnerable to pluvial flooding. This issue will be dealt with by the proposed surface water provision within the development and the associated re-grading of ground levels to facilitate construction of the proposed sheds.

3.2.2. Other Technical Reports

3.2.3. Environment Section – further information:

- Wells within 100m to be marked on a map showing distance from proposed pig house.
- Calculations for proposed effluent storage; confirm how many weeks storage is proposed; if existing effluent storage capacity is to be included, existing effluent produced on the farmyard would need to be included.

3.2.4. Engineer Infrastructure – conditions – per No 5 of decision.

3.2.5. Architectural Conservation Officer - further information:

- Visual impact assessment of the impact on the adjoining protected structure Rossmakay House LHS 012-049 (NIAH 13901214).
- Landscape plan to screen the proposed development from the protected structure and demesne.

3.3. Prescribed Bodies

IFI - 22nd March – no objection subject to conditions. The number of animals housed shall not exceed that in the application. All effluent, soiled water and solid wastes should be stored on site in adequately sized and sited watertight structures and

treated or disposed of in an environmentally sound manner. Given the nutrient content of pig manure it is important to ensure that disposal of all manure must be carried out in accordance with the EU (Good Agricultural Practice for the Protection of Waters) Regulations. Buildings should comply with Department of Agriculture standards and regulations.

On-site surface water should be treated in a sustainable manner to minimise the impact on water quality and prevent habitat degradation.

The site is located in the River Fayne catchment and is close to the main channel itself. This river is important from a fisheries perspective as it contains valuable fisheries habitat and supports populations of salmon, trout, eel and lamprey, among other species. Atlantic salmon and lamprey are Annex II species. It is important that the proposed development does not negatively impact on the aquatic habitat.

3.4. Further information

3.5. Further information was requested 11th April 2019, on 5 items, based on the foregoing reports.

3.6. The further information response received 2nd July 2019, includes:

An EIA screening statement; A Stage 2 NIS; and a Landscape and Visual Impact Assessment.

3.7. Further Reports

3.7.1. Environment Section – Conditions:

- The development shall be so operated that there will be no emissions or malodorous fumes, gases, dust or other deleterious matter such as would give reasonable cause for annoyance to any person in any residence in the vicinity.
- If a new well is proposed it must be kept to a minimum of 60m from the proposed effluent storage facility. This may be reduced to not less than 30m subject to a hydro-geological survey (this hydro-geological survey must be submitted to the Planning Authority for written approval prior to the commencement of development). In vulnerable situations this distance shall be increased to 300m.

- If a well exists close to the proposed effluent storage facility (approx. 30m) the same requirements will apply as described.
- In the event the site is subject to probability of flooding of 1:200 year or more frequent probability, the Environmental Compliance Section objects to the proposed development on public health grounds.

3.7.2. Heritage Officer:

- Accepts the findings of the NIS that the development itself would not have a significant impact on the European sites.
- Slightly concerned about the areas selected for landspreading of pig slurry. The landspreading will be dealt with by an up-to-date nutrient management plan for the farm. The NIS states that landspreading will not take place on the applicant's land at Mooretown as this lies within the SPA. Can this be included as a condition?
- The huge expanse of south facing roof could be used to generate solar PV electricity to supply the power needs of the pig shed and farm.

3.7.3. The second planning report recommending permission includes:

- Acceptance of the assessment in the EIAR.
- The Heritage Officer has stated that the findings of the NIS are accepted, that the proposed development would not have a significant impact on the European sites.
- Report accepts that the proposed development is acceptable.
- Calculation of the development levy due.

3.8. **Prescribed Bodies post FI**

IFI - reiterate their comments of 22nd March.

3.9. **Third Party Observations**

3.9.1. Observations on file have been read and noted.

4.0 Planning History

Histories in '03 and '06 are given in the name of Rye Valley Foods.

15561 – John Lamb permission granted for development to consist of new slatted tank and shed to existing farmyard.

15633 - John Lamb permission granted for development to consist of new slatted tank and shed to existing farmyard. This development is within the curtilage of protected structure.

5.0 Policy Context

5.1. National Planning Framework, 2018 (NPF)

5.1.1. The NPF is the Government strategic plan to shape the future growth and development of the country up to 2040. Relevant provisions include:

Agriculture - The agri-food sector continues to play an integral part in Ireland's economy and is our largest indigenous industry, contributing 173,400 direct jobs and generating 10.4% of merchandise exports in 2016. Agriculture has traditionally been the most important contributor to rural economies and it remains important as a significant source of income and both direct and indirect employment. However, it must adapt to the challenges posed by modernisation, restructuring, market development and the increasing importance of environmental issues. Much of the economic benefits in the agri-food sector are dispersed throughout the country making it particularly vital to rural areas and economic development generally. Continued development of the agri-food sector will be supported through the implementation of Food Wise 2025.

Food Wise 2025 has five cross-cutting themes: sustainability, human capital, market development, competitiveness and innovation. Sustainability is key to the strategy, which states that: "environmental protection and economic competitiveness are equal and complementary – one cannot be achieved at the expense of the other". Food Wise also supports technology and processes that result in a more efficient use of resources.

National Policy Objective 14 Protect and promote the sense of place and culture and the quality, character and distinctiveness of the Irish rural landscape that make Ireland's rural areas authentic and attractive as places to live, work and visit. The Action Plan for Rural Development will support this objective up to 2020; thereafter a review of the Action Plan will be undertaken to ensure continued alignment and consistency with the National Policy Objectives of this Framework.

National Policy Objective 26

National Policy Objective 62 Identify and strengthen the value of greenbelts and green spaces at a regional and city scale, to enable enhanced connectivity to wider strategic networks, prevent coalescence of settlements and to allow for the long-term strategic expansion of urban areas.

5.2. Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES) 2019-2031.

- 5.2.1. This is a strategic plan and investment framework to shape the future development of our region to 2031 and beyond.

The strategic vision is to create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all”

In relation to agriculture; it states that agriculture is a key sector in the Region, but one which faces challenges from encroaching urbanisation, Brexit and CAP reform and in meeting climate obligations. There is an opportunity to support more sustainable farming practices in the Region such as local agri-food, biomass, permaculture, agri-forestry and anaerobic digestion to produce renewable energy from farm wastes, and to develop on farm and on farm activities as part of a unique tourism and leisure offer.

Air Quality - RPO 7.7: To reduce harmful emissions and achieve and maintain good air quality for all urban and rural areas in the Region and to work with local authorities and the relevant agencies to support local data collection in the development of air quality monitoring and to inform a regional air quality and greenhouse gas emissions inventory.

5.3. Development Plan

5.3.1. Louth County Development Plan 2015-2021 is the operative plan. Relevant provisions include:

Within an overall Common Agricultural Policy, the Rural Development Programme Policy in the period 2014 to 2020 is intended to contribute towards the following objectives:

- The competitiveness of agriculture,
- The sustainable management of natural resources and climate action,
- A balanced territorial development of rural areas.

Policy

ENV 2 To pursue the precautionary and the polluter pays principles in relation to permitted development in the County.

ENV 3 To promote and maintain the highest achievable standards of air, noise and water quality in the County.

ENV 6 To implement the Louth County Council Noise Action Plan 2013-2018 in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.

RD 3 To secure vibrant and viable rural communities by promoting sustainable development and settlement patterns in rural areas, environmentally friendly agricultural practices and the protection of natural resources, environment, sensitive landscapes and landscapes of the countryside.

RD 13 To ensure that agricultural buildings are designed and appropriately sited to integrate into the landscape

RD 14 To ensure that agricultural developments provide adequate waste collection and storage facilities and adhere to all legislation on water quality including the Water Framework Directive, Nitrates Directive and Phosphorus Regulations.

RD 15 To ensure that agricultural developments are designed and constructed in a manner that will ensure that watercourses and sources of potable water are protected from the threat of pollution.

Table 3.2: Strategic Objectives for Development Zones 1 to 6

Development Zone 4 - To provide for a greenbelt area around the urban centres of Dundalk, Drogheda, and Ardee. It is an objective of the Council to preserve a clear distinction between the built up areas of settlements and the surrounding countryside. In this regard, greenbelt areas are proposed surrounding the main urban settlements of Dundalk, Drogheda, and Ardee.

Policy RD 37 To permit limited one-off housing*, agricultural developments, extensions to existing authorised uses and farms, appropriate farm diversification projects, tourism related projects (excluding holiday homes), institutional and educational facilities, leisure and recreation related projects and renewable energy schemes.

Policy RD 38 Multi-unit residential, large scale industrial and commercial developments, or other developments of similar scale or nature, would not be considered appropriate within this zone.

Policy TC 12 To apply the visibility standards and vehicle dwell area requirements as set out in Tables 7.4 and 7.5 in accordance with the National Roads Authority Design Manual for Roads & Bridges (DMRB) for the national road network and to ensure that the standards set out in the Design Manual for Urban Roads & Streets (DMURS) apply to all urban roads & streets

5.4. County Louth Local Economic & Community Plan 2016 – 2022

- 5.4.1. Under the Local Government Act 2014, each Local Authority is obliged to develop a Local Economic & Community Plan (LECP). The LECP is referred to in the planning authority's submission. Economic Goal No 7 Agriculture, food and fisheries is to establish Louth as a premier producer in the Agri-Farming, Food and Fisheries sector.

5.5. European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017

SI No 605 of 2017 - This deals mainly with requirements as to manner of application of fertilisers, soiled water etc.

5.6. European Union (National Emission Ceilings) Regulations 2018.SI. No. 232/2018 -

These are regulations to limit emissions of sulphur dioxide (SO₂), nitrogen oxides (NO_x), non-methane volatile organic compounds (NMVOC), ammonia (NH₃), and fine particulate matter (PM_{2.5}) in accordance with the emission reduction commitments specified for each pollutant in tables A and B of Schedule 2, in accordance with the timeframe specified in those tables.

In order to give effect to Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants.

Schedule 2

Table B Emission reduction commitments for ammonia (NH₃) and fine particulate matter (PM_{2.5}). (The reduction commitments have the year 2005 as base year, and for road transport, apply to emissions calculated on the basis of fuels sold).

NH₃ reduction compared with 2005 - for any year from 2020 to 2029, 1%; for any year from 2030, 5%. PM_{2.5} compared with 2005 - any year from 2020 to 2029, 18%; for any year from 2030, 41%.

Schedule 3 - content of national air pollution control programmes referred to in regulations 6 and 9.

Part 2

A. Measures to control ammonia emissions

1. A national advisory code of good agricultural practice to control ammonia emissions shall be established, taking into account the UNECE Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions of 2014, covering at least the following items:

- a) nitrogen management, taking into account the whole nitrogen cycle
- b) livestock feeding strategies;
- c) low-emission manure spreading techniques;
- d) low-emission manure storage systems;
- e) low-emission animal housing systems;
- f) possibilities for limiting ammonia emissions from the use of mineral fertilisers

3 (c) promoting the replacement of inorganic fertilisers by organic fertilisers.

4 Ammonia emissions from livestock manure may be reduced by using the following approaches:

(a) reducing emissions from slurry and solid manure application to arable land and grassland, by using methods that reduce emissions by at least 30% compared with the reference method described in the Ammonia Guidance Document and on the following conditions:

(i) only spreading manures and slurries in line with the foreseeable nutrient requirement of the receiving crop or grassland with respect to nitrogen and phosphorous, also taking into account the existing nutrient content in the soil and the nutrients from other fertilisers;

(ii) not spreading manures and slurries when the receiving land is water saturated, flooded, frozen or snow covered;

(iii) applying slurries spread to grassland using a trailing hose, trailing shoe or through shallow or deep injection;

(iv) incorporating manures and slurries spread to arable land within the soil within four hours of spreading;

(b) reducing emissions from manure storage outside of animal houses, by using the following approaches:

(i) for slurry stores constructed after 1 January 2022, using low emission storage systems or techniques which have been shown to reduce ammonia emissions by at least 60% compared with the reference method described in the Ammonia Guidance Document, and for existing slurry stores at least 40%;

(ii) covering stores for solid manure;

(iii) ensuring farms have sufficient manure storage capacity to spread manure only during periods that are suitable for crop growth:

(c) reducing emissions from animal housing, by using systems which have been shown to reduce ammonia emissions by at least 20% compared with the reference method described in the Ammonia Guidance Document

(d) reducing emissions from manure, by using low protein feeding strategies which have been shown to reduce ammonia emissions by at least 10% compared with the reference method described in the Ammonia Guidance Document.

5.7. **Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture 2019,**

5.7.1. Which includes:

Techniques that can be considered for reducing ammonia emissions from pig housing, particularly when refurbishing or constructing new buildings. Ensuring that any changes are compatible with the existing housing system and allow for adequate ventilation:

- Reducing the area where manure is gathered,
- Partly slatted floors emit less ammonia, allowing the manure to fall more rapidly,
- Air cleaning systems (such as wet acid scrubber; two-stage or three stage air cleaning system; bioscrubber (or biotrickling filter). These devices are fitted to the outlets of mechanically ventilated pig houses and some systems can reduce ammonia emissions in exhaust air by up to 90%.

5.8. **Natural Heritage Designations**

5.8.1. The nearest Natura sites are Dundalk Bay SPA 004026 Dundalk Bay SAC 000455 located approximately 3.5 km straight line distance to the east; and downstream.

6.0 **The Appeal**

6.1. **Grounds of Appeal**

6.1.1. The appeal by EHP Services, on behalf of James Carolan, Deirdre Lynch & others listed, against the planning authority's decision to grant permission, includes:

- No justification for siting within the greenbelt.
- Will sit atop a rise in the local topography and be visible, separate from existing buildings.
- NPO 14 NPO 62 of NPF (see above).
- RD 38 of CDP (see above).

- Magnitude of impacts not properly quantified.
- No odour abatement.
- Oct to Jan umbilical spreading.
- Jan to Oct tractor and tanker.
- Risk to groundwater and R Fayne.
- CFRAM identifies proximity to 1 in 10, 1 in 100 and 1 in 1000 fluvial flooding events. Proposal for land-spreading in proximity to these areas is of concern.
- The Stage 2 NIS did not adequately quantify or properly assess the potential impact on protected habitats and species comprising the Natura 2000 network.
- Heritage Officer remained concerned post FI.
- Noise impact has not been assessed. Contrary to good neighbour policies – and ENV 6.
- Specific concerns of individual families are referred to – citing NPF NPO 26 Draft RSES RPO 7.7 (see above) and CDP ENV 2 and ENV 3. Impact on the long-established residential amenities of properties and property value.
- Traffic impact – the 1 pig movement load, 4 slurry spreading loads (tractor and tanker) per week depending on slurry practices are soft numbers, as the application has not provided a clear description of the activities associated with each rearing cycle.
- The slurry spreading vehicle numbers at zero between 15th October and 15th January, when an umbilical spreading system could be used, stretches credulity. It is unreasonable to expect the applicant not to make use of the local road network and therefore generate associated traffic as slurry is spread across parts of or the entire 347.36ha farm holding.
- Transporting pigs to the abattoir involves HGV lorries driving along the L3167 Blackrock Road to the north, the L7184 Green Road to the east, the N52 to the west, the L1182 to the south and a 900m laneway.

- The provision of sightlines is required. Policy TC 12 of the CDP is cited. 75m x 4.5m sightlines are required at the laneway and the Blackrock Rd L3167. From the centre of the lane to the junction of the L3167 with the N52 is only 64.61m. The field and dwelling either side of the junction are not owned by the applicant. The applicant cannot implement condition 5(a).
- Traffic along the L3167 travels at speed. The introduction of HGV lorries and associated traffic entering and exiting on this heavily planted and narrow country lane will create a substantial volume of traffic, creating a traffic hazard. With (out) the provision of a ghost island allowing HGV and other traffic to turn without interfering (with) the flow of passing and oncoming traffic the junction is unsuited to the type and frequency of traffic that will be generated. Contrary to Policy TC 12.
- Various appendices are attached.

6.2. Applicant Response

6.2.1. The applicant has responded to the grounds of appeal, including:

- The proposed development is small in terms of pig farm developments and is in keeping with the type and scale of agricultural developments throughout the Irish countryside.
- The development is agricultural, sustainable farm diversification, suitable to the site, scale of the adjoining landholding, and completed to the highest welfare and environmental standards, and will integrate successfully with the existing agricultural activities.
- A set back distance of 800m from any of the appellants is a significant advantage of the proposed site. BATNN+EEC Guidance note has been superseded by Commission Implementing Decisions (EU) 2017/302 establishing best available techniques (BAT) conclusions under Directive 2010/75/EU for the intensive rearing of poultry or pigs. BATNEEC guidance states that units should be sited preferably not less than 400m from the nearest neighbouring dwelling. Now out of date, and guidance only. The proposed development is also below the threshold requiring licensing.

- The purpose of the green belt is to define and curtail the fabric of urban settlements. The proposed development is not in contravention of same but is actively supported by same.
- NPO64 - National Policy Objective 64

Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.
- NPO14 (promote sense of place etc see above) cannot be interpreted to the extent that an existing farming family, employing a large number of people in the agri-sector both directly and in-directly can not be permitted to diversify in a way that integrates so well with the existing farming activities.
- There is an attempt to detail agricultural activity as commercial, it is not considered as such in planning. Agricultural development can predominantly only be accommodated in the countryside.
- The location adjacent to an existing active farmyard, making better use of the facilities, access and labour, is perfectly reasonable for the consideration of the location. Taking into consideration the existing vehicular access, the location of 3rd party residences c >500m and location of applicant's lands adjacent, for the substitution of imported fertiliser (chemical and organic), is more than enough to support the applicant's decision to locate the proposed development here.
- The proposed development is integrated with the existing farmyard and will not be overly prominent in the landscape.
- The applicant has a significant area within his ownership within which to locate the proposed development.
- Reaction to odour exposure is a complex mix of visual, physiological and psychological factors. Good relationship with neighbours, keeping a tidy

unobtrusive yard, and a common sense approach to potential complaints are the critical factors in maintaining good relationships with neighbours.

- EPA R&D report Odour Impact and Odour Emission Control Measures for Intensive Agriculture, Final Report, is cited AND The hierarchy of control on this farm outlined.
- The responsible spreading of animal manure on the applicant's lands will not result in unreasonable annoyance to any person.
- They clarify the use of umbilical spreading.
- The traffic to transport pigs and feed will be HGV. There is already a significant amount of HGV traffic associated with the farm. Considering the HGV traffic associated with organic fertiliser and the ability of lorries transporting feed in, to take back grain to the mill, the net effect may at worst be neutral.
- The lands adjacent to the entrance are owned by a family member and the applicant will advance the works required by the PA's condition.
- Section 7.3.6 of the county development plan refers to new or an intensification of use. In this regard the transporting feed in will be negated by taking back grain to the mill; pigs-in 1 load per week, and fortnightly collection of fallen stock – 78 trips, will be more than offset by provision of 2,263m³ organic fertiliser equivalent of c 90 loads of 25m³/load; no additional staff trips; no additional inspections.

6.3. Planning Authority Response

- 6.3.1. The planning authority has responded to the grounds of appeal stating that the proposed development is not contrary to national policy and the County Development Plan policy. The proposed development will not have a negative impact on residential amenities and public health, subject to the numerous mitigation and management practices to be implemented.

6.4. Board Correspondence

6.4.1. The Board requested an Environmental Impact Assessment Report and a revised NIS, which were received, together with notices, on the 27th March 2020.

6.5. Further Responses

6.5.1. EHP Services have submitted a response on behalf of the third party appellants, following circulation of the EIAR including revised NIS, which includes:

- The EIAR does not provide the necessary or compelling reassurances that the development will not have a significant impact on the receiving rural environs and downstream European sites.
- Section 7.10 of the EIAR is quoted, with the contradiction between use on the applicant's lands and customer lands highlighted.
- It is misleading to suggest that past and future farming activities on the applicant's lands are comparable.
- It fails to thoroughly consider the potential impact on Dundalk Bay by ignoring potential implications on ground water and water quality, the R Fayne is 220m away from the elevated site.
- The year round operational cycle and vague management of manure is a problem. This is in zone B, where spreading of organic and/or farmyard manure is prohibited between 15th October and 1st November respectively and 15th January. The EIAR has failed to provide data or analysis on whether or not the proposed slurry tanks have sufficient collective capacity to store during the 3 months.
- An Bord Pleanála has held in similar circumstances, where impacts result in uncertainty and anxiety as to a proposal's impact on health or the health of a vulnerable family member is a detriment to one's amenity, is sufficient justification to refuse. Whatever practical or financial benefit that may be derived by the applicant, it is not sufficient or appropriate that residential amenities and public health should be so profoundly and detrimentally impacted.

6.5.2. The planning authority has submitted a response following circulation of the EIAR including revised NIS, which includes:

- The proposal is acceptable given:
 - Policy RD 39 to permit extensions to existing authorised uses.
 - Louth LECP (Local Economic and Community Plan) Economic Goal 7 Agriculture, food and fisheries and establish Louth as a premier producer in the Agri-Farming , Food and Fisheries sector.
 - RD 3 (see above)
 - Development Control Zone 4
 - The Environment and Infrastructure Sections report.
 - The proposed pig house is to be situated immediately south of the applicant's existing farm complex and house.
 - The site is situated on undulating ground partially concealed by mature trees to the south and by the existing farm complex and trees to the north and west. The existing complex and proposed shed are situated on a remote landholding some 900m from the adjoining public roads at the end of a mature and planted rural laneway.
 - The comprehensive revised NIS.
 - The comprehensive EIAR.
 - The proposed development will ensure that high standards of animal welfare and environmental protection are achieved.
 - The proposal is in line with the requirements of the European Communities (Welfare of Farmed Animals) Regulations 2010.
 - Satisfied that the VIA demonstrates the proposal will not have a negative impact on the amenities or setting of adjoining protected structure.
 - The numerous mitigation and management practices to be implemented to protect the residential amenities of the area.
- All buildings shall comply with Department of Agriculture standards and regulations.

7.0 Appropriate Assessment

- 7.1.1. The application was accompanied by a Stage 1 AA Screening Assessment report. In response to a further information request, a Natura Impact Statement was submitted. This was revised in response to the Board's request.
- 7.1.2. The proposed development comprises:
- The construction of a pig house, 1963m², together with all ancillary structures to include meal storage bins and all site works associated. The building, of c7m height will be 100.075m x 20.625m and will have an underground tank of c2.4m depth. The meal bins will be up to 9m height.
 - 1,850 production pigs will be housed.
 - An estimated 2,246.4m³ of organic fertiliser will be produced; the capacity of slurry and effluent storage facilities is 4,723m³. The slurry is to be applied on the applicant's farmland (customer lands are also mentioned) for use in accordance with SI 605 of 2017 as amended.
 - Washwater is to be applied on the applicant's lands.
 - The site is 0.9207ha; the associated lands amount to 347ha.
- 7.1.3. The proposed development is not within a European site and the works are not relevant to the maintenance or management of any such sites.

Screening

- 7.1.4. The following European sites are located in the vicinity of the site:

European Site	Site Code	Relevant QIs & CIs	Distance
Dundalk Bay SAC	000455	Estuaries Mudflats and sandflats not covered by seawater at low tide Perennial vegetation of stony banks Salicornia and other annuals colonising mud and sand	3.8km east (& downstream)

		Atlantic salt meadows Mediterranean salt meadows	
Dundalk Bay SPA	004026	Great Crested Grebe Greylag Goose Light-bellied Brent Goose Shelduck Teal Mallard Pintail Common Scoter Red-breasted Merganser Oystercatcher Ringed Plover Golden Plover Grey Plover Knot Dunlin Black-tailed Godwit Bar-tailed Godwit Curlew Redshank Black-headed Gull Common Gull Herring Gull Wetland and Waterbirds	3.5km (& downstream)
Stabannan-Braganstown SPA	004091	Greylag Goose	6.7km south
Carlingford Mountain SAC	000453	Northern Atlantic wet heaths with Erica tetralix European dry heaths	12.4km north-east

		Alpine and Boreal heaths Species-rich Nardus grasslands, on siliceous substrates in mountain areas Transition mires and quaking bogs Alkaline fens Siliceous scree of the montane to snow levels Calcareous rocky slopes with chasmophytic vegetation Siliceous rocky slopes with chasmophytic vegetation	
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7.1.23. Potential impacts to Stabannan-Braganstown SPA or Carlingford Mountain SAC were excluded at screening stage, due to distance and lack of hydrological connectivity.

Screening Assessment

7.1.24. The sites Dundalk Bay SAC and SPA are carried forward for Stage II AA.

7.1.25. I agree with the exclusion of potential impacts to Stabannan-Braganstown SPA and Carlingford Mountain SAC at screening stage based on distance and lack of ecological connectivity.

Stage II AA

7.1.26. Specific conservation objectives for Dundalk Bay SPA and Dundalk Bay SAC have been developed which could be summarised as: to maintain or restore the favourable conservation status of habitats and species of community interest:

7.1.27. Potential impacts identified in the NIS are:

- Deterioration of water quality in designated areas arising from pollution from surface water run-off during site preparation and construction.

- Deterioration of water quality in designated areas arising from pollution during the operation of the proposed development.
- Impacts on designated sites arising from atmospheric emissions,
- Deterioration of water quality in designated areas arising from pollution / eutrophication caused by land-spreading of the manure stored at the site.
- Risk to annex 1 habitats or annex II species associated with the site.
- Cumulative impacts.

7.1.28. The Natura 2000 standard data form for the sites, identified the highest impact threats and pressures as including: discharges, industry and commercial areas, invasive species, the encroachment of urban areas and human habitation, cultivation, grazing and fertilisation.

7.1.29. Table 3 of the NIS sets out the qualifying interests with potential for impact, the potential impacts and reason for inclusion. In relation to the SPA it includes possible impacts on species due to eutrophication and decreases in water quality leading to impacts on their diets. The reason given is that all the over wintering bird species that use this site have the potential to be impacted by the proposed development due to potential pollution and decreases in water quality. One parcel of land identified for land-spreading, is within the SPA (at Mooretown). The Dundalk Bay SPA Conservation Objectives Supporting Document provides waterbirds distribution, recorded during low tide and high tide surveys between October 2009 and February 2010. The fields identified for land spreading have been classified in this document as terrestrial habitats, and during the survey period they were used by Graylag Geese in significant numbers for foraging and roosting / other. Curlew and Lapwing were also recorded once on this site during this monitoring period. These species are generally adapted to foraging on agricultural land, including those that have been land spread.

7.2. Potential Impacts are considered in more detail:

7.2.1. Water Quality

7.2.2. Deterioration of water quality during site preparation and construction; and post construction / operation of the proposed development.

- 7.2.3. Mitigation measures to avoid impacts on water quality are listed in section 5 of the NIS. These include measures for both the construction stage of the project and the operational stage.
- 7.2.4. The construction phase of the proposed development would include excavation works and the pouring of concrete. If appropriate mitigation measures are not taken there is the possibility that water quality in the River Fayne and downstream ecological receptors of Dundalk Bay SPA/SAC may be negatively impacted; including by the pollution of watercourses with silt, oil, cement, hydraulic fluid etc. This would directly affect the habitat of protected species by reducing water quality or by polluting the fine mud/sand sediments of the estuary and intertidal zones. The substances could also have a toxic effect on the ecology of the water in general, directly affecting certain species and their food supplies. The potential risk of direct and indirect impacts arising from the site preparation and construction requires appropriate mitigation.
- 7.2.5. In the operational phase the proposed development has potential to effect the water quality of the R Fayne and the European sites Dundalk Bay SPA and Dundalk Bay SAC.
- 7.2.6. The most likely source of negative impact on water quality in the operational phase is slurry, oil or silt contaminated surface water run-off from the site into the River Fayne or its tributaries leading to a deterioration in water quality or by polluting the fine mud/sand sediments of the SAC/SPA.
- 7.2.7. The management of surface water and slurry storage at the farmyard will mitigate the potential for direct impact.
- 7.2.8. The management of the application of slurry to lands will mitigate the potential for indirect impact.
- 7.3. Atmospheric Emissions
- 7.3.1. Impact arising from atmospheric emissions are also considered.
- 7.3.2. The proposed development will lead to atmospheric emissions, mainly in the form of ammonia and nitrogen. A SCAIL model (Simple Calculation of Atmospheric Impact Limits) was run to determine the potential impacts on the closest Natura site.

- 7.3.3. A number of factors were taken into account: use of fan ventilation (7m height, 0.63m diameter capacity of 3.7m³/s).
- 7.3.4. Using these parameters and having set the critical load for ammonia at 3µg/m³ it was determined that the load of ammonia at the edge of the Dundalk Bay SPA, accounted for by the process contribution from the proposed development of the farm, will be 0.07368µg/m³ versus a background level of 2.73µg/m³. This is an additional load of 2.56% and will not result in an exceedance of the critical load for this SPA. The SAC being slightly further away the contribution will be slightly lower (0.0658µg/m³).
- 7.3.5. The process contribution for nitrogen at the edge of this SPA will be 0.38kg N/ha/yr against a background level of 16.17 N/ha/yr. At the edge of this SAC it will be 0.34kg N/ha/yr. The critical load for the habitats within the SAC/SPA was set at 8 kg N/ha/yr (perennial vegetation of stony banks). Using these figures, it was determined that the contribution of nitrogen from the farm will be 4.25% of the critical load for this habitat. It is stated that this additional load can be considered insignificant.

7.4. Land-spreading

- 7.4.1. Land-spreading of pig manure produced on the farm will occur within lands owned or leased by the applicant in the townlands of Louth Hall, Ballybailie, Glydefarm, Vesingtown, Warrenstown, Knockattin, Stephenstown, Dunmahon, Rossmakay, Milltown Grange, Haggardstown and Mooretown, (note the landbank within the SPA in Mooretown is to be excluded from land-spreading activities, per NIS and EIAR statements). Manure will only be spread on areas of tillage lands.
- 7.4.2. Inappropriate land-spreading of manure can lead to serious impacts on receiving waters and can result in eutrophication, algal blooms, fish kills and loss of biodiversity. The applicant will use all the manure produced within his own farm and it will not be exported. It will be spread in accordance with an up to date nutrient management plan for the farm and it will be done in accordance with the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2017 (SI 605 of 2017).
- 7.4.3. The qualifying interests of Dundalk Bay SPA and SAC are sensitive to human disturbance, and changes and deterioration in water quality and habitat structure.

7.4.4. Cumulative Impacts

7.4.5. The proposed development will have no cumulative impacts when considered in combination with properly assessed developments. Any future developments with potential to impact on the Dundalk Bay SPA and SAC will be subject to Appropriate Assessment.

7.4.6. Cumulative impacts with other agricultural activities in the area were considered. All are required to operate within the legislation defined in SI 605 of 2017, regarding manure storage, minimisation of soiled water and general good agricultural practice etc.

7.4.7. In 2015 the applicant was granted planning permission for a separate agricultural development on his farm on the site just north of and adjacent to the subject site. This has not yet been constructed. It pertained to a part slatted, part dry bedded shed and its purpose was to relocate cattle from the existing straw bedded sheds in the yard into new housing. If it is constructed at any stage it will be for the welfare of the animals only and there will be no provision for any increase in stock numbers. It was screened for AA and Louth County Council determined that impacts on the SAC/SPA were unlikely and that AA was not required. There will be no cumulative with this development if ever completed.

7.4.8. The land-spreading of any manure stored on this site, or other sites operated by the applicant in the Knockbridge area has also been considered here, as inappropriate land-spreading of organic fertiliser can lead to cumulative impacts on water quality and the qualifying features of all designated sites, however the applicant is aware of his obligations under SI 605 of 2017. If spreading is carried out within the requirement of this legislation any cumulative impacts from this practice will be negligible.

7.4.9. One parcel of land at Mooretown is within the SPA. During the 2009-2010 survey of the protected site was used by greylag geese in significant numbers for foraging and roosting / other. Curlew and lapwing were also recorded once on this site during the monitoring period. These species are generally adapted to foraging on agricultural land, including those that have been land spread.

7.5. Mitigation Measures

7.5.1. Mitigation measures are proposed. Measures to protect certain designated sites and species, to protect local biodiversity of the surrounding area, and to ensure the protection of local wildlife.

The largest threat to the Natura 2000 sites is from land-spreading. If this is done in accordance with the legislation in SI 605 of 2017 and in accordance with the annual farm plan, the integrity of and conservation objectives of the Natura sites will be maintained and protected.

- The construction and operation of the proposed farm must comply with the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2017 (SI 605 of 2017).
- Guidelines within the Department of Agriculture's Explanatory Handbook for Good Agricultural Practice Regulations must also be followed.
- The proposed farm structures must adhere to the Department of Agriculture's Farm Buildings and Structures Specifications. Before use, they should undergo an integrity test that is performed by a suitably qualified person. They should be inspected regularly for deficiencies.
- Manure, slurry and soiled water storage facilities should be constructed to Department of Agriculture, Food and The Marine specifications with leak detection facilities underneath. They should be certified by an engineer before use and inspected regularly.
- Site preparation and construction must be confined to the development site only and should adhere to all standard best practice measures. Work areas should be kept to the minimum area required to carry out the proposed works and the area should be clearly marked out in advance of the proposed works.
- There should be no discharges of contaminated waters to ground or surface waters from these developments. Post construction surface water run-off from hardcore / concreted / tarmac areas should be directed into a soak pit. If soak-pit disposal is not viable or practical, then surface water run-off from these areas should be treated via serviced sediment and oil interceptor traps, prior to discharge into any watercourse. All silt drains and farm yard discharge should be in accordance

with the specifications within the Department of Agriculture's Minimum Specifications for Farmyard Drainage, Concrete Yards and Roads.

- Any excavated material arising from the construction process must not be disposed or within any designated site. It must be used responsibly within the boundary of the application site or disposed of in a licensed facility using a registered contractor.
- Fuels, oils, greases and hydraulic fluids must be stored in a bunded compound(s) well away from watercourses. Refuelling of machinery etc, should be carried out in bunded areas. Any bulk fuel storage tank should be properly bunded with a bund capacity of at least 110% of that of the fuel tank. Stockpile areas for sands and gravels should be kept to a minimum size well away from the drains and watercourses.
- Any additional mitigation measures as recommended by IFI in their submission must also be adhered to.
- The pigs should be fed a low-protein diet in order to reduce atmospheric emissions from the farm.
- The storage and handling of all wastes and fertilisers on site must be in accordance with SI 605 of 2017.
- It is illegal to remove hedgerows / treelines during the bird nesting season (September – March). Riparian verges along local streams and watercourses must not be damaged during the construction or operation. Any landscaping should involve the planting of native Irish species that are indigenous to the site. Suitable species would include birch, oak, ash, willow and alder.

7.5.2. Lands spreading and farm operation:

The following measures should be implemented at both the applicant's farms on an ongoing basis.

- Out of an abundance of caution and given the capacity of the farm to accommodate the organic fertiliser closer to the site, the landbank within the SPA in Mooretown should be excluded from land-spreading activities.

- Manure should only be spread on existing improved grassland habitats. It should only be spread in accordance with the Nutrient Management Plan for the farm and in accordance with SI 605 of 2017.
- Manure should not be spread in areas where bedrock occurs at the surface or within areas of extreme groundwater vulnerability.
- To avoid contamination of the local watercourses in areas identified for land-spreading, a minimum buffer zone of 10m from any main river channels and 5m for smaller watercourses should be adhered to at all times during the application of effluent. Buffer zones should be increased depending on the gradient of the land.
- Manure should not be applied within 3m of open field drains or ditches in accordance with Good Agricultural Practice for the Protection of Waters Regulations 2017 (SI 605 of 2017).
- Land-spreading should only take place when suitable climatic and environmental conditions exist. Spreading should be avoided on:
 - Wet or waterlogged soils.
 - Land sloping steeply towards water courses.
 - Frozen or snow covered soils.
- Effluent should not be applied in proximity to hedgerows and field margins. This will maintain the biodiversity of these areas and allow for a more natural ecological corridor.
- New technologies for spreading manure that improve efficiency and minimise emission should be considered, eg. bandspreader, trailing shoe and the shallow injection technique.

7.5.3. The conclusion is reached that potential impacts can be successfully mitigated and the NIS concludes with a finding of no significant effects.

7.6. Assessment

7.6.1. I agree with the potential impacts identified in the NIS, and the mitigation proposed to address deterioration of water quality during construction and operational phases at the farmyard.

- 7.6.2. I am satisfied that potential indirect impacts associated with landspreading can be adequately mitigated by careful management of the landspreading operations as proposed.
- 7.6.3. In relation to atmospheric emissions it should be noted that the SCAIL model referred to was not submitted. The NIS refers to the critical load for the habitats within the SAC/SPA which was set for nitrogen at 8 kg N/ha/yr (perennial vegetation of stony banks). The process contribution for nitrogen at the edge of the SPA will be 0.38kg N/ha/yr against a background level of 16.17 N/ha/yr; and at the edge of the SAC it will be 0.34kg N/ha/yr. The contribution of nitrogen from the farm will be 4.25% of the critical load for this habitat; and it is stated that this additional load can be considered insignificant. The critical load of 8 kg N/ha/yr is used for screening and otherwise a critical load of 8-15 kg N/ha/yr is used. In the context of the background level and the critical load, the NIS has not given a full explanation as to why the proposed development is acceptable. It seems likely that use of the organic fertiliser from the proposed development can be justified on the basis that emissions therefrom would be less than or at least not greater than that from existing imported fertiliser, both chemical and organic. However the Board may consider that this issue has not been sufficiently clarified within the NIS.
- 7.6.4. In relation to ammonia, the model indicates that the critical load will not be breached. The discharge from ventilating the proposed building has been included in the model, but not discharges from landspreading where potential emissions could arise. In this regard it should be noted that European Union (National Emission Ceilings) Regulations 2018.SI. No. 232/2018, which are intended to limit emissions to air of atmospheric pollutants including ammonia, advocate measures to control ammonia emissions, including low-emission manure spreading techniques, as proposed; limiting ammonia emissions from mineral fertilisers by promoting the replacement of inorganic fertilisers by organic fertilisers, as proposed; and incorporating manures and slurries spread to arable land within the soil within four hours of spreading, i.e. ploughing in, as proposed. It is important to note (again) that the landspreading can be accommodated on the applicant's lands in proximity to the site, where the organic fertiliser produced will replace imported fertilisers.
- 7.6.5. In relation to cumulative impact I accept that the permitted and not yet constructed shed on this farm was assessed for AA and that the-spreading of organic fertiliser, if

carried out in accordance with regulations, would not be likely to contribute to cumulative impacts on water quality or air quality.

7.7. Conclusion

- 7.7.1. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European sites Nos 004026 or 000455, or any other European site, in view of the sites Conservation Objectives.

8.0 **EIA**

Assessment of the likely effects on the environment

- 8.1.1. Class1(e)(ii) of Part 2 of Schedule 5 of the Planning and Development Regulations 2001-2018 requires that an Environmental Impact Assessment is carried out for intensive pig rearing installations with more than 2,000 places for production pigs (over 30 kilograms). The proposed development, for 1,800 production pigs, is sub-threshold. The Board wrote to the applicant 23 January 2020 requiring the submission of an EIAR (and a revised NIS).
- 8.1.2. The EIAR is presented in one volume, comprising the following chapters:
- chapter 1 – Non -Technical Summary,
 - chapter 2 - Introduction,
 - chapter 3 - Description of development,
 - chapter 4 - Description of the physical characteristics of the proposed development, the land use requirements during construction and operation and the likely significant effects of the project on the environment,
 - chapter 5 - Description of reasonable alternatives,
 - chapter 6 - Description of the relevant aspects of the current state of the environment and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of environmental information and scientific knowledge,

chapter 7 - Description of the aspects of the environment with potential to be significantly affected by the proposed development,

chapter 8 - Interaction of Effects,

chapter 9 - Environment Management Programme, and

chapter 10 - Summary.

- 8.1.3. The EIAR is accompanied by a revised Natura Impact Statement, attached as appendix no. 13, and needs to be read in conjunction with the NIS in relation to biodiversity, (with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC).
- 8.1.4. Article 3(1) of the EIA Directive, requires that the EIAR identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following factors: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape and the interaction between the factors referred to in points (a) to (d).
- 8.1.5. The requirements of Article 3(2) to include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned, do not arise in this case.
- 8.1.6. In accordance with Article 5 and Annex IV, the EIAR provides a description of the project comprising information on the site, design, size and other relevant features of the project. It also provides a description of the likely significant effects of the project on the environment and a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment.
- 8.1.7. Alternatives studied are addressed in chapter 5. Alternatives considered were: other locations on lands owned by or available to the applicant - deemed less suitable for reasons including poorer road access, higher density of residential dwellings in close proximity, failure to integrate with existing farmyard, and closer to Dundalk Bay SAC / SPA; the purchase and re-development of an existing pig farm site was considered – there are no suitable sites located close to the applicants existing activities, with which the proposed development would integrate; the purchase of an entire green

field site was considered – a separate site would be significantly less effective due to the additional costs involved and would be remote from existing farmyard, would put the development under financial strain and would not be the most suitable to integrate with the existing farming activities; alternative designs were researched and reviewed with the aid and guidance of Teagasc, commercial pig house designers, the architect and commercial pig equipment suppliers; alternative forms of farm diversification were considered and rejected (per 5.4).

- 8.1.8. I am satisfied that the details comply with the requirements of the legislation, insofar as a description of the reasonable alternatives studied by the developer, together with an indication of the main reasons for selecting the chosen option have been provided.
- 8.1.9. The EIAR includes a non-technical summary of the information referred to in Article 5 (a) to (d).
- 8.1.10. No specific difficulties are stated to have been encountered in compiling the required information. The participation of the public has been effective and the application has been made accessible to the public by electronic and hard copy means with adequate timelines afforded for submissions.
- 8.1.11. I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. Overall, I am satisfied that the information contained in the EIAR complies with the provisions of Article 3, 5 and Annex (IV) of EU Directive 2014/52/EU amending Directive 2011/92/EU.
- 8.2. Direct and indirect significant effects
- 8.2.1. I have carried out an examination of the EIAR and other relevant information presented by the applicant in this case, together with the submissions received during the course of the application.
- 8.2.2. The direct and indirect significant effects of the development against the factors set out under Article 3(1) of the EIA Directive 2014/52/EU, which include:
- a. population and human health;
 - b. biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;

- c. land, soil, water, air and climate;
- d. material assets, cultural heritage and the landscape;
- e. the interaction between the factors referred to in points (a) to (d).

are considered hereunder, structured to follow items (a) to (e).

Population and Human Health

- 8.2.3. Population and human health impacts are dealt with under various chapter headings. In chapter 2 it is stated that in excess of 7000 jobs nationally are directly dependent on the pig industry and that due to ever increasing costs associated with chemical fertiliser, organic manures such as pig manure are becoming ever more sought after by tillage/livestock farmers in order to reduce their fertiliser costs. The development will employ 1 additional person on a part-time basis.
- 8.2.4. The proposed development will modify existing farming activities and provide for a sustainable farm diversification in line with supermarket and consumer requirements. The development will be located in a rural area, significantly removed from any population centres; away from any designated areas and/or tourist attractions; well-integrated into the local environment with sympathetic design and layout. All organic fertiliser will replace the use of organic/chemical fertiliser on the applicant's lands
- 8.2.5. In chapter 3 it is stated that the applicant and/or other designated person(s) will be available at all times should any emergency arise.
- 8.2.6. In chapter 6 it is stated that the peak noise periods in the pig house are associated with feed deliveries which will occur during the normal working day. The farm will have state of the art buildings with high insulation standards. Due to its remote location and the area's low population density, this pig house will not create a disturbance or annoyance to anyone. (7.7) Noise will not be detected outside the site boundary. It is proposed to restrict deliveries to daytime periods only. The predicted noise from the 8 proposed ventilation fans will be 23dB $L_{Aeq,T}$ at 500m; the location of the nearest noise sensitive location, NSL1, a dwelling.
- 8.2.7. A generator will be required for emergency use. They recommend a low noise generator (≤ 65 dB(A) at 3m) in order to minimise any potential nuisance.
- 8.2.8. Predicted construction noise from various items of equipment, during the various stages of construction, has been considered, at 10m and at NSL1, indicating a maximum 54dB $L_{Aeq,1hr}$ at the nearest noise sensitive location. The levels are within

the maximum criterion level of 65dB L_{Aeq} for construction activities during daytime and Saturday periods.

8.2.9. As further mitigation it is proposed to:

- Limit the hours during which site activities, likely to create high levels of noise, are permitted.
- Appoint a site representative responsible for noise.
- Maintain all site access roads to minimise noise.
- Select plant with low inherent potential for generation of noise.
- Erect barriers as necessary around noisy processes and items. Place noisy / vibratory plant as far away from sensitive properties as permitted by site constraints.

8.2.10. The role of the rural area as a key resource for the county is vital and agricultural and amenity lands should be carefully managed to ensure that their primary use is protected from encroachment, fragmentation and urban driven development. (6.11 of the EIAR)

8.2.11. Impact on population and human health has been raised as a concern in the grounds of appeal.

8.2.12. It is stated that noise impact has not been assessed; that it is contrary to good neighbour policies.

8.2.13. The applicant response refers to the fact that a set back distance of 800m from any of the appellants is a significant advantage of the proposed site. The BATNN+EEC Guidance note has been superseded by Commission Implementing Decisions (EU) 2017/302 establishing best available techniques (BAT) conclusions under Directive 2010/75/EU for the intensive rearing of poultry or pigs. BATNEEC guidance, although now out of date, and guidance only, states that units should be sited preferably not less than 400m from the nearest neighbouring dwelling; but points out that the proposed development is below the threshold requiring licensing.

Assessment re noise

8.2.14. The construction noise will be within acceptable levels for the temporary construction period and predicted noise from the 8 proposed ventilation fans will be a mere 23dB $L_{Aeq,T}$ at the location of the nearest noise sensitive location.

8.2.15. I am satisfied that the construction stage of the development would not have an adverse impact in terms of noise on the local receiving environment and that once operational, no significant noise impacts are predicted. No mitigation measures have been prescribed for the operational phase, other than the use of a low noise standby generator, which is acceptable.

Odour

8.2.16. Odour is dealt with in chapter 6.5. Odour associated with pig farming enterprises may arise from two situations:

- The pig farm site, and
- The manure spreading operation.

8.2.17. According to the EIAR the pig farm is located in an entirely agricultural hinterland where typical levels of farm odour are to be found, and expected. Well maintained, properly ventilated pig farms with modern manure management systems will minimise any potential adverse odour impact and will be practically odour free outside the confines of the site/immediate area. Transient increases in odour emissions may be associated with manure removal from the site. The house will be continuously cleaned after each batch of pigs, stocked at optimum levels and adequately ventilated, ensuring minimal odour emissions.

8.2.18. The closest inhabited dwelling is located > 750m north of the proposed development. A currently uninhabited dwelling is located c 550m west of the proposed development. There are no noise/odour sensitive locations likely to be affected by the proposed development.

8.2.19. Mr John Lambe will advise any future customer farmers that manure from this development should be applied to land in as accurate and uniform a manner as is practicably possible. All lands currently identified for the receipt of manure are predominantly tillage, farmed by the applicant. Farmers will be advised, in order to minimise any potential adverse environmental impact and to ensure that they get maximum fertiliser benefit from the organic fertiliser, that all manure from this farm should be stored, managed and applied in accordance with SI 605 of 2017 and incorporated into the soil as soon as practicable after application.

8.2.20. The utilisation of organic fertiliser in the manner proposed and in accordance with the Teagasc Codes of Good Practice will help them maintain a good working

relationship with their neighbours. The application of organic fertiliser in accordance with SI 605 of 2017, as amended, and as part of the fertiliser substitution programme to replace existing organic / chemical fertiliser currently used, will ensure that excessive application of manure, which could lead to extra odour due to surface soil saturation, will be avoided.

8.2.21. Odour has been raised as a concern by the appellants who state that no odour abatement is proposed.

8.2.22. The applicant response states:

- EPA R&D report Odour Impact and Odour Emission Control Measures for Intensive Agriculture Final Report sets out a hierarchy of control which should be to:
 - Prevent generation of odour at source by good design and maintenance,
 - Minimise or contain odour at source by observing good operational techniques and management practice,
 - Sympathetic timing and control of operations.
 - The management programme includes:
 - Hygiene/washing routines; environmental regulation; animal carcass storage and removal; slurry storage/removal all slurry to be removed from tanks under vacuum; soiled yards/dirty areas; stockmanship; there are no open manure storage tanks; use of low protein diets; high health status. A more efficient production system will minimise feed usage and manure output per unit of pigmeat. The pigs will be sourced from high health status breeding farms. Organic fertiliser is to be allocated to the applicant's lands. It must be remembered that this will only be allocated to a portion of the lands as the proposed development is not sufficient to supply all of the fertiliser needs. It will replace existing organic fertiliser including pig manure from other sources, available and used by the applicant.
- The responsible spreading of animal manure on the applicant's lands will not result in unreasonable annoyance to any person.

- They clarify the use of umbilical spreading. An umbilical system is a system of piping the organic fertiliser direct from the tank to the field in question. The slurry is pumped from the tank via this system of piping to the tractor in the field with a spreading attachment (typically trailing shoe or other similar low emission attachment). This system can be used at any stage during the year outside the closed period. This method of application provides for more even spreading, less compaction of ground, significantly reduced emissions and minimal traffic, which will reduce / eliminate the requirement to transport organic fertiliser from this site to lands further away. The applicant will continue to use existing fertiliser sources on the remaining lands.

Assessment re odour

- 8.2.23. Other than reference to the distance of the building from the nearest houses and mitigation measures proposed, no assessment of odour impact is provided.
- 8.2.24. As previously stated, the European Union (National Emission Ceilings) Regulations 2018, which are intended to limit emissions to air of atmospheric pollutants, include provisions in relation to landspreading, which will also have the effect of reducing the odour impact of the proposed development. It is worth noting that landspreading of organic fertilisers is already carried out on these lands and that organic fertiliser is the preferred method (per the European Union (National Emission Ceilings) Regulations 2018) of supplying the requisite nutrients to these arable lands.
- 8.2.25. Some odour from landspreading of slurry is intrinsic to productive agricultural areas. I am satisfied and that there will be no significant impact from odour from the proposed development, over and above that already experienced in this rural area.

Health

- 8.2.26. In response to the submission of the EIAR the appellants state that where impacts result in uncertainty and anxiety as to a proposal's impact on health or the health of a vulnerable family member is a detriment to one's amenity, and sufficient justification to refuse.
- 8.2.27. In my opinion there is nothing to suggest an impact on human health.

8.3. Conclusion on Population and Human Health

8.3.1. I have considered all of the written submissions made in relation to population and human health. I am satisfied that the impacts identified would be avoided, managed and/or mitigated by measures forming part of the proposed scheme, proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of population and human health. I am also satisfied that cumulative effects are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

Biodiversity

8.3.2. Biodiversity is dealt with in Chapters 6 & 7 ((Current state) 6.9 Biodiversity – flora and fauna, 6.10 Biodiversity – Special Policy Areas, 7.9 Biodiversity – flora and fauna, and 7.10 Biodiversity – Special Policy Areas. In the submission documents biodiversity is more comprehensively dealt with in the NIS which is attached as an appendix to the EIAR. The potential impact on designated sites has been dealt with under the separate heading of Appropriate Assessment earlier in this report.

8.3.3. The following section concentrates on the broader environmental impact of the proposed development on the biodiversity considerations, outwith the designated sites.

8.3.4. The proposed site is relatively close to the River Fayne and currently comprises intensively managed agricultural lands. The majority of the land in the surrounding area is used for grass/ arable based agricultural production. Landspreading of the slurry produced in the pig house is proposed to be carried out within the applicant's landholding, identified in the application documents as lands surrounding the site or in close proximity thereto.

8.3.5. In relation to the construction phase, the NIS includes:

- The construction phase of the proposed development would include excavation works and the pouring of concrete. If appropriate mitigation measures are not taken there is the possibility of impact on water quality in the River Fayne. (The NIS refers to the potential for deterioration of water quality in designated areas arising from pollution from surface water run-off during site preparation and construction).

- 8.3.6. Mitigation proposed (in the NIS) includes measures to protect surface waters during construction, referred to earlier under the heading AA.
- 8.3.7. In relation to the operational phase - organic fertiliser from the farm will be allocated for use in accordance with the Nitrates Directive, SI 605 of 2017 as amended. In order to prevent any adverse impact on flora and fauna in the area, per the NIS, the following practices are to be implemented:
- Organic fertiliser is not to be allocated to areas of woodland/scrubland habitat.
 - Organic fertiliser is not to be allocated within 10m of hedgerows.
 - Organic fertiliser is not to be allocated within 5m of a watercourse or 20m of a lake shoreline.
 - Organic fertiliser is not to be applied to areas where it is likely to adversely impact on a NHA, SAC and/or SPA or other such sensitive area.
 - Organic fertiliser is not to be applied within 10m of an archaeological feature.
 - All organic fertiliser from the proposed development will be utilised by the applicant, direct from the manure storage tank in the proposed house to his lands to replace existing organic / chemical fertiliser use as part of a fertiliser substitution programme, under optimum soil and weather conditions.

Assessment Biodiversity

- 8.3.8. The proposed development, which includes the production of 2,246.4m³ of pig slurry and up to 520m³ of soiled water, all of which will be disposed of / utilised by application to farm lands owned by the applicant in the vicinity of the site. Provided the mitigation measures outlined for the construction and operational phases of the development are applied, I am satisfied that residual impacts on the ecology of the area would not be significant, as a result of construction works or during the operational phase.
- 8.3.9. Conclusions on Biodiversity
- 8.3.10. I have considered all of the written submissions made in relation to biodiversity. I am satisfied that the impacts identified would be avoided, managed and / or mitigated by the measures, which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of

biodiversity. I am also satisfied that cumulative effects are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

Land, Soil, Water, Air and Climate

- 8.3.11. Land, Soil, Water, Air and Climate factors are dealt with in Chapters 6 and 7. I have considered these factors under those headings as follows.
- 8.4. Land, soil, water
- 8.4.1. The EIAR states that the site is in the Muirhevna Plain an extensive plain drained by the Rivers Fane, Glyde, White and Dee. This area contains the most fertile agricultural lands in the county, conducive to a wide variety of productive agricultural practices in both animal and crop production. The topography of the site and landholding is gently undulating. The site is located where the soil type is referred to as TLPSsS (Till derived chiefly from Lower Palaeozoic rocks) soil group acid brown earths, brown podzolics, deep well drained mineral (mainly acidic); and the subsoil TLPSsS -Till derived chiefly from Lower Palaeozoic sandstones and shales.
- 8.4.2. The groundwater adjacent to the site is overlain by a low permeability, predominantly acid brown earth and gley type overburden. The aquifer classification is poor bedrock aquifer generally unproductive except for local zones (PI). Aquifer vulnerability if classed as high.
- 8.4.3. The estimated manure production will be c. 2,246.4m³ and will supply <c. 20% of the applicant's existing phosphorus requirements; <20% of permitted organic N allocations and < 15% of total N fertiliser requirements on the farm.
- 8.4.4. The applicant farms c347ha, of which >300ha is tillage, available for the application of organic fertiliser.
- 8.4.5. The applicant has considered only the lands in close proximity to the proposed development as these are the most likely to receive organic fertiliser from this source, albeit that the remaining c 136ha remains available to the applicant for consideration, if required. The applicant has excluded lands within the boundary of Dundalk Bay SPA/SAC (c31ha). The applicant has excluded lands classed in excess of high vulnerability (c 57ha). The remaining area c 123ha results in an application rate of c75kg Organic N/Ha well below the 170kg N/ha limit.

- 8.4.6. At present the applicant satisfies all of his farm fertiliser P requirements from imported manures, predominantly poultry manure. The net effect of the proposed development will be to adjust the applicant's fertiliser plan to replace c300 tonnes of poultry manure and 11.5 tonnes of CAN fertiliser (calcium ammonium nitrate) with a total available N content of 4,755 kg and a total P content of 1,800kg with 2,246.4m³ of pig manure with an available N content of 4,717.44 kg N and total P content of 1,797kg P. This represents a substitution of c 20-25% of the farms existing annual poultry manure use with on-farm organic fertiliser. The remaining c 75-80% of imported organic fertiliser and that arising from the applicant's existing bovine livestock will continue to be utilised.
- 8.4.7. Slurry is collected directly through slatted floors and stored in the tank located below slat level. The storage facilities is of mass concrete to a specification that ensures a watertight seal (Department of Agriculture, Food and The Marine, S123, Minimum Specification for Bovine Livestock Units and Reinforced Tanks), of 4723m³ volume, 2.4m depth, freeboard 0.2m, storage 4,329m³, proposed annual slurry production 2,246.4m³ – available storage 23.13 months. Fig 4.1.1 - 1,800 pigs, manure production 0.024m³/week/head x 52 = 2,246.4 m³per annum.
- 8.4.8. Organic fertiliser can be applied directly from the manure storage to farmland, thus minimising any loading/handling.
- 8.4.9. While all manure from this proposed development will be allocated to the applicant lands, additional customer farmer may be supplied if, and when, they arise, if deemed appropriate.
- 8.4.10. Re. the proposed customer (incl applicant) farmlands – it is envisaged that the organic fertiliser generated will be utilised on the lands closest to the proposed site. Of the total of 347ha farmed c211ha, identified on Fig 6.2, are in close proximity. These occur in the townlands of Mooretown (31.5ha to be excluded), Milltown Grange, Dunmahon, Stephenstown and Rossmakay (180ha). Figs 6.2b(i) and 6.2b(ii) show that the majority of the applicant's lands are underlain by a poor aquifer. The lands close to the coast are underlain by a locally important aquifer; these lands are not required to facilitate the proposed development and out of an abundance of caution will be excluded from receipt of the organic fertiliser where existing farming practices will continue unaltered.

- 8.4.11. There are no drains or streams within or adjacent to the application site. The closest watercourse is the River Fayne 220m south-west. The EPA have not defined the ecological status of the River Fayne or its tributaries within this particular sub-basin. Water quality upstream of the application site and in the upper reaches of the River Fayne have been classed as good.
- 8.4.12. It is stated that the applicant/customer farmlands, that will potentially utilise organic fertiliser from this farm, have been farmed well with due care to waterways, spreading rates and nutrient requirements. This will continue in line with the requirements of SI 605 of 2017 as amended. Surface water quality in the area where organic fertiliser will be used will not be affected as organic fertiliser will replace imported organic fertiliser and allocated for use in accordance with the Nitrates Directive, SI 605 of 2017 as amended.
- 8.4.13. While the proposed development will provide for a substantial increase in organic fertiliser production on the farm, the applicant has demonstrated significant capacity within the currently farmed lands in accordance with SI 605 of 2017 as amended to accommodate the organic fertiliser produced and will replace existing organic / chemical fertiliser use in accordance with the fertiliser substitution programme.
- 8.4.14. The slurry storage capacity is stated to be 4,723m³ with slurry production given as 2,246.4m³, (Fig 4.1.1 - 1,800 pigs, manure production 0.024m³/week/head x 52 = 2,246.4 m³ per annum) such that available storage is stated to be sufficient for 23.13 months. It is worth noting that this does not account for the washwater, of up to 10m³ per week, (the water used for washdown), which is to be channelled into the under-slat tanks. This could increase the annual load to 2,766.4m³. However the 4,329m³ capacity would still be 1^{1/2} times that required.

8.5. Water supply and use:

- 8.5.1. Water is to be supplied from a private well located/to be located on site, and/or adjacent to the site. Water is to be stored in an overground water storage tank(s) with a capacity of at least 24 hours supply. The estimated water use per annum will be c 4,000-4,500m³. All animal drinking appliances are regularly maintained to ensure that there is no leakage to the slurry storage structures.
- 8.5.2. Water will be used for: drinking water for livestock & high pressure wash down systems. The finisher house is proposed to be washed after each batch, as the pigs

are moved in an 'all in/all out' system through their growth cycle. The pressure of the washer is c3,000psi, water throughput per hour = c. 1.08m³. the power washer will be in use for 4-8 hours per week. A weekly total of c.5-10m³ of water will be required. Soiled water from washing the house will be collected in the slurry storage tank.

8.6. Air and Climate

- 8.6.1. Air and Climate are dealt with in Chapters 6.5 & 7.5. Under the heading climate (6.5) it is stated that annual average rainfall in the area, Dublin airport, is 758mm and the prevailing wind is from the west. It is worth noting that in another current file before the Board (R307333 - for a site further south near Dunleer and closer to Dublin Airport), Dublin Airport data was not used by the specialist who prepared an air emissions model, because '*Dublin Airport is located within 10km of the coast and as a result, Ballyhaise was selected as the most appropriate station.*' The Ballyhaise data shows that the prevailing wind is from the south-west rather than the west.
- 8.6.2. Climate – large livestock populations and nitrogen inputs to soil generate one-third of all greenhouse gases in Ireland. The amount of methane emitted by livestock is a lot higher for ruminants, such as cattle and sheep, than non-ruminants, such as poultry or pigs.
- 8.6.3. N₂O emissions can be divided into three areas:
- Direct from agricultural soils and from agricultural production systems.
 - Indirect emissions which take place after nitrogen is lost from the field.
 - Emissions resulting from agricultural burning.
- 8.6.4. According to the EIAR the application of the organic fertiliser in accordance with SI 605 of 2017, particularly with regard to amounts applied, weather and ground conditions at the time of spreading and even application, should ensure that emissions generated are kept to an absolute minimum. Similar advice will be given to any additional customer farmers. As a result this farm will have no significant effect on the climate in the area.
- 8.6.5. The NIS refers to air emissions of ammonia and nitrogen. It states that a modelling exercise was carried out (details or results not submitted) which uses a SCAIL model (Simple Calculation of Atmospheric Impact Limits) to determine the potential impacts on the closest Natura site. Factors regarding the building ventilation were taken into account.

- 8.6.6. The detailed methodology, inputs and outputs from the SACIL model have not been submitted. The Board may consider that this information is necessary for their assessment. The model only considers emission from the air and climate animal housing, in addition emissions arise from landspreading.
- 8.6.7. The proposed development complies with the European Union (National Emission Ceilings) Regulations 2018, S.I. No. 232/2018, to control ammonia emissions, in replacing inorganic fertilisers by organic fertilisers and in the measures proposed for the application of slurry to arable land.
- 8.6.8. Odour is referred to in the grounds of appeal and has been dealt with earlier under the heading population and human health.

Assessment

- 8.6.9. The proposed landspreading, put forward for consideration as part of the EIAR, is entirely within the applicant's landholding, although this could change over time. The landholding is an area of low groundwater vulnerability. Landspreading will be confined to tilled areas. The Board has not been presented with any soil analysis within the EIAR for the landspread areas and is required to rely on SI 605 of 2017 in this regard. In my opinion, the proposed landspreading on these lands, over which the applicant has control sufficient to ensure that the proposed mitigation is implemented, will thereby ensure that there will be no significant adverse impact on land, soil, water, air or climate.

8.7. Conclusions on Land, Soil, Water, Air and Climate

- 8.7.1. I have considered all of the written submissions made in relation to land, soil, water, air and climate, in addition to those specifically identified in this section of the report. I am satisfied that the impacts identified would be avoided, managed and / or mitigated by the measures, which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts on land, soil, water, air or climate. I am also satisfied that cumulative effects are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

Material Assets, Cultural Heritage and the Landscape

8.7.2. The factors material assets, cultural heritage and the landscape, are dealt with in Chapters 6 and 7.

8.8. Material Assets

8.8.1. The access, via an existing entrance to the road network in the vicinity of the site, consists of a 900m private access road joining a local road and then the regional road, R215, a short distance from the junction with the local road. The M1 motorway is a further c 2km distance. The existing farming operations and dwelling generate significant traffic, including a significant amount of HGV traffic associated with grain and straw transport and deliveries of organic fertiliser, chemical fertiliser and other inputs.

8.8.2. Construction traffic – the development is expected to be completed over a 4-6 month period. It is not expected that any excess soil will be removed from the site but will be used for landscaping works.

8.8.3. HGV construction traffic will involve:

- Plant and machinery,
- Stone for the roadway and site development / levelling,
- Concrete (ready mix),
- Construction materials,
- Roofing materials, and
- Feeding, drinking, and ventilation systems.

8.8.4. Traffic generated will equate to c3-4 loads / day over the construction period with an additional 2-4 journeys per day associated with labour. Operational traffic – existing traffic levels are typical of this scale of farming activity and include a significant amount of HGV traffic associated with grain and straw transport and deliveries of organic fertiliser, chemical fertiliser and other inputs.

8.8.5. In the proposed development operational traffic will arise due to:

- Feed deliveries c 1 load /week.
- Pig movement average 1 load in and out/ week.
- Staff movement – no significant additional traffic.

- Transport of organic fertiliser ranging from 0 during closed period 15th October to 15th January and / or where the umbilical spreading system is used; to 4 loads per week if all organic fertiliser is transported by road. Given that the proposed development is located centrally within the farm, there is capacity to utilise all organic fertiliser on this landholding, resulting in minimal if any traffic on the public road.

8.8.6. Traffic impact is referred to in the grounds of appeal including:

- Transporting pigs to the abattoir involves HGV lorries driving along the L3167 Blackrock Road to the north, the L7184 Green Road to the east the N52 to the west, the L1182 to the south and a 900m laneway.
- The provision of sightlines is required. Policy TC 12 of the CDP is cited. 75m x 4.5m sightlines are required at the laneway and the Blackrock Rd L3167. From the centre of the lane to the junction of the L3167 with the N52 is only 64.61m. The field and dwelling either side of the junction are not owned by the applicant. The applicant cannot implement condition 5(a).
- Traffic along the L3167 travels at speed. The introduction of HGV lorries and associated traffic entering and exiting on this heavily planted and narrow country lane will create a substantial volume of traffic creating a traffic hazard. The junction is unsuited to the type and frequency of traffic that will be generated; contrary to Policy TC 12.

8.8.7. The applicant has responded including:

- The traffic to transport pigs and feed will be HGV. There is already a significant amount of HGV traffic associated with the farm. Considering the HGV traffic associated with organic fertiliser and the ability of lorries transporting feed in to take back grain to the mill, the net effect may at worst be neutral.
- The lands adjacent to the entrance are owned by a family member and the applicant will advance the works required by the PAs condition.

8.8.8. Traffic impact was considered by the planning authority and is the subject of a detailed condition, No. 5 which, in my opinion deals adequately with this subject heading.

8.9. Tourism

- 8.9.1. The EIAR states that agriculture and tourism are two significant industries, important to the economy of this area. A significant proportion of the rest of the economy of the area has arisen as ancillary services/businesses to these two industries. It is of extreme importance therefore that these two industries can coincide and develop together.
- 8.9.2. The tourism industry in this area is based primarily around the natural landscape, including the coastlines and rich heritage of the area. Termonfeckin Strand, Clogherhead, Port and Templetown are superb beaches the latter three were awarded blue flag status in 2015. The proposed pig house will not affect the tourism industry due to the fact that it is in an agricultural area and a remote location, will be well screened from public view, integrated with the existing farmyard and is located away from any areas frequented by tourists. Mr Lambe will inform all customer farmers (if and when they arise) in receipt of organic fertiliser from the proposed development, of the requirements of the Nitrates Directive (SI 605 of 2017, as amended) in relation to the spreading of organic fertiliser.
- 8.9.3. There has been a long tradition of supplying the organic fertiliser produced on farms in Monaghan and Cavan to tillage lands in Meath / Louth to optimise the use of the organic fertiliser and nutrients contained therein. The proposed development will reduce the use of imported organic and chemical fertilisers on these lands. It is anticipated that the cumulative impact within the county as a whole will be neutral.
- 8.9.4. The organic fertiliser from the proposed development and the existing bovine enterprise will be integrated into a fertiliser management plan for the entire farm, devised in line with the requirements of SI 605 of 2017 as amended, and will have the net impact of replacing imported organic and chemical fertiliser, with on-farm produced organic fertiliser, resulting in no net increase in the amount of nutrients applied to the applicant's landholding.
- 8.9.5. The farm does not require any major modifications to the electricity supplies, water or road infrastructure in the area.
- 8.10. Cultural Heritage
- 8.10.1. Rossmakay House is a protected structure. The visual impact assessment, attached as appendix 18 to the EIAR, has confirmed that there will be no adverse impact on Rossmakay House.

- 8.10.2. The closest archaeological site is the Abbey ruins to the west, shown on the historic mapping submitted.
- 8.10.3. No known recorded monuments would be impacted upon by ground disturbances associated with the construction.
- 8.10.4. Mitigation is not proposed, but the details submitted indicate that the selection of the site, where there is no intervisibility with Rossmakay House, is the main mitigation.
- 8.10.5. Topsoil stripping has the potential to have a direct and negative impact on archaeological features that have the potential to survive within these areas. This can be addressed by condition.

8.11. Landscape

- 8.11.1. The EIAR states that the site location in the Muirhevna Plain, in the landscape classification, an extensive plain of predominantly agricultural activity. The topography of the site and landholding is gently undulating drained by the meandering Rivers Fane, Glyde, White and Dee. The area contains the most fertile agricultural lands in the county, which gives the overall impression of good farming husbandry.
- 8.11.2. There will be no significant adverse visual impact from the proposed development.
- 8.11.3. The existing farm, and the site, is well set back from the public road c 0.8km from the regional road R215. The location, nestled into the surrounding land topography and integrated with the existing farmyard, will help to screen the proposed farm from view.

Assessment of material assets, cultural heritage and the landscape

- 8.11.4. Taking account in particular of the siting in a rural area where productive agricultural is practiced, well removed from the nearest road, where landspreading will largely be contained within the immediate area, on the applicant's lands, and were the site selection ensures that there will be no impact on the setting of the protected structure, the proposed development is not likely to impact significantly on material assets, cultural heritage or the landscape.

8.12. Conclusions on Material Assets, Cultural Heritage and the Landscape

- 8.12.1. I have considered all of the written submissions made in relation to material assets, cultural heritage and the landscape, in addition to those specifically identified in this section of the report. I am satisfied that the impacts identified would be avoided,

managed and / or mitigated by the measures, which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of material assets, cultural heritage or the landscape. I am also satisfied that cumulative effects are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

8.13. Interactions between the Factors and Cumulative Impacts

- 8.13.1. I have considered the interrelationships between factors and whether these may as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. A table at page 129/130 of the EIAR provides a matrix, and a summary of the impact interactions.
- 8.13.2. I am satisfied that effects as a result of interactions, indirect and cumulative effects can be avoided, managed and / or mitigated by the measures which form part of the proposed development, mitigations measures, and suitable conditions. There is, therefore, nothing to prevent the approval for the development on the grounds of significant effects as a result of interactions between the environmental factors and as a result of cumulative impacts.

8.14. Reasoned Conclusion on the Significant Effects

- 8.14.1. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information and the submissions from observers and prescribed bodies, the contents which I have noted, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:
- Potential for water pollution during construction and during operation at the pig house site and from inappropriate application of manure as a fertiliser to land, and
 - Potential for air pollution and odour associated with the building ventilation and the inappropriate application of manure as a fertiliser to land.
- 8.14.2. The EIA has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by

construction environmental management measures and through adherence to regulations which control landspreading of slurry to land, (including codes of best practice). In this regard it is noted that the effluent arising can be landspread on the applicant's lands in the vicinity of the site where it will replace the use of imported fertiliser.

- 8.14.3. Following mitigation, no residual significant negative impacts on the environment would remain as a result of the proposed development. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

9.0 Assessment of Other Issues

- 9.1.1. The other issues which arise in relation to this appeal are, the principle of the development and property value and these are dealt with hereunder.

9.2. Principle of Development

- 9.2.1. The policy context supports agricultural development subject to environmental protection.
- 9.2.2. The grounds of appeal refers to the NFP and in particular National Policy Objective 14 to protect and promote the sense of place and culture and the quality, character and distinctiveness of the Irish rural landscape green belt; and National Policy Objective 62 to identify and strengthen the value of greenbelts and green spaces; and states that the development would be contrary to these policies, and that there is no justification for siting within the greenbelt.
- 9.2.3. The applicant's response includes that:
- The purpose of the green belt is to define and curtail the fabric of urban settlements. The proposed development is not in contravention of same but is actively supported by same.
 - NPO14 cannot be interpreted to the extent that an existing farming family, employing a large number of people in the agri-sector both directly and indirectly cannot be permitted to diversify in a way that integrates so well with the existing farming activities.

- There is an attempt to detail agricultural activity as commercial, it is not considered as such in planning. Agricultural development can predominantly only be accommodated in the countryside.
- The location adjacent to an existing active farmyard, making better use of the facilities, access and labour, is perfectly reasonable for the consideration of the location.

9.2.4. It is an objective of the Council to preserve a clear distinction between the built-up areas of settlements and the surrounding countryside. In this regard, greenbelt areas are proposed surrounding the main urban settlements of Dundalk, Drogheda, and Ardee. The strategic objective for this zone is to protect and provide for the development of agriculture and sustainable rural communities and to facilitate certain resource based and location specific developments of significant regional or national importance.

9.2.5. It is clear that the green belt objectives provide for agricultural developments.

9.2.6. The proposal is to replace imported organic fertiliser (chicken litter), currently used on these lands, but no information is presented in relation to overall volumes arising in the region (or nationally) and no explanation as to how the displaced manure can be accommodated elsewhere, which is an impact of the proposed development. In the context of intensive production of housed animals, the proposal has not been placed in the context of Ireland's drive to achieve reductions in greenhouse gas emissions and reduction in air emissions.

9.2.7. The European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017, SI No 605 of 2017, is frequently referred to in the EIAR and other submission documents. This deals with requirements as to manner of application of fertilisers, soiled water etc. but in itself would not provide sufficient information as to the likely environmental implications of the landspreading of the slurry arising in the subject development, which is a very significant direct impact of the proposed development. Also of relevance is European Union (National Emission Ceilings) Regulations 2018.SI. No. 232/2018, which will be referred to later in this assessment.

9.2.8. It would not be appropriate in the context of a planning assessment/decision to seek to control ad infinitum the use of livestock manure produced. However the disposal

or use of effluent arising from the development has very significant environmental implications and must be considered as part of the assessment of this proposed development, notwithstanding that, as stated in the application submission, this may change over time. The details provided show that the spreading of slurry can be accommodated in its entirety on the applicant's lands in proximity to the site. The location of the landspreading has been shown. The pig slurry will be spread on arable lands, where it will supplant the use of imported organic fertiliser, although not supplying all the fertiliser needs on the farm. As previously noted, the information provided does not place this intensive agricultural development in a regional context, which would have been desirable and could, in other circumstances, be considered essential. In this case, since the landspreading can be accommodated on the applicant's lands in proximity to the site, the proposed development is, in my opinion, acceptable in principle.

9.2.9. I am satisfied therefore that the planning authority's assessment, that the development is acceptable in principle, is correct.

9.3. Property Value

9.3.1. The grounds of appeal refers to impact on property value.

9.3.2. The location of the pig house is set deep within the applicant's own landholding and well removed from residential properties in the surrounding area. Landspreading of slurry, which will take place largely in the vicinity of the site, is a feature of rural areas and is already established practice in this area. In my opinion there is nothing to suggest that the proposed development will impact on property value.

10.0 Recommendation

10.1.1. In accordance with the foregoing I recommend that permission should be granted, for the following reasons and considerations and in accordance with the following conditions.

11.0 Reasons and Considerations

Having regard to

- (a) the nature, scale and extent of the proposed development and the associated lands,
- (b) the location of the proposed development in an area of fertile agricultural lands
- (c) the distance to dwellings or other sensitive receptors from the proposed development,
- (d) the submissions on file including those from prescribed bodies and the Planning Authority,
- (e) the documentation submitted with the application and appeal including the Appropriate Assessment Screening Statement, the Natura Impact Statement and the Environmental Impact Assessment Report,

It is considered that subject to the following conditions the proposed ~~agricultural~~ development, which is provided for in development zone 4 of the Louth County Development Plan 2015-2021, would not impact adversely on surface water or groundwater, would not impact adversely on biodiversity or designated sites; would neither impact unduly on residents in this rural area or on property value; would not tend to cause traffic congestion or create a traffic hazard; is appropriate to the scale and management of the landholding and would therefore be in accordance with the proper planning and sustainable development of the area.

12.0 Conditions

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars received on the 2 nd July 2019 and by the further plans and particulars received by An Bord Pleanála on the 27 th day of March, 2020, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details
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	<p>in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.</p> <p>Reason: In the interest of clarity.</p>
2.	<p>All mitigation measures included in the EIAR and NIS shall be implemented in full.</p> <p>Reason: In the interest of clarity.</p>
3.	<p>The proposed underground tank shall be constructed to Department of Agriculture, Food and The Marine specifications with leak detection underneath. The structure shall be certified by an indemnified structural engineer prior to use and at least every five years following an inspection and a report submitted to the planning authority confirming its structural stability.</p> <p>Reason: In the interest of sustainable development and pollution control.</p>
4.	<p>All silt drains and farm yard discharge shall be in accordance with the specifications within the Department of Agriculture's Minimum Specifications for Farmyard Drainage, Concrete Yards and Roads.</p> <p>Reason: In the interest of sustainable development and pollution control.</p>
5.	<p>The storage, handling and use of all wastes and fertilisers arising on site shall be in accordance with SI 605 of 2017, as may be amended.</p>

	<p>Reason: In the interest of sustainable development and pollution control.</p>
6.	<p>(a) full visibility of 75m from a setback of 4.5m from the edge of the public road over a height of 1.05m – 0.6m above road level shall be made available and maintained in each direction at the entrance to the development onto the public road.</p> <p>No impediment to visibility shall be placed, planted and/or allowed to remain within the visibility triangle.</p> <p>If/where it is necessary to remove hedges/banks/walls to provide adequate sightline visibility, this work must be completed prior to the commencement of any development on site and comply with the current Departmental Environmental Regulations.</p> <p>Any proposed new boundary hedge/wall shall be located behind the visibility splay. Any pole, column, vegetation, tree or sign materially affecting visibility must also be removed with consent from the relevant authority to do so.</p> <p>(b) No work shall commence on site until the visibility splays have been provided. If/where applicable, the area within the visibility splay shall be cleared to provide a level surface no higher than 250mm above the level of the adjoining carriageway and shall be retained and kept clear thereafter.</p> <p>(c) Entrance gates (if any) into the development, shall be set back at least 5.5m from the public road edge. Wing walls or fence shall be splayed at an angle of 45 degrees, and the gates shall open inwards. The gradient of the access road servicing the development shall not be greater than 2%, for a distance of 5 meters from the junction with the public road.</p> <p>(d) Surface water from the site shall be disposed of within the boundaries of the site and shall not discharge onto the public road or adjoining property. Surface water attenuation and disposal must be carried out in accordance with the submitted soakaway design report and as detailed on the submitted proposed site plan drg no. PL02.</p>

	<p>(e) The applicant/developer shall liaise with statutory bodies and public authorities and carry out all diversions, re-routing, modifications, etc as required during the construction works. The applicant/developer shall arrange to carry out any works required by statutory bodies and the public utility authorities.</p> <p>(f) The applicant/developer shall make all necessary arrangements to apply for and obtain a road opening license(s) from Lough County Council in respect of all openings in public areas and shall pay road opening license fees and road restoration costs. The applicant shall abide by the conditions as set out in the said license(s).</p> <p>(g) The applicant/developer shall be responsible for the full cost of repair in respect of any damage caused to the adjoining public road arising from the construction work and shall either make good any such damage forthwith to the satisfaction of Lough County Council or pay to the Council the cost of making good any such damage on a demand thereof being issued by the Council.</p> <p>(h) All necessary measures, as may be determined by the Planning Authority, shall be taken by the developer/ contractor/ servants/ agents to prevent the spillage or deposit of clay, rubble or other debris on adjoining public roads or footpaths during the course of the development works. The developer shall ensure that all vehicles leaving the development are free from any material that would be likely to deposit on the road in the event of any such deposition; immediate steps shall be taken to remove the material from the road surface. The developer shall be responsible for the full cost of carrying out of road/footpath cleaning work.</p> <p>Reason: In the interests of traffic safety.</p>
7.	The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of

	<p>archaeological materials or features which may exist within the site. In this regard, the developer shall:</p> <p>(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and</p> <p>(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.</p> <p>The assessment shall address the following issues:</p> <p>(i) the nature and location of archaeological material on the site, and</p> <p>(ii) the impact of the proposed development on such archaeological material.</p> <p>A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works. In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.</p> <p>Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.</p>
8.	<p>The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid</p>

prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Planning Inspector

16 October 2020

Appendices:

Appendix 1: photographs

Appendix 2: Louth County Development Plan 2015-2021 extract

Appendix 3: Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES) 2019-2031 extract

Appendix 4: Commission Implementing Decision (EU) 2017 / 302 extract

Appendix 5: The Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture 2019

Appendix 6: Site Synopsis Dundalk Bay SPA 004026

Appendix 7: Site Synopsis Dundalk Bay SAC 000455