An Bord Pleanála

Supplementary Inspector's Report ABP-301652-18

Development	Construction of Sheep Shed and Hay Shed with all associated ancillary works
Location	Townland of Lisnagranchy, Ardrahan County Galway
Planning Authority	Galway County Council
Planning Authority Reg. Ref.	18/250
Applicant	Gerald Harney
Type of Application	Permission
Planning Authority Decision	Grant Permission
Type of Appeal	Third Party
Appellant	Padraig Brennan
Inspector	Dolores McCague

1.0 Previous Inspector's Report

1.1.1. This report should be read in conjunction with the previous inspector's report dated 12th December 2018.

2.0 Board Correspondence

2.1.1. The Board wrote to the applicant on the 7th January 2019 requesting further information, stating that it considered that the submitted documentation, does not adequately address the indirect impacts of the proposed development on European Sites; questioning whether it will lead to an increase in the overall stocking rate of the farm or merely improve the management of the existing stock; and stating it's concern at potential impacts of surface water and soiled water on the adjoining landholding including the well.

2.1.2. The requested information includes: a NIS addressing the impacts of land spreading and of any other aspect of land management relating to the farm, referring to the potential for impacts on the Inner Galway Bay SPA and Galway Bay Complex SAC and the Wicklow Mountains SAC; and detailed surfaced water and soiled water drainage proposals, ensuring that there will be no off-site flows from the development either on its own or in combination with the existing farm complex.

2.1.3. A response to the Board's request for further information was received 23rd April 2019. Notice of receipt of the further information and the NIS, was published on 10th May 2019.

2.1.4. An invitation to make a submission was afforded to the appellant and the appellant's response was cross-circulated to the applicant and the planning authority.

2.1.5. The applicant responded. A further response was received from the appellant to the applicant's response.

2.1.6. This report addresses the matters arising.

3.0 Further Information

3.1. Response to the further information request.

3.1.1. The response by James O'Donnell Planning Consultancy Services on behalf of the applicant includes:

- A Natura Impact Statement prepared by John Curtin (Bsc Environmental Science) in partnership with James O'Donnell (BA, MRUP, Dip APM).
- A letter from Michael John Ryan Limited Registered Agricultural Consultant in relation to the Aghavannagh Mountain commonage lands.
- A letter from Tarpey & Associates Agricultural Consultants in relation to the applicant's farm enterprise.
- A letter and attachments from Clarke Construction Design Ltd in relation to the surface water runoff.
- Revised drawings (by Archeco): the first titled 'existing site layout plan' file no. 1, this is at a scale of 1:200; the second titled 'proposed site layout plan' file no. 2, is at a scale of 1:500; the third titled 'sections w-w and y-y', file no. 3.

3.2. Mr O'Donnell's submission includes:

- Re NIS:
    - The proposed sheep shed will not result in an increase in the overall stocking rate at Mulroog West (Galway Bay) and Aghavannagh Mountains (Wicklow Mountains).
    - The GLAS environment scheme for the lands at Mulroog West and the Wicklow Mountains will remain unchanged as a result of the proposed development. The commonage at the Wicklow Mountains is in good condition, with the current number of sheep deemed appropriate.
    - The construction of the sheep shed will allow for greater rest periods for all lands managed by the applicant.
    - Mitigation/best practice measures have been identified.
    - The NIS finds that with the implementation of best practice measures as outlined…, it can be concluded, on the basis of objective scientific information, that the proposed plan, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site.

- The proposed development will merely improve the management of the existing stock within the sensitive areas of the landholding, therefore the conservation objectives/qualifying interest of the relevant Natura 2000 sites will be unaffected. It is considered that the proposed development, if properly managed as part of a traditional farming practice, will continue to maintain and sustain the integrity of each of the relevant sites. The applicant has no objection to the imposition of conditions akin to those imposed by the Planning Authority.
- Surface water and soiled drainage proposals include:
    - The applicant has commissioned Civil Engineering consultants to prepare the requisite information. Layouts, Sections & Specifications prepared by Archeco and the letter and surface water design calculations prepared by Clarke Construction Design.
    - Proposals include:
    - Proposal to concrete the southern section of the existing access road, with a crossfall sloping away from the appellant's property.
    - Provision of an underground network of pipes under the proposed concrete road and stone farmyard area, with a petrol interceptor, to discharge to an underground soiled water collection tank.
    - Provision of a crossfall along the western side of the proposed sheep shed, to slope away from the appellant's property.
    - Provision of downpipes, gullies and soak pits to cater for run offs from existing and proposed shed roofs.
    - Provision of a smaller collection tank to cater for the surface water run-off from the concrete apron in front of the proposed sheep shed.
- Under the provisions of the 2017 Nitrates Regulations, all soiled water from collection tanks can be spread on the farm at anytime of the year. The specifications for the proposed soiled water effluent collection tanks is provided. The main underground soiled water collection tank is designed to cater for sufficient storage.
    - Substantiated by design calculations prepared by Clarke Construction Design. The size of the tank as 14.3m^3 per SUDS manual based on a year,

30 year and 100 year. The provision exceeds the normal requirement of minimum 15 days storage. Concerns in relation to off-site flows will be avoided.

- The proposed development will tidy up this established farm complex. Landscaping is proposed to include semi-mature native trees along the south-western and north-western boundary of the site, in order to soften the impact of the proposed sheds at this location.

- The proposed development would not adversely affect the amenities of the appellant's premises/farm complex. In the interests of diligence and duty of care, the proposals also greatly enhance the management of the established farm practice on site. Having regard to the established farm complexes on both properties, a relocation of the proposed sheep shed is not warranted.

- They have no objection to a condition akin to the planning authority's good agricultural practice regulations to protect the neighbouring well as well as water bodies within and adjacent the applicant's holding.

3.3. NIS

3.3.1. A Natura Impact Statement prepared by John Curtin (Bsc Environmental Science) in partnership with James O'Donnell (BA, MRUP, Dip APM), has been submitted; it includes:

3.3.2. It refers to the Natura sites:

- Castletaylor complex 2km from the site boundary.

- Rahasane Turlough 3km from the site boundary.

- The site is part of a farm with land in several locations which will also be considered.

- Mulroog West lies within the Inner Galway Bay SPA and Galway Bay Complex SAC, similarly land in the Aghavannagh Mountains lies within the Wicklow Mountains SAC and SPA.

- It outlines at 2.3 best practice / mitigation measures in relation to the construction, which includes:

- Details in relation to earthworks including:

- Prior to excavation, works area will be assessed and delineated with temporary fencing. There will be no access to works vehicles outside those areas.
- Storage of plant, excavated material/topsoil and other materials required for construction/landscaping will be within the fenced area.
- Any excavated topsoil that is to be reused will be stored on the site. Any excavated rock will be used as infill to replace excavated soil.
- Washing of plant, vehicles or equipment will be completed within a designated section of the site. Deliveries will be required to complete wash out at their own company base, not on site.
- In all circumstances, excavation depths and volumes will be minimised and excavate material reused where possible.
- There will be no release of suspended solids during construction works.
- During periods of heavy precipitation, with the potential for run-off, works will be halted or working surfaces/pads will be provided to minimise soil disturbance.
- Any temporary fills or stockpiles will be consolidated either by covering, seeding or sealing with an excavator bucket to avoid sediment release.
- Stock-piling of topsoil or subsoil in heaps during construction will take place in designated areas within the site boundary.

- **Details in relation to refuelling fuel and hazardous material storage including**:
  - Oils, fuel and potentially harmful materials will be stored in impermeable proprietary container.
  - Mobile storage such as fuel bowsers will be bunded to prevent spills. Tanks for bowsers and generators will be double skinned.
  - No hazardous substances will be permitted to be left unattended at any time when taken outside the secure storage.

- Potential impacts by spillages etc during construction phase will be reduced by keeping spill kits, drip trays and other appropriate equipment on site.
- All construction vehicles will be regularly checked and maintained prior to arrival at the site to prevent hydrocarbon leakage.
- All major repair and maintenance operations will take place off site.
- Hoses and valves will be checked regularly for signs of wear and will be closed and securely locked when not in use.
- Fuels, lubricants and hydraulic fluids for equipment used on the construction site should be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment in accordance with current best practice.
- Waste oil and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal or re-cycling.
- All pumps using fuel or containing oil will be locally and securely bunded.
- Refuelling will only be carried out by trained personnel.
- Oil booms and oil soakage pads will be kept on site to deal with any accidental spillage.
- The plant refuelling procedures described above shall be detailed in the contractor's method statement.

- **Details in relation to dust control including:**
  - The road adjacent will be regularly inspected by the site engineer for cleanliness, and cleaned if necessary.
  - The transport of soils or other material, which has significant potential to cause dust, will be undertaken in tarpaulin-covered vehicles where necessary.
  - When necessary, sections of the site will be swept and/or damped down with water.
- **Details in relation to noise control including:**

- Diesel generators will be enclosed in sound proofed containers to minimise the potential for noise impacts.
- Plant and machinery with low inherent potential for noise / vibration will be selected. All construction plant and equipment will comply with the EU (Construction Plant and Equipment) (Permissible Noise Levels) Regulations.
- All activities will be carried out in compliance with BS5228, Noise Control on Construction and Open Sites Part 1 and BS 6187 CoP for Demolition.
- Regular maintenance of plant will be carried out in order to minimise noise emissions.
- All vehicles and plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the works.
- Compressors will be sound reduced models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers.
- Machines which are used intermittently will be shut down during those periods when they are not in use.
- Training will be provided by the site engineer to drivers to ensure smooth machinery operation and minimise unnecessary noise generation.

- **Details in relation to drainage control, including:**
  - Drainage measures have been devised in consultation with Tom O'Toole of Archeco Engineers, to provide for the protection of groundwater (including neighbouring water sources) with separate measures specific for the existing farmyard and the new proposed shed.
  - The removal of the existing separation tank and the installation of a new holding tank for soiled water arising from surface water runoff. The addition of sloped concrete road to the south-west of the site with a fall to the east will ensure surface water flows away from the neighbouring property and into the holding tanks via concrete gullies. The replacement of the separation tanks by holding tanks will allow the landowner to spread the soiled water on his land providing a filter through top and subsoil in accordance with the 2017 Nitrates

Regs, before entering groundwater. A similar holding tank will be installed to the north of the site adjacent to the proposed sheep shed, collecting all soiled water runoff from the concrete apron. Clean water from the roof sections will be released via soakpits.

3.3.3. Re. Mulroog West

3.3.4. These lands were examined in order to assess condition. One section of field located to the south west was used as tillage in the previous year. During the site visit (5th March 2019) the ground was bare. This field lay outside the SAC boundary. Sections of tillage located close to SPAs can provide excellent roosting areas for species such as Lapwing and Golden Plover. None were noted during the visit. Two Snipe were perched in the field. Plots 17 & 16 contain a mixture of improved grassland and semi-natural species rich grassland. In a personal communication between the former consultant ecologist with the Burren Life Project and the Mr Curtin, it was suggested, when ranking the condition of calcareous, species rich grassland, that an examination of the level of poaching, in comparison to the levels of scrub encroachment, is required. Too low a level of grazing will result in blackthorn, bramble and hazel scrub encroachment, as was the case in the Burren uplands from the 1970s. On this basis, species rich grassland within the landholdings appear to be in good condition with low levels of current poaching, (one area used as a path by cattle showed some poaching), combined with some bramble and blackthorn found on field margins. These lands are within and fully complying with the agri-environmental scheme GLAS. This states that animals are removed from these lands during the winter months.

The subject proposal will result in no increase in stocking density within the Mulroog West landholdings.

Species noted in the site visit are listed.

3.3.5. Re. Aghavannagh

The applicant has grazing rights for sheep within a section of commonage located in the Aghavannagh Mountains in the Wicklow Mountains SAC and partially within the Wicklow Mountains SPA.

A separate report has been compiled by Michael John Ryan Agricultural Consultant who created a commonage plan during October 2016. This examined the state of the

blanket bog, wet heath and acid grassland so as to comply with the GLAS agri-environmental scheme. Mr Ryan states that the applicant is entitled to graze between 69 and 87 ewes on the commonage. Grazing occurs from May to October. At least one farmer has rights to the commonage who is not included in the GLAS scheme, thus exact numbers of animals on the mountain is difficult to obtain.

The subject proposal will result in no increase in stocking density within the land holding. None of this land parcel will be receiving slurry or additional fertilizer as a result of the proposed development. The rights to graze this mountain at the rates outlined will remain unchanged whether this application is successful or not.

3.3.6. Fauna

A number of bird species were recorded during the field survey typical of the habitats and not under any EU designation.

3.3.7. Soils & Geology

Minimum soil depth on spreadlands with extreme vulnerability is a concern, regarding the spreadlands within the farm. Five trial holes were dug to prove sufficient soil depth for landspreading.

3.3.8. Assessment of Impact on Natura Sites

Table 1 sets out a determination of the European Sites within the likely zone of impact.

Table 4 sets out an assessment of pathways for potential adverse effects on the integrity of European Sites within the zone of likely impact of the proposed works

Likely cumulative impact is considered in 4.2, where it is concluded that there is no potential for in-combination impact.

The conclusion states that with the implementation of best practice measures as outlined in section 2.3, it can be concluded, on the basis of objective scientific information, that the proposed plan, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site.

3.4. A letter from Tarpey & Associates, Agricultural Consultants, in relation to the applicant's farm enterprise, includes:

3.4.1. The applicant currently operates a sheep and suckler cattle enterprise on a 93ha farm. He has roughly 35 suckler cows and followers and 180 sheep, which he farms

on 4 different land blocks: 14.35ha of land at Lisnagrancy, excellent quality agricultural land suitable for both grassland and tillage; 10.94ha at Caherdaly, prime agricultural land suitable for both grassland and tillage; a one third commonage share of 50.11ha of Aghavannagh Mountain, the number of ewes permitted is between 69 and 87 and is controlled by the most recent commonage management plan; 14.54ha at Mulroog of which 13.89ha is farmed under the Green, Low carbon, Agri-environment Scheme (GLAS) as farmland habitat area. The areas have received SPA and SAC status because they are prime areas of wildlife importance and traditional farming practices have helped create and maintain these environments. No spreading of slurry will occur within the Mulroog West or Aghavannagh Mountains lands.

3.4.2. The applicant predominantly keeps his cattle on the lands around Ardrahan and Mulroog and the sheep are spread around the other parts of the farm, predominantly the commonage during the summer months at a stocking rate permitted under the commonage management plan. They are brought to the lands near home in order to lamb them down where they can receive the most attention and reduce welfare issues.

3.4.3. Should he not receive planning permission to build the shed he would have to lamb them down outdoors and place more stress on the sheep; pose welfare threats as they would lamb unattended; put more threat on the Mulroog lands as some livestock may have to be outwintered there, increasing the risk of runoff and poaching during periods of unfavourable weather. The sheep shed would give more control over nutrient production by storing organic waste during wetter periods and spreading it on land between 15th January and 31st October per SI No 605/2017 EU (Good Agricultural Practice for Protection of Waters) Regulations 2017.

3.4.4. The shed would increase sheep welfare and reduce mortality rates.

3.4.5. Landspreading of manure will only take place on the good agricultural land at Lisnagrancy and Ardrahan in early spring or after silage cut in early summer, to optimise benefit and minimise impact.

3.4.6. The proposed shed will not lead to an increased stocking density or frequency of use of lands in Mulroog West or the Aghavannagh Mountains.

3.5. A letter from Michael John Ryan Limited, Registered Agricultural Consultant, in relation to the Aghavannagh Mountain commonage lands, includes:

- He is the DAFM approved commonage advisor for this commonage for the GLAS scheme and he walked it with the applicant in October 2016 to assess its general condition for grazing under the scheme. He describes the commonage, enclosed to the south and east by post and wire fencing and open to the north and west to adjacent commonages; consisting of several habitat types including upland dry and wet mountain type grassland, marsh, rock outcrop and wet and dry heath. It is sloping ground from 900m to 500m, part of which is quite steep. The area of marsh is small (5%) and the grassland that can be grazed is more than 85%. Streams flow along the eastern boundary and in the upper centre of the commonage. Rock outcrop and exposed peat, caused by land slippage from the drainage on steep slopes and near water watercourses, occupy small areas. It is an elevated cold wet area, unsuitable for the outwintering of sheep. Mr Ryan believes the commonage is adequately grazed during the May to October period by the commonage shareholders. While the number of ewes to be grazed by the GLAS participants is in the region of 837 to 1050, and these participants have the required number of sheep to cover this, there are other non GLAS participants that he is not privy to due to GDPR restrictions and he does not have a total permissible ewe grazing number for this commonage.

3.6. It is the duty of DAFM to take appropriate action regarding the non GLAS participants as regards keeping the appropriate sheep numbers correct to maintain the current grazing condition.

- The condition of the heather is generally good and varied with evidence of grazing present on the day of his visit. The peat can be fragile in places, especially near or on sharp outcrops but is generally stable with minimal erosion except near the watercourses where obvious erosion form flood waters has occurred. In general terms the commonage is in average to good condition and needs to be kept in this order with the current number of sheep being deemed appropriate for the time being.

- He attaches photos of the commonage.

3.7. A letter and attachments from Clarke Construction Design Ltd in relation to the surface water runoff, includes:

- He has carried out calculations of the surface area of the project and calculated the size of the tank as a 14.3m^3 volume per SUDS manual; calculations are attached.

3.8. The drawings include revisions:

Section Y-Y of drawing 3 shows a finished floor level (ffl) for the proposed sheep shed of 100.22m and a fall of 1:40 towards the shed from the direction of the neighbours boundary. A concrete access road, extending in width from the neighbour's boundary to the hay shed, is shown in section X-X. The finished floor level (ffl) of the shed is 100.22m with a fall away from the boundary wall of 1:40. Roof runoff is captured in a gully outside the shed.

Drawing 2 shows a ffl for the proposed sheep shed of 99.40m, and for the hay shed of 100.22m.

Levels for the proposed road, to run between the hayshed and the boundary are given. Immediately inside the gateway it is slightly higher than the temporary benchmark in the public road, and falls to 99.47m at the front of the shed. At the rear of the shed, the ground level adjacent to the boundary in the stone yard, is given as 99.42m. Levels close to the neighbours boundary, progressing inwards from the public road are set out and the direction of falls indicated. Drains collect this runoff to a proposed new soiled water effluent tank (3500 gal/15.9m^3). Clean surface water soakpits are indicated, and the proposed soiled water effluent tank (2500 gal/11.36m^3), for the proposed sheep shed, is indicated.

Drawing 1 shows the existing site layout including the 'existing separation tank' within the stone yard north of the proposed hayshed, which is to be removed.

4.0 **Appellant's Response**

4.1.1. The appellant has responded to the applicant's response to the further information request, which includes:

- The issues previously raised have not been addressed satisfactorily. In an itemised response, similar issues are raised to those listed in the O'Connor Sutton

Cronin submission (referred to below), which is attached to the response. The appellant objects to the siting of both sheds. He requests that the proposed development be relocated to a more suitable location within the lands, compliant with legislation and the requirements of S146, Department of Agriculture, Food and the Marine, Minimum Specification for Wintering Facilities for Sheep, cited as:

- Avoid endangering rivers, streams or wells by pollution.
- Be well separated from potential fire hazards,
- The minimum distance between a storage facility and a public/private water supply source, either surface or ground, in vulnerable situations this distance shall be increased up to 300m.
- Given the sensitivity of the site, including his property, drinking well and the Natura 2000 sites of Castletaylor Complex SAC 000242, Rahasane Turlough SAC 000322 and Rahasane Turlough SPA 004089, all within the likely zone of impact, he requests that any subsequent plans and details are obtained prior to a decision and requests an opportunity to see such plans/ details and comment on them.

4.2. O'Connor Sutton Cronin

4.2.1. A response from O'Connor Sutton Cronin Multidisciplinary Consulting Engineers to the applicant's response to the further information request is attached, which includes:

- Collection of surface water is based on two distinct and separate systems:
    - Soak pits, and
    - An underground storage tank described and designed by calculation and as an attenuation system. The soak pits are intended to dispose of clean roof water while the other system, comprising an underground storage tank, collects what is termed soiled water.
- There is no evidence that the soak pits have been justified by site tests or design.
- The attenuation system does not match the proposed storage tank system proposed. The design calculations are based on a software package that allows the user to input site variables into a pre-written package. As presented the design is for

an attenuation system that has an outlet that allows storm water to discharge from the tank as it is filled from surface water run-off. There is no outlet from the tank proposed and the calculation basis is fundamentally incorrect. In addition the calculations presented contain incorrect input variables.

- Re. soak pit design soil infiltration rates, soak pit suitability and sizing – soak pits must discharge quickly and the rate of discharge depends on their shape and size and the surrounding soil's infiltration characteristics. BRE Digest 365 describes design and construction and explains how to calculate rainfall design values and soil infiltration rates.

- The proposed soak pits are not substantiated by on-site infiltration tests. The soils surface water infiltration rate should form the basis of the appropriateness and suitability of using soak pits in the first instance.

- The receiving ground should have suitable infiltration rates. Groundwater should not rise to the level of the base of the soakaway during annual variations. These are established through field tests.

- On site infiltration tests should be carried out in the proposed soak pit locations by a Chartered Engineer in accordance with BRE Digest 365.

- Soiled Surface Water Collection Tank Design – the precast concrete buried tank provides a storage volume of approx. 14m^3. There are conflicting proposed tank details. One of the Carlow Concrete Tanks drawings is titled 2500 Gallon/11.36m^3 the other is titled 3500 Gallon/15.9m^3. The design calculation to justify the storage volume has been prepared using a 'Tekla' calculation package which allows the user to input variables such as rainfall, site area and the like.

- A number of technical errors with this methodology and calculation are outlined:

    - It is for an attenuation system that has an outflow, where the calculated storage volume is based on storage that empties as it is filled by the passing rainfall event. It must have an outflow to a local authority water drain or stream/water course. The control, termed a hydrobreak, controls outflow, normally to release at pre development greenfield rates. The design presented has calculated the storage volume based on run-off rates of 0.8 l/sec up to 2.0 l/sec. The rainfall events modelled are 1:1, 1:10 and 1:100

returns. The outfall rate is one of the main constraints that determines storage required.

- The tank storage includes for an outflow, whereas there is no outfall; the description states that the tank will be emptied, and soiled water spread over the land.

- In addition there are a number of fundamentally incorrect input variables.

- Annual rainfall, standard average annual rainfall (SAAR), is given as 720mm. This is not reflective of the west of Ireland. SAAR figures for Galway are on average 1250mm. This underestimates rainfall by over 43%, (Leeds, the default location, has a SAAR of 720mm). All of the site characteristics listed in the calculations use the default for Leeds provided in the package.

- There is also an incorrect use of the 'head – discharge relationship' factor. This factor of 1.25 is used where a hydraulic head builds up above the outlet pipe level and allows for the effect of hydraulic head. The factor of 1.25 is fundamentally incorrect as there is no outlet on which to base the hydraulic head.

- Climate change 0% has been selected – whereas 10% to 20% is used in guidelines.

- Soil type 4 selected reflects a very high rainfall runoff rate. This is not reflective of the area and is not derived or discussed.

- The proposal to empty the tank via machinery and spread the contents on the applicant's lands is impractical as the tank will fill up quickly during a rainfall event.

- It is stated that the area to be drained is 0.2ha with a 50% permeable factor and a resultant 1000 sqm effective area draining to the tank. Using the applicants figures to fill a 14m^3 tank without discharge from a hydrobrake takes 44.2 mins for a five year 60 minute event, reducing to 17 minutes for a 50mm / hr rainfall event and 84 mins for a 10 mm/hr rainfall event. This demonstrates the inadequacy of the system. In the event of the tank filling, the upstream system will back up and the manholes and gullies will overflow.

- The outflow rates used do not reflect the intended methodology which relies on the tank being emptied and spread on lands. Using the outflow rates, which were used in the calculations provided, to demonstrate a no outflow situation: a 19mm

rainfall event over a one hour period requires additional storage volumes of 2.88m^3, 6.12m^3 and 7.2m^3. This shows that the soiled tank calculations are incorrect.

- The calculations provide for a 'treatment volume' of 14.31m^3 and an attenuation storage required of 33.9m^3. UKSUDS web site provides a definition of treatment volume, which is the volume of water that is retained in an attenuation system held back from discharge to water courses to that it can be treated, and is separate to total attenuated volume. The applicant's agent has provided an enclosed tank sized only to store the treatment volume rather than the attenuated volume in the calculations.

- An impermeable area of 0.1ha is being drained. Any rainfall event of 14mm rain will result in the tank of 14m^3 filling; a 1:100 year event, per met Eireann data, shows that the tank provides storage for less than 10 minutes rainfall.

- Drawing errors – there is a discrepancy between ffl 99.4m and 100.22m for the sheep shed, a difference of 820mm. There is no reference on plans to where sections x-x and y-y are taken. The development could be constructed to either level. The use of a temporary benchmark makes it difficult to compare the proposed levels with existing levels on adjoining sites.

- Flood risk – the proposed construction of sheds and associated works will result in the raising of existing ground levels by c1.22m. No Site Specific Flood Risk Assessment (SSFRA) was presented with the application. OPW Flood Risk Management Guidelines provides guidance on SSFRA.

- The significant raising of ground levels may impact on existing flow paths and have a detrimental effect on adjoining lands, the lower level lands to the west. Also the proposed soak pits may simply discharge their water into the lower lying ground to the west.

- The incorrectly designed and sized soiled water storage tank will overflow during a storm event and may cause overground flow that could flood lower level ground to the west. The location within the applicants ownership appears to have the most detrimental effect on possible flooding to the adjoining landowner given the proximity, compared with other locations within the landholding.

5.0 Applicant's Response to Appellant's Response

5.1.1. James O'Donnell Planning Consultancy Services on behalf of the applicant, has responded to the foregoing appellant's. The response includes:

5.1.2. Revised proposals, calculations and drawings are presented.

5.1.3. A document titled 'Surface water infiltration test's to BRE digest 365' by Clarke Construction Design Ltd. includes calculations and infiltration test locations marked on a layout drawing; and photos of test holes are supplied.

5.1.4. Calculation sheets and other information in relation to each soakpit location, which include trial pit length, width and depth (below invert); the results of site infiltration tests at 4 locations where the soakpits are proposed, the extent of the area to be drained; and revised proposals for soakpit design and sizing based on these. The details indicate that at location no. 1 to the rear of the proposed sheep shed a soakaway of 51.26m^3 is required; at location no. 2 to the front of proposed sheep shed a soakaway of 28.6m^3 is required; at location no. 3 to the front of the existing slatted shed a soakaway of 21.46m^3 is required; and at location no. 4 to the front of the proposed hay shed a soakaway of 15.67m^3 is required.

5.1.5. The revised drawings are titled: existing site layout plan, File No. 1; proposed site layout plan, File No. 2; and sections X-X and Y-Y, File No. 3. The proposed site layout plan indicates the locations of the soakaways and contains notations in this regard, indicating the required dimensions of each pit. It also indicates the locations of the soiled runoff storage and the required dimensions to provide two weeks storage.

6.0 Appellant's Further Response

6.1.1. A further response has been received from the appellant to the foregoing, which includes:

6.1.2. Itemising substantial inconsistencies:

- Ground level to the NW of the proposed sheep shed shown as 99.460 on drawing site layout, stamped 21st May 2018; the current level shown on file no 2, stamped 29th July 2019 is 99.00 a difference of 460mm.

- A level of 100.180 is shown for existing shed D site layout, stamped 6th March 2018; a level of 99.64 is shown adjacent shed E on shown on drawing file no 2, stamped 29th July 2019, Shed D and E are approximately the same level: a difference of 540mm.

- At various stages in the planning process three different levels have been shown for the ffl of the sheep shed: 99.840, 100.22 and 99.4; a big difference.

- Ground level 100.080 south of sheep shed concrete apron on drawing site layout, stamped 6th March 2018; the current level shown on file no 2, stamped 29th July 2019 is 99.60 a difference of 480mm

- Ground level south of soiled water tank of proposed sheep shed on drawing site layout, stamped 6th March 2018, 100.080; shown on drawing file no 2, stamped 29th July 2019 as 99.60, a difference of 480mm.

- Level of 100.450 east of soiled water tank of proposed sheep shed on drawing site layout, stamped 6th March 2018; shown on drawing file no 2, stamped 29th July 2019 as 99.70, a difference of 750mm.

- Ground level 100.220 south of the proposed soakaway to existing shed E on drawing site layout stamped 6th March 2018; the current level shown on drawing file no 2, stamped 29th July 2019 a 99.370, a difference of 850mm.

6.1.3. Soak pit adjacent to existing shed E - The soak pit adjacent to existing shed E is in a heavy trafficked tractor area, used to access shed E, which will lead to contamination of the soak pit.

6.1.4. Proposed planting - The proposed planting cuts off the existing access and the remainder of his farm and an alternative proposed new access roadway is not shown. Drainage and calculations for soiled water and runoff for same need to be addressed. The planting may lead to the destruction of the dry stone wall and together with the shed will result in casting shadow over the appellant's field during morning hours.

6.1.5. Hay & Straw Shed

The proposed hay & straw shed is only 16.5m from the well. There is a history of flooding and soiled water runoff into the groundwater, as noted in the NIS. This together with the added risk of weal's disease is of concern.

It is within the zone of contribution of the well.

The EU Water Framework Directive requires protection and improvement in all waters.

6.1.6. Soak Pit Design

- No version of BRE Digest 365 is quoted. The latest version 2016 states that a climate change factor of 30% is good practice. No allowance for climate change has been included; the sizing is incorrect.

- The permeability test photographs 1&2 appear to be at less depth than 1.5m below invert level. The data sheet for the modular unit states that the system will require a minimum cover of 800mm from ground level to top of system. The depth of the test pits should represent the actual depth of the proposed pit.

- They should have been excavated to a depth of 2.3m below ground level; depths as given are: TP1 – 830m; TP2 – 910m; TP3 – 900m; and TP4 – 930m.

- They note that the designer has taken the slowest infiltration rate of three for each location but the undefined groundwater depths are of most concern.

6.1.7. New soiled water collection tank – the new soiled water collection tank is not the requisite 50m from the appellant's well as stipulated by EPA guidelines.

6.1.8. Location of proposed development

- Proximity of 4 bay hay & straw shed, its close proximity to boundary and well and dwelling poses pollution, health & fire and safety risk, and flood risk.

- The proximity of the 10 bay sheep shed places appellants field, silage storage area, and domestic well at risk from flooding and contamination. More suitable locations are available. S 146 is quoted.

7.0 **Further Assessment**

7.1.1. The issues which require further assessment in relation to this appeal are appropriate assessment, surface water runoff and impact on groundwater and other issues and the following assessment is dealt with under these headings.

8.0 Appropriate Assessment

8.1.1. In accordance with obligations under the Habitats Directives and implementing legislation, there is a requirement on the Board, as the competent authority in this case, to consider the possible nature conservation implications of the proposed development on the Natura 2000 network, before making a decision on the proposed development. The process is known as appropriate assessment. In this regard a guidance document 'Appropriate Assessment of Plans and Projects in Ireland' was published by the DoEH&LG on the 10th December 2009.

8.1.2. The applicant submitted an Appropriate Assessment Screening Report with the application on the 6th March 2018 and a Natura Impact Statement to the Board on the 23rd April 2019. This information together with other information on the file is, in my opinion, sufficient to enable the Board to carry out Appropriate Assessment.

8.2. Screening

8.2.1. The first exercise to be carried out by the Board is screening.

8.2.2. The NIS is referred to earlier in this report. It includes, at table 1.1, the Natura Sites, 25 in total, which were considered for the purpose of screening, of which 6 sites were selected for further consideration based on the proposed development's potential to impact these sites:

Castletaylor Complex SAC, Rahasane Turlough SAC, SAC Rahasane Turlough SPA, Wicklow Mountains SAC, Galway Bay Complex SAC and Inner Galway Bay SPA.

8.2.3. In my opinion the proposed development does not have potential to impact any other European site.

8.3. Stage 2 - Appropriate Assessment

8.3.1. Proposed Development

8.3.2. The development proposed is the construction of a sheep shed and hay shed with all associated ancillary works.

8.3.3. It comprises a hay shed of 257.47 sq m (19.2m x 13.41m x 6.85m high), within the existing farmyard, and in a field immediately beyond the existing farmyard, a sheep shed of 1011.84 sq m measuring 21.8m x 48m x c 7.m high with a concrete apron and a seepage tank to the front.

8.3.4. The proposed sheep shed comprises two feed passages of 4.7m width extending between doorways at either end and separating concrete floor bedded pens, which are indicated as 3m width along each side of the building, and 6m width where they run between the feed passages in the middle of the building.

8.3.5. The Department of Agriculture, Food and the Marine has produced a document titled 'Minimum Specification for Wintering Facilities for Sheep, S146 June 2016' which includes item 6.3: Depth of Pens, and 6.4 Passages, and also includes sample drawings:

> Pen depth is limited by the trough space. Ideally the pen depth should be such that all sheep can be fed from feeding passages. In practice, particularly where existing buildings are adapted, trough space may be required on two sides of the pen.
>
> The ideal pen depth = $\frac{\text{Floor space per Ewe}}{\text{Trough Space Available per Ewe}}$
>
> Example: Floor space per ewe - l.2m^2, meal feeding space 450 mm per ewe: pen depth 1.2 / 0.45 = 2.6m.
>
> Feeding passages shall be at least 2.5m wide. Recommended minimum widths of feeding passages vary according to proposed access for feed supply: for feed wagons excluding troughs 4.0m; for tractor/trailer or block cutters - 3.0m; and for tractor and front loaders - 2.5m.

Outline drawings are provided which demonstrate adequate feed space, with floor areas given.

One of the outline drawings Figure 2 is of a building 24m in length and c 18m in width which accommodates over 200 ewes. This layout, with two feed passages providing access to pens to either side, is similar to the layout proposed, except that the feed passages are 3m wide whereas in the proposed development they are 4.7m wide. Even allowing for the greater width of the feed passages, which would be accommodated in the 21m width proposed, the length of 48m, which is more than

twice the size of the sample shed, would accommodate more than 400 ewes. It is stated in the application that the applicant farms 180 sheep.

8.3.6. The application details therefore do not account for the scale of the shed proposed, nevertheless the Board may consider that there are various possible reasons for this, which would not impact adversely on the environment or on designated sites, such as future intentions regarding increased land rental or ownership.

8.3.7. **Natura Sites**

8.3.8. The Natura Sites with potential to be impacted by the proposed development are:

Rahasane Turlough SPA (Site code 004089),

Rahasane Turlough SAC (Site code 000322),

Castletaylor Complex SAC (Site code 000242),

Galway Bay Complex SAC (Site code 000268),

Inner Galway Bay SPA (Site code 004031),

Wicklow Mountains SAC (Site code 002122), and

Wicklow Mountains SPA (Site code 0004040).

8.3.9. **Conservation Objectives**

8.3.10. Conservation Objectives have been set out for the Natura Sites with potential to be impacted by the proposed development:

8.3.11. Site specific Conservation Objectives have not been developed out for Rahasane Turlough SPA). The generic conservation objectives are to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

Whooper Swan

Wigeon

Golden Plover

Black-tailed Godwit

Greenland White-fronted Goose

Wetland and Waterbirds

To acknowledge the importance of Ireland's wetlands to wintering waterbirds, “Wetland and Waterbirds” may be included as a Special Conservation Interest for some SPAs that have been designated for wintering waterbirds and that contain a wetland site of significant importance to one or more of the species of Special Conservation Interest. Thus, a second objective is included as follows:

to maintain or restore the favourable conservation condition of the wetland habitat at Rahasane Turlough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

8.3.12. Site specific Conservation Objectives have not been developed out for Rahasane Turlough SAC. The generic conservation objectives are to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

Turloughs (priority habitat).

8.3.13. Site specific Conservation Objectives have not been developed for Castletaylor Complex SAC. The generic conservation objectives are: to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests[1] for this SAC:

Turloughs (priority habitat)

Alpine and Boreal heaths

Juniper scrub

Orchid rich calcareous grassland (priority habitat)

Limestone pavements (priority habitat)

8.3.14. Site-specific conservation objectives for Wicklow Mountains SAC have been developed which could be summarised as: to maintain or restore the favourable conservation status of habitats and species of community interest, which are:

Oligotrophic waters containing very few minerals of sandy plains

Natural dystrophic lakes and ponds

[1] Turloughs [3180], Alpine and Boreal heaths [4060], Juniperus communis formations on heaths or calcareous grasslands [5130], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210], and Limestone pavements [8240].

Northern Atlantic wet heaths with Erica tetralix

European dry heaths

Alpine and Boreal heaths

Calaminarian grasslands of the Violetalia calaminariae

Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)

Blanket bogs (* if active bog)

Siliceous scree of the montane to snow levels

Calcareous rocky slopes with chasmophytic vegetation

Siliceous rocky slopes with chasmophytic vegetation

Old sessile oak woods with Ilex and Blechnum in the British Isles

and the species:

Otter.

8.3.15. Site-specific conservation objectives have not been developed for Wicklow Mountains SPA. The generic conservation objectives are: to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

Merlin

Peregrine

8.3.16. Site-specific conservation objectives for Inner Galway Bay SPA have been developed which could be summarised as: to maintain or restore the favourable conservation status of habitats and species of community interest, which are:

Great Northern Diver

Cormorant

Grey Heron

Light-bellied Brent Goose

Wigeon

Teal

Shoveler

Red-breasted Merganser

Ringed Plover

Golden Plover

Lapwing

Dunlin

Bar-tailed Godwit

Curlew

Redshank

Turnstone

Black-headed Gull

Common Gull

Sandwich Tern

Common Tern

and

Wetland and Waterbirds

8.3.17. Site-specific conservation objectives for Galway Bay Complex SAC have been developed which could be summarised as: to maintain or restore the favourable conservation status of habitats and species of community interest, which are:

Habitats:

Mudflats and sandflats not covered by seawater at low tide

Coastal lagoons

Large shallow inlets and bays

Reefs

Perennial vegetation of stony banks

Vegetated sea cliffs of the Atlantic and Baltic coasts

Salicornia and other annuals colonising mud and sand

Atlantic salt meadows

Mediterranean salt meadows

Turloughs (priority habitat)

Juniperus communis formations on heaths or calcareous grasslands

Semi-natural dry grasslands and scrubland facies on calcareous substrates (*important orchid sites)

Calcareous fens with Cladium mariscus and species of the Caricion davallianae

Alkaline fens

Limestone pavements (priority habitat)

and species:

Otter, and

Harbour Seal

8.3.18. **Likely Impacts**

8.3.19. The likely direct or indirect impacts of the project, on Natura sites are: adverse impact on water quality and impact from grazing and poaching by livestock.

8.3.20. Groundwater Quality

8.3.21. There is potential for impact on groundwater quality which could potentially affect the Natura sites: Rahasane Turlough SPA, Rahasane Turlough SAC and Castletaylor Complex SAC, all of which are groundwater dependent ecosystems.

8.3.22. GSI website information is provided in the AA Screening report submitted with the planning application, which shows that the site is underlain by Dinatian pure bedded limestone with basic, deep, well drained mineral topsoil, and with subsoil derived from limestone till. The groundwater is classified as having high vulnerability.

8.3.23. Per the Geological Survey Ireland on line mapping the subject site is in the groundwater body ‘Clarinbridge’, the remainder of the lands to the north are in the ‘Rahasane Turlough’ groundwater body and the other spreadlands in the area, near Ardrahan, are in the ‘Kinvara Gort’ groundwater body.

Construction Impact

8.3.24. The potential for impact on groundwater, arising during the construction phase of the project, is considered in the NIS and detailed mitigation measures are proposed in this regard. The detailed mitigation measures proposed for the construction phase,

including measures to avoid any impact on groundwater, are referred to earlier in section 3.4.2. of this report.

8.3.25. In my opinion subject to the implementation of the detailed mitigation measures set out in the NIS, the construction phase of the proposed development, will not impact adversely on groundwater.

Operational Phase Impact

8.3.26. During the operational phase of the project the potential for adverse impact on groundwater quality, which could potentially affect the Natura sites: Rahasane Turlough SPA, Rahasane Turlough SAC and Castletaylor Complex SAC, arises from landspreading of farmyard manure on the applicant's local lands and from the management of soiled water and surface water in the farmyard.

8.3.27. The potential for impact from landspreading was considered in the AA Screening report where it is stated that having regard to the extreme vulnerability of groundwater trial holes were dug, which demonstrated sufficient soil cover.

8.3.28. I am satisfied that the screening report carried out adequately addresses potential effects of landspreading for Castletaylor Complex SAC, Rahasane Turlough SAC, and SAC Rahasane Turlough SPA and that landspreading carried out as proposed will ensure that no impact on groundwater is likely to arise.

8.3.29. The NIS refers to the removal of the existing separation tank and the installation of a new holding tank for soiled water arising from surface water runoff, as providing for the protection of groundwater (including neighbouring water sources) with separate measures specific for the existing farmyard and the new proposed shed.

8.3.30. Issues remain in relation to the potential for impact on groundwater quality during the operational phase of the project, in relation to the proposals to treat clean surface water and soiled yard water.

8.3.31. Soiled farmyard runoff could potentially adversely impact on groundwater and therefore adversely impact on the Natura sites Castletaylor Complex SAC, Rahasane Turlough SAC and SAC Rahasane Turlough SPA, which are all groundwater dependent. The subject site is located on the edge of the groundwater body Rahasane Turlough, within which Rahasane Turlough SAC and SPA are

located; and within the groundwater body Clarinbridge, within which Castletaylor Complex SAC is located. The potential impact on groundwater is referred to in more detail under a separate heading hereunder.

8.3.32. In my opinion it is possible to mitigate the potential for impact on groundwater quality during the operational phase. Should the Board be minded to grant permission a condition, such as condition no 2 drafted hereunder, should be attached such that the potential for adverse impact on groundwater can be adequately mitigated.

8.3.33. The likely indirect impact on Wicklow Mountains SAC, Galway Bay Complex SAC and Inner Galway Bay SPA would arise from grazing and poaching by livestock. The potential impact on these lands is addressed in the NIS; in the Tarpey & Associates Agricultural Consultants submission in relation to the applicant's farm enterprise, which submission is referred to earlier in this report; and in the submission of Michael John Ryan Limited Registered Agricultural Consultant in relation to the Aghavannagh Mountain GLAS scheme, which submission is also referred to earlier in this report.

8.3.34. It is stated that there will be no landspreading of effluent carried out on these lands. The stocking levels and the management of stock have not impacted adversely on the lands or the conservation objectives of the sites and are controlled by GLAS schemes on the lands in each of the two locations.

8.3.35. In my opinion the potential for adverse impact arising from the proposed development during the operational phase on: Wicklow Mountains SAC and SPA, Galway Bay Complex SAC and Inner Galway Bay SPA from the management of livestock on these lands is adequately mitigated by the GLAS schemes under which the use of these lands is controlled.

8.3.36. No in-combination affects with other plans or projects is envisaged.

8.3.37. In my opinion the Board has sufficient information to enable it to reach a conclusion in relation to appropriate assessment, that, having regard to the likely impacts of the construction stage and the operational stage, the mitigation proposed and the mitigation required by condition, the proposed development will not have significant adverse impact on any of the European sites in view of their conservation objectives.

8.4. Surface Water Runoff/ Impact on Groundwater

8.4.1. The grounds of appeal include detailed concerns regarding runoff and its potential to affect the appellant's nearby well water supply; that the existing farmyard includes extensive hard surface areas with falls towards the road and towards the appellant's farmyard with the location of the third party's well at a lower point relative to existing and proposed development. The appellant is asking the Board to amend the development and to insist on the submission of a detailed surface water and soiled water drainage proposal and requests to be afforded the opportunity to make further comment on revised proposals.

8.4.2. The appellant's concerns arise in part at least, from the existing development, in addition to that proposed.

8.4.3. All advice in relation to the management of farmyard waste includes as a basic principle the requirement to keep the amount of soiled water produced on the farm to a minimum and to divert all clean water from roofs to a clean water outfall[2]. Another basic requirement is that all organic fertilisers, effluents and soiled waters produced in buildings and yards must be collected in a way that will prevent run-off or seepage, directly or indirectly, into groundwater and surface water.

8.4.4. The current proposal has undergone amendment in the course of the application and appeal, and attempts to address the existing unsatisfactory situation.

8.4.5. In the original planning application the only reference to water management was a proposed seepage tank of 29m^3 at the front of the proposed sheep shed.

---

[2] Examples in recent publications include:

'Protecting and Enhancing Water for Sustainable Agriculture Water-related measures for the agri-food, forestry and marine sectors', published March 2017 by the Department of Agriculture, Food & the Marine (DAFM) Water Network consisting of DAFM Divisions and DAFM Agencies: Teagasc; Bord Bia; Marine Institute; Sea Fisheries Protection Authority, and

'Nitrates Explanatory Handbook: for Good Agricultural Practice for the Protection of Waters Regulations 2018', Department of Agriculture, Food and the Marine Department of Housing, Planning and Local Government

8.4.6. In response to the Board's further information request, revised proposals included: two clean water tanks at the front and rear of the proposed sheep shed, and an effluent tank of 11.63m^3 at the front of the shed; an effluent tank of 15.9m^3 in the yard south of the slatted shed (to replace an existing separation tank) and two other clean water tanks (14.31m^3) one in the yard and one south of the proposed hayshed.

8.4.7. A later revision, in response to the appellant's consulting engineer's comments, includes clean water soakpits of 53.39m^3 and 27.92m^3 to either end of the proposed sheep shed together with an effluent tank of 11.63m^3 at the front of the shed; an effluent tank of 150m^3 in the yard; and two clean water soakpits of 22.35m^3 and 16.33m^3 one in the yard and one south of the proposed hayshed.

8.4.8. The proposed provision is a very significant improvement on the existing situation. In particular the proposal to provide an effluent tank of 150.m^3 in the yard, in lieu of an existing separation tank in this location. The proposed sealed containment would represent a very significant improvement, and a significant benefit to groundwater protection and the protection of the neighbour's well.

8.4.9. It should be noted that the surface water proposals include provision for surface water arising from the proposed development and the existing development and the better management of existing surface water will be beneficial.

8.4.10. The appellant's concerns regarding the proposed development remains.

8.4.11. In my opinion in relation to the proposed clean (surface) water system details require clarification before any development commences. Information must be presented in relation to the water table level at each soakpit location. The applicant must clarify that, for the type of proprietary containment system proposed, the proposed depth, on which the infiltration test results are based, is in accordance with the manufacturers requirements. Full details are required to clarify how infiltration of soiled water into the surface water attenuation/soakpits will be prevented. The sizing of the pits requires further certification.

8.4.12. Subject to the presentation of these details to the satisfaction of the planning authority, in my opinion, the proposed development can be accommodated on the site without any adverse impact on groundwater, and in addition the proposal provides significant improvement to the water management at the existing farmyard.

8.5. Other Issues

8.5.1. Flood Risk

8.5.2. The grounds of appeal includes concerns regarding flood risk. It is stated that the proposed construction of sheds and associated works will result in the raising of existing ground levels by c1.22m and that no Site-Specific Flood Risk Assessment (SSFRA) was presented with the application.

8.5.3. It appears to me that some increase in finished levels, extending to the neighbour's boundary is required, in order to achieve falls to the proposed surface water soakpits. In my opinion this will not result in any increase in flood risk to the adjoining property since a solid boundary already exists between the properties and the proposed levels are designed to fall away from the shared boundary.

8.5.4. Tree Planting and Overshadowing

8.5.5. The appellant expresses concerns regarding the proposed planting, that it may lead to the destruction of the dry stone wall and together with the shed will result in casting shadow over the appellant's field during morning hours.

8.5.6. In my opinion tree planting for screening, in the circumstances of this case, is not an issue on which the Board should make any adjudication. Any impact on the dry stone wall, which is a shared boundary, is a legal matter between the parties. The casting of shadow from vegetation is similarly not an issue on which the Board should make any adjudication. Although the proposed sheep shed is of very substantial size the casting of a shadow onto adjoining lands should not, in my opinion, be a reason to refuse or amend the proposed development.

8.5.7. Disease and Fire Risk

8.5.8. The appellant expresses concerns regarding the proximity of the proposed hay and straw shed to his boundary and well and the risk of transmission of weil's disease and risk of fire.

8.5.9. In my opinion the proposals in relation to surface water will ensure that any contaminated water will not drain towards the shared boundary or well. Any other

issues regarding the management of rodents in the farmyard are outside the Board's remit.

8.5.10. In my opinion having regard to the distance between the proposed development and the boundary, fire risk is not a concern.

8.5.11. **Requirement that the Soiled Water Tank be a minimum 50m distance from a well**

8.5.12. The appellant states that EPA guidelines requires the proposed new soiled water tank to be minimum distance of 50m from his well. The EPA guidelines are not referenced.

8.5.13. The Department of Agriculture, Food and the Marine 'S146, Minimum Specification for Wintering Facilities for Sheep', published in June 2016, includes reference to soiled water storage, stating that the minimum distance between such storage and a private well should be 60m for new farmyards and not less than 30m for existing farmyards, subject to a hydro-geological survey; in vulnerable situations this distance to be increased up to 300m. The proposed soiled water storage appears to be in the region of 45m from the well. The location is where the existing separation tank is located. As previously stated the proposal to provide the existing and proposed development with a soiled water storage tank of 150m^3 is a very significant improvement on the existing situation. It is not in breach of the guidelines, and is acceptable in this case.

9.0 Recommendation

9.1.1. In the light of the above assessment I recommend that planning permission be granted for the following reasons and considerations and in accordance with the following conditions.

10.0 **Reasons and Considerations**

Having regard to the location of the proposed development in a rural area where it is the objective of the planning authority as expressed in the Galway County Development Plan 2015-2021, to support the sustainable development of agriculture; the intended use of the sheep shed to improve the management of the existing stock and not to increase the overall stocking rate on the existing lands; the proposals for the management of clean water and soiled water from the proposed and existing farm buildings and yard areas; and the details provided regarding the management of the applicants lands at Mulroog West and Aghavannagh; it is considered that subject to the attached conditions the proposed sheep shed, hay/straw shed and ancillary work, would not adversely impact on groundwater or the natural heritage of the area, would not adversely impact on the amenities of adjoining properties or otherwise be contrary to the proper planning and sustainable development of the area.

11.0 **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 the further plans and particulars received by An Bord Pleanála on the 23rd day of April, 2019, and the 29th day of July, 2019 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 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. **Reason:** In the interest of clarity.
2.	Prior to the commencement of any development on the site the applicant shall submit for the written agreement of the planning authority details prepared by an engineer or other suitably qualified and indemnified person

	indicating the water table level at each soakpit location; showing that, for the type of proprietary containment system proposed, the proposed depths, and the infiltration test results based thereon, are in accordance with the manufacturers requirements, or further proposals shall be submitted in this regard; detailed measures to ensure that infiltration of soiled into the surface water attenuation/soakpits will be prevented; and a detailed justification for the sizing of the soakpits. **Reason:** In the interest of groundwater protection.
3.	All the mitigation measures proposed in the NIS shall be implemented in full. **Reason:** In the interest of environmental protection.
4.	All effluent generated by the proposed development shall be disposed of by spreading on land, or by other means acceptable in writing to the planning authority. The location, rate and time of spreading and the buffer zones to be applied shall be in accordance with the requirements of the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations, 2017, as amended. **Reason:** In the interest of environmental protection.

Planning Inspector

05 February 2020

Appendices

1 GSI on-line mapping Groundwater Vulnerability

2 S146, Minimum Specification for Wintering Facilities for Sheep, Department of Agriculture, Food and the Marine, June 2016

3 Protecting and Enhancing Water for Sustainable Agriculture Water-related measures for the agri-food, forestry and marine sectors', published March 2017 by the Department of Agriculture, Food & the Marine (DAFM) Water Network consisting of DAFM Divisions and DAFM Agencies: Teagasc; Bord Bia; Marine Institute; Sea Fisheries Protection Authority, extract.

4 Nitrates Explanatory Handbook: for Good Agricultural Practice for the Protection of Waters Regulations 2018, Department of Agriculture, Food and the Marine Department of Housing, Planning and Local Government, extract.

5 Site Synopsis Rahasane Turlough SPA (Site code 004089)

6 Site Synopsis Rahasane Turlough SAC (Site code 000322)

7 Site Synopsis Castletaylor Complex SAC (Site code 000242)

8 Site Synopsis Galway Bay Complex SAC (Site code 000268)

9 Site Synopsis Inner Galway Bay SPA (Site code 004031)

10 Site Synopsis Wicklow Mountains SAC (Site code 002122)

11 Site Synopsis Wicklow Mountains SPA (Site code 0004040).