

**Open Report on behalf of Richard Wills
Executive Director, Environment & Economy**

Report to:	Planning and Regulation Committee
Date:	5 March 2018
Subject:	County Matter Application - 137107

Summary:

Planning permission is sought by Adam Duguid (Agent: G J Perry Planning Consultant) for the construction of a lined and covered lagoon for the storage of anaerobic digester digestate at land at Harpswell Grange, Harpswell Lane, Harpswell, Gainsborough, Lincolnshire.

The proposed lagoon would be 100m long by 50m wide and 4m deep and have an approximate holding capacity of around 20-25,000m³. The lagoon would be used to temporarily store digestate produced by the anaerobic digestion plant at Hemswell Cliff until it is ready to use/spread on the surrounding farmland. The digestate would be pumped to the lagoon via a temporary above ground pipeline which would be laid across farmland between the two sites and would be in use no more than 10 days at any one time. When the pipeline is not required it would be removed. The proposed lagoon is considered to be appropriate in terms of its location, size, scale and design and any potential impacts on the environment and local amenity as a result of its use, including during the transferral of digestate from the AD Plant, are not considered to be significant.

Subject to conditions, the proposed development would therefore be acceptable and would not conflict with the relevant identified Development Plan policies with the development plan and therefore can be supported.

Recommendation:

Following consideration of the relevant development plan policies and the comments received through consultation and publicity it is recommended that conditional planning permission be granted.

Background

1. Planning permission for the construction of an anaerobic digestion plant (AD Plant) at Hemswell Cliff Industrial Estate was first granted on 11 February 2013 (ref: W127/129257/12). Since then several subsequent permissions have been granted which have allowed changes to the original design and layout of the site and an increase in the annual tonnages handled. In June 2017 a further permission was granted for the installation of ancillary gas

cleaning plant and equipment which is to be used prior to a proportion of the gas being piped into the National Grid for wider use (ref: W127/135816/17).

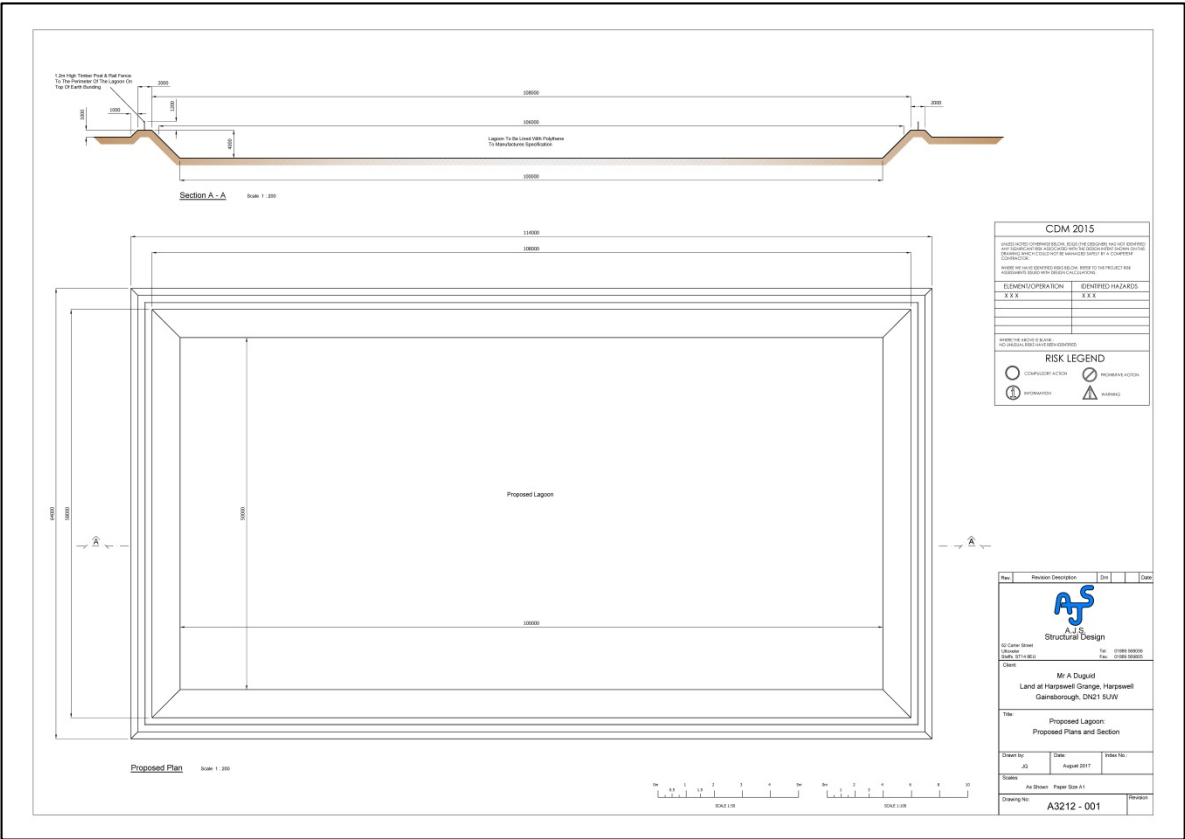
2. In addition to the AD Plant itself, West Lindsey District Council has also granted two separate planning permissions for off-site digestate storage lagoons (refs: 132412 and 134287). The lagoons are used to temporarily store digestate produced by the AD Plant until it is ready to use/spread on the surrounding farmland. The lagoons are connected via an underground pipeline which is used to pump the digestate from the AD Plant to the lagoons. The lagoons are located to the east, and some distance from, the AD Plant itself and are situated at Cliff Farm, Hemswell Cliff (Lagoon No.1) and Highfield Cliff Farm, Glentham (Lagoon No.2).
3. The applicant is now seeking planning permission to construct a third off-site digestate storage lagoon at land situated at Harpswell Grange, Harpswell (Lagoon No.3). Following discussions with the applicant and West Lindsey District Council it was agreed that this application should be handled by the Waste Planning Authority as the proposed lagoon should be considered a 'county matter' given its use is closely associated with, and ancillary to, the AD Plant at Hemswell Cliff. Details of the proposed lagoon are set out in this report.

The Application

4. Planning permission is sought by Adam Duguid (Agent: G J Perry Planning Consultant) for the construction of a lined and covered lagoon for the storage of anaerobic digester digestate at land at Harpswell Grange, Harpswell Lane, Harpswell, Gainsborough, Lincolnshire.
5. The applicant states that having carried out a review of the volumes of digestate produced by the AD Plant, the current storage capacities available and taking into account the restrictions governing the spreading of fertilisers and digestate on land within nitrate vulnerable zones, a need to create an additional digestate storage lagoon has been identified. Like the two existing off-site lagoons, the proposed lagoon would also be used to temporarily store digestate produced by the AD Plant prior to it being spread on surrounding farmland. At present the digestate produced by the AD Plant is spread on farmland that is owned by the applicant on either side of the A15. The applicant has however now secured provisional agreements with farmers located to the west of the AD Plant who have expressed an interest in using the digestate on their landholdings as an alternative to chemical fertilisers. The land that is potentially available for the spreading of the digestate is located on the western side of the B1398 and totals upwards of 450 hectares/1,170 acres. The applicant states that the construction of the lagoon at the proposal site would therefore be well placed to serve this area.
6. The proposed lagoon itself would be 100m long by 50m wide and 4m deep and have an approximate holding capacity of around 20-25,000m³. The lagoon would be largely constructed below existing ground level and

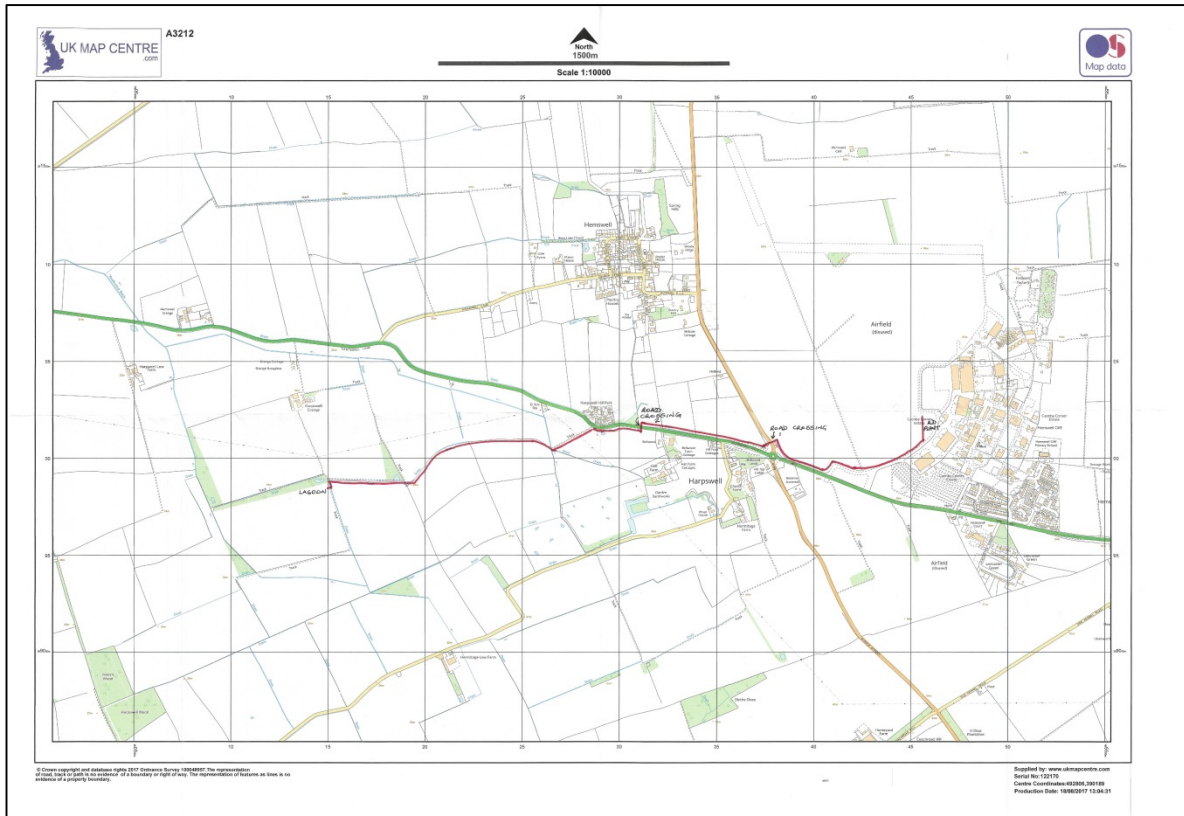
surrounded by a grassed earth bund that would be 2m wide and 1m high (relative to existing ground level). A 1.2m high tanalised timber post and rail fence would be erected along the top of the bund which would be fitted with rabbit fencing along its lower sections so as to restrict access.

7. The lagoon would be lined with a geotextile membrane and an agitator used to ensure that the digestate is aerated so as to not allow anaerobic conditions to establish during its storage. The lagoon would also be fitted with a floating cover that is coated with a micro porous substrate that helps to prevent the release of ammonia, hydrogen sulphide (H₂S), carbon dioxide (CO₂) and other volatile organic compounds (VOC's) which cause nuisance odours. The specification of the floating cover is the same as that which has been used at the other digestate storage lagoons approved by West Lindsey District Council.



8. The applicant proposes to pump digestate from the AD Plant to the new lagoon via a temporary over ground pipeline. An indicative route for the pipeline is included within the application and shows that this would cross a number of agricultural fields between the two sites. The temporary pipeline would comprise of a sealed, pressurised polypropylene pipe and given the distance, if necessary, additional portable pumps would be used in order to maintain pressure along the route. Where the pipeline is required to cross the public highway the applicant states that the temporary pipeline would be threaded through a steel pipe which would be installed underneath the road. The pumping of digestate between the two lagoons would take place

principally during the winter months (when the NVZ restrictions prevent spreading) and would typically take place over a 10 day period. The use of the pipeline would reduce the need to transport the digestate by road and also remove the number of vehicle movements associated with the delivery of fertilisers to local farms which would ordinarily take place if the digestate were not to be used.



9. Finally, given the location of the lagoon and its distance from sensitive receptors, the applicant submits that the lagoon would have a minimal impact on the appearance of the area and would not have any adverse impacts in terms of noise or odour. The proposal includes measures to minimise odours and an Odour Management Plan has been submitted and would be adopted as part of the development if granted.

Site and Surroundings

10. The application site covers an area of 0.75 hectares and lies within the open countryside approximately 1.5km west of Harpswell village. The proposed lagoon would be constructed in the corner of an existing arable field which is accessed via a farm track leading south from the A631 and to the south of the Harpswell Grange farm complex. There is a mature belt of trees/shrubs to the north of the site which screens the proposal site from views from Harpswell Grange. The nearest residential properties to the proposed lagoon are located at and around the Harpswell Grange complex (approx. 470m north) with other properties being at a greater distance to the east and north east.



11. The indicative route of the proposed pipeline extends approximately 3.5km and would be laid across agricultural land between the AD Plant and the lagoon. The pipeline would have to cross the public highway in two locations along this route (one being close to the roundabout junction between the A631 and B1398 and the other being the A631 itself). There are a number of residential properties close to the A631 which would lie in close proximity to the pipeline route which include properties at Harpswell Hill Park, Hill Foot Cottages, Bellwood Farm Cottage and Hall Farm.

Main Planning Considerations

National Guidance

12. National Planning Policy Framework (NPPF) (March 2012) sets out the Government's planning policies for England and is a material planning consideration in the determination of planning applications. In assessing and determining development proposals, Local Planning Authorities should apply the presumption in favour of sustainable development. The main policies/statements set out in the NPPF which are relevant to this proposal are as follows (summarised):

Paragraph 17 – Core Planning Principles

Paragraph 28 – The rural economy

Paragraph 109 – Protect and enhance valued landscapes

Paragraph 112 – Agricultural land
Paragraph 120 – Protection of natural environment and general amenity
Paragraphs 186 and 187 – Pre-application advice on the development and by processing the application efficiently
Paragraph 206 – Use of planning conditions
Paragraph 215 – Relevant policies in existing plans - Lincolnshire Minerals and Waste Local Plan: Core Strategy and Development Management Policies (2016) and Central Lincolnshire Local Plan (2017)

Local Plan Context

13. Lincolnshire Minerals & Waste Local Plan: Core Strategy & Development Management Policies (CSDMP) 2016 – the following policies are of relevance to this proposal:

Policy DM1 - Presumption in Favour of Sustainable Development
Policy DM3 - Quality of Life and Amenity
Policy DM6 - Impact on Landscape

14. Central Lincolnshire Local Plan (CLLP) 2017 – the following policies are of relevance to this proposal:

Policy LP1 - Presumption in Favour of Sustainable Development
Policy LP2 – Spatial Strategy and Settlement Hierarchy
Policy LP14 – Managing Water Resources and Flood Risk
Policy LP17 – Landscape, Townscape and Views
Policy LP26 – Design and Amenity
Policy LP55 – Development in the Countryside

Results of Consultation and Publicity

15. (a) Local County Council Member, Councillor Perraton-Williams – was notified of the application on 1 December 2017 but no comments/response had been received or offered by the time this report was prepared.
- (b) Harpwell Parish Council – has stated they have two primary concerns regarding the proposed development these being: (i) odour pollution that may be suffered by residential and business receptors, and; (ii) potential environmental pollution. Their comments are summarised as follows:
- (i) Odour pollution - the Parish Council disagrees with the applicant's assertion that treated digestate is not inherently odorous. In the past digestate from the AD Plant that has been spread on surrounding farmland and the Parish Council states that this has had a pungent and acrid smell which has led to complaints from local residents. Although an Odour Management Plan (OMP) has been submitted in support of the application the Parish Council consider that this has failed to identify the village of Harpwell as a key sensitive receptor despite

being 2km due east, and therefore downwind, of the proposed lagoon. Other potentially sensitive receptors such as residential properties and businesses at Hall Farm and Harpswell Hill Park (approx. 1.4km east-northeast) have also appeared not to be taken into consideration.

Doubts are also raised about the effectiveness of the proposed floating cover over the lagoon and its ability to minimise odour emissions. It is stated that an anchored cover might be more dependable.

Finally, whilst the OMP sets out details of the procedures to be adopted to monitor and record accidents and incidents of odour releases, the Parish Council comments that little or no detail is given on the nature of the response a complainant can expect and the remedial actions that would be taken.

(ii) Environmental pollution – concerns have been expressed about the use of an above ground, lay flat pipeline especially given the proposed distance it is to be used to pump digestate between the lagoon and the AD Plant (approx. 3.5km). The pipeline would stretch across large areas of a working landscape (including farm tracks and public rights of way) and therefore be at risk of damage. As multiple joints would be required this could increase the risk of leakages and this is of concern especially as the proposed route runs alongside an open drain for a distance of 875m.

Finally, whilst the use of rabbit proof fencing around the lagoon is welcomed this would not be strong enough to guarantee the safety of a full range of protected species and larger species such as deer.

- (c) Hemswell Cliff Parish Council (nearby Parish) – has stated that they support the comments/concerns raised by Harpswell Parish Council (summarised above) especially regarding concerns that the pipeline may split at any point.
- (d) Hemswell Parish Council (nearby Parish) - were consulted on 22 December 2017 but no comments or response had been received within the statutory consultation period or by the time this report was prepared.
- (e) Environment Agency (EA) – no objection but has recommended that an Informative be attached to any permission granted which advises the applicant of the need to ensure that the pipework to be used for the purpose of filling and distributing the digestate to and from the lagoon is of a robust standard in order to prevent environmental incidents. It is advised that flexible lay flat piping or coupling pipes should not be used for extended periods of time due to risk of failure and release of material to land or watercourses. Furthermore where roads or access ways are crossed, appropriate road crossings should be used to prevent pipework damage.

- (f) Environmental Health Officer – has expressed more general concerns about the piecemeal development of the AD Plant and the increased production and disposal of digestate in the local area. It is commented that the AD Plant has expanded over the years with subsequent applications for off-site digestate storage lagoons being granted and is concerned that there is no oversight as to where or what quantities of digestate are being stored and spread.

The EHO states that whilst they are responsible for air quality management, the lagoons and AD Plant are subject to control and monitoring by the County Council and Environment Agency and as such the EHO is not fully conversant with the number and type of complaints made. Indeed if complaints are made these are generally forwarded to the Environment Agency however it is understood that they do not investigate odour complaints relating to spreading activities.

The EHO therefore recommends that an Odour Management Plan be secured which identifies the landholdings to be used for spreading, the areas for storage and means of transport along with details of application rates regardless of the NVZ restrictions. It is also recommended that the proposed lagoon be covered and have an alarm mechanism fitted to warn of any leaks and that the Environment Agency be consulted around the specific and wider potential impacts of the spreading of digestate on the wider area.

- (g) Highway & Lead Local Flood Authority – has confirmed that the development is acceptable and so has no objection.

16. The application has been publicised by notices posted at the site and in the local press (Lincolnshire Echo on 7 December 2017) and letters of notification were sent to the nearest neighbouring residents.
17. Two representations have been received. One letter states that they welcome the development and that whilst they live closer to the proposed lagoon than most residents they see it as a benefit. It is commented that the digestate exists and has to go somewhere and so it makes sense to use it both locally and without the need to transport it by tanker on the roads in future. A second letter similarly states that they live close to one of the existing digestate storage lagoons (Lagoon No.2) and despite having initial concerns about its positioning close to their property they have had no issues in terms of nuisance by odour or as a result of the spreading operations.

District Council's Recommendations

18. West Lindsey District Council has responded and note that the proposed development is related to the AD Plant located approx. 3.5km to the northeast of the site and that digestate is planned to be pumped to the lagoon via a series of over ground pipes when required which will be a fairly infrequent affair. It is recommended that the opinion of the Environment

Agency will be key to determining this application and consideration should also be given to local residents when considering the proposed route of the overground pipes. It is added that it is hard to see how a system of temporary pipes can be readily used for pumping digestate across the public highway network.

Conclusions

19. This proposal seeks permission to construct a storage lagoon at the site which would be used to hold digestate produced by the AD Plant located at Hemswell Cliff. The digestate is a by-product of the AD Plant operations and would be fed to the proposed lagoon via an above ground pipeline where it would be temporarily stored until being spread on surrounding farmland as a fertilizer.

Location & Design

20. The proposed lagoon is to be constructed in the open countryside in the corner of an agricultural field located to the south of the Harpswell Grange farm complex. The lagoon would be used to store digestate that would be spread on the surrounding farmland and therefore its location has been purposefully chosen so as to be close to the proposed end use location. Given the purpose of the lagoon and its close proximity to the surrounding farmland, I am satisfied that its construction in this open countryside and rural location is justified and would not conflict with the principles and objectives of CLLP Policies LP2 and LP55.
21. The lagoon itself would be constructed partially below ground level and surrounded by earth bunds which would be grass seeded. Given the lagoons location it would not be visible from any public vantage points and a belt of trees which lie to the north of the site would help to screen views from the nearby farm complex. Consequently, given its location, size and design I am satisfied that it would not have an unacceptable adverse impact on the appearance or character of the local area as it would look no different to irrigation lagoons that are typical in rural landscapes. The proposed development would therefore not be in conflict with the objectives and principles of CLLP policies LP17 and LP26 and CSDMP policy DM6.

Pollution and Amenity

22. The applicant proposes that the digestate be pumped and transported to the lagoon via an above ground pipeline that would be laid across farmland between the AD Plant and the lagoon. Harpswell and Hemswell Cliff Parish Councils have both expressed concerns about the type of pipe to be used and the potential for damage and leakages resulting in pollution to the local environment.
23. In response to these concerns the applicant has stated that the pipeline would comprise of a sealed, pressurised polypropylene pipe and would only be in place during the winter months and for a period of around 10 days. An

indicative route for the pipeline has been included within the application and this is largely located away from properties and runs along field boundaries so as to minimise any risk of damage from farm vehicles or impacting on farming activities. Where the pipeline is required to cross the public highway the applicant has stated that the pipeline would pass underneath the road within a steel pipe and therefore would not be exposed or at risk of damage from traffic using these roads. No objection has been raised to this suggestion from the Highways Officer however no details have been provided of how this would be achieved. It is therefore recommended that a planning condition be imposed which requires details of these to be submitted for approval. Such a condition would ensure safe passage of the pipeline across the public highway and ensure the concerns expressed during consultation are addressed.

24. As well as concerns about the crossing points, the Parish Councils have also expressed concerns regarding potential pollution risks from the use of a flexible pipe. The Environment Agency has not objected to the principle of a flexible pipe being used to transfer the digestate so long as it is temporary and fit for purpose. The use of a pipeline is considered acceptable in principle, however, it is recommended that a condition be imposed on any permission granted which would require further details of the design and specification of the pipeline to be submitted for approval. Such a condition would ensure that the pipeline is of a suitable specification and design to reduce the risks of leakage and pollution and would ensure that the development would not pose an unacceptable pollution risk to the local environment and therefore accord with CLLP Policy LP14 and LP26.

Odour

25. Objections and concerns have been received about odour issues associated with this proposal, previous spreading activities and the existing AD Plant. Officers are aware that in the past there have been complaints about odours in the area and these have been blamed upon the operations of the AD Plant and in particular the spreading of the final digestate within the existing off-site lagoons. However, when these previous complaints have been investigated it has not been possible to attribute the odours experienced to the AD Plant operations or the spreading of the digestate itself. Instead when investigated the odours appeared to have been associated with the spreading activities of farm wastes/products on land by other farmers (e.g. slurries, chicken litter, etc) and not the digestate produced by AD Plant.
26. Whilst there is no direct evidence to therefore demonstrate that the spreading or storage of digestate has been the cause of odours in the past, it is accepted that if digestate is not stored correctly then this can result in adverse odours arising. Measures are therefore proposed to prevent this and include the use of a floating membrane cover and agitator within the lagoon. These measures are the same as those which have been used on the lagoons approved by West Lindsey District Council and similar to those which have been adopted on lagoons at other sites that the County Council has granted permission for. Such measures are proven and effective in

minimising odour emissions and therefore, subject to their implementation as part of this proposal, would minimise any potential nuisance or odour impacts associated with the storage of digestate within the lagoon.

27. With regard to the spreading activities, the EHO has suggested that controls should be put in place to identify and define the areas and rates at which digestate can be spread. Whilst these comments are noted, digestate from the AD Plant is treated to meet a recognised specification (PAS110) and as a result, for the purposes of planning, no longer constitutes a waste. Digestate that meets a recognised specification need not be subject to control and can therefore be used as a soil improver just like other products such as chemical fertilisers. The only restrictions governing the use and rate of application are therefore those which apply to the land as a result of it being within a Nitrate Vulnerable Zone and these will continue to apply. Given the area of farmland available within the locality there is no reason to believe the land is not capable of safely receiving the volume of digestate proposed and so not pose and risk of pollution to soils or water environment.

Final Conclusions

28. The proposed lagoon is appropriate in terms of its location, size, scale and design and potential impacts on the environment and local amenity as a result of its use and during the transferral and pumping of digestate from the AD Plant are not considered to be significant to warrant refusal. Planning conditions can be imposed to ensure the development is carried out in accordance with the details contained within the application and to ensure mitigation measures proposed are implemented and secure further details where they are needed.
29. Subject to such conditions, the proposed development would be acceptable and conforms with the relevant identified Development Plan policies as set out in this report.

RECOMMENDATIONS

That planning permission be granted subject to the following conditions:

Commencement

1. The development hereby permitted shall be commenced within three years of the date of this permission. Written notification of the date of commencement of development shall be sent to the Waste Planning Authority within seven days of commencement.

Reason: To comply with Section 91 of the Town and Country Planning Act 1990.

Approved Documents & Plans

2. The development hereby permitted shall only be carried out in accordance with the following documents and plans unless otherwise modified by the conditions attached to this planning permission or details subsequently approved pursuant to those conditions. The approved documents and plans are as follows:
 - Planning application form, Access & Design Statement, Odour Management Plan (prepared by Enzygo) and details relating to the proposed floating lagoon cover and lining/membrane (by Aerocover and Juta) (all date stamped received 20 October 2017)
 - Drawing No. A3212-001 – Proposed Plans and Sections
 - Drawing No. A3212-002 – Site Location Plan
 - Drawing No. A3212-003 – Site Plan

Reason: To define the permission and to ensure the development is implemented in all respects in accordance with the approved details.

Pre-development/commencement conditions

3. No development shall take place until full specification details of the type of temporary pipeline to be used to transfer digestate to the lagoon have first been submitted and approved in writing by the Waste Planning Authority. The pipeline employed for the transferal of all digestate shall thereafter be in accordance with the approved details.
4. No development shall take place until a scheme and details relating to the proposed public highway crossing points have first been submitted and approved in writing by the Waste Planning Authority. The scheme shall include, but not be limited to, information which confirms the exact location of the crossing points, the means by which the temporary pipeline would pass beneath the public highway and details of any method and specification of construction. The crossing points shall thereafter be constructed in accordance with the approved details and shall be employed, along with the approved temporary pipeline (as approved by Condition 3 above) when transferring all digestate to the lagoon.
5. Prior to the lagoon hereby permitted being brought into use details of the additional pumping engines to be used in association with the pipeline shall be submitted to and agreed in writing by the Waste Planning Authority. Details shall include their position and acoustic performance and any noise mitigation measures. The pumps shall be constructed in accordance with the approved details and maintained as such thereafter.

Reasons: To ensure that the pipeline used for the transferal of digestate is fit for purpose; to minimise the potential for noise nuisance, and; to ensure the integrity of the public highway is not jeopardised by the proposed crossing points.

Permitted Use

6. The lagoon hereby approved shall only be used for the storage of digestate generated from the anaerobic digestion plant at Hemswell Cliff and for no other material or from no other source.

Reason: To ensure the use of the lagoon is restricted to that for the storage of treated digestate only and to reduce the risk of odours arising from the storage or liquids or wastes that have not been assessed.

7. The lagoon will be lined and have a floating cover installed in accordance with the details contained within the application prior to the digestate lagoon being brought into use and will remain in place thereafter.

Reason: To reduce the potential for odours and protect residential amenity.

Appendix

These are listed below and attached at the back of the report	
Appendix A	Committee Plan

Background Papers

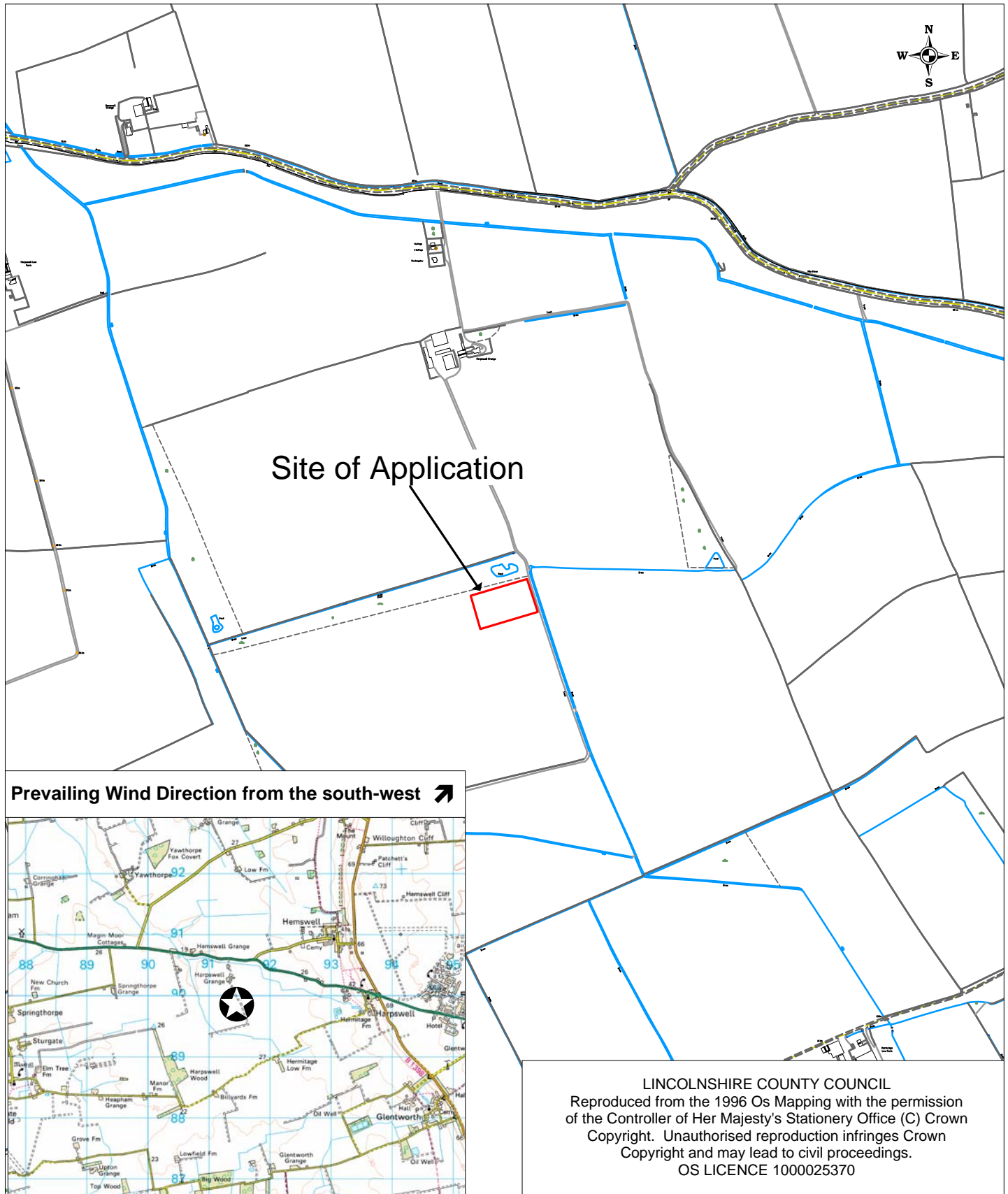
The following background papers as defined in the Local Government Act 1972 were relied upon in the writing of this report.

Document title	Where the document can be viewed
Planning Application File 137107	Lincolnshire County Council, Planning, Witham Park House, Waterside South, Lincoln
National Planning Policy Framework (2012)	The Government's website www.gov.uk
Central Lincolnshire Local Plan (2017)	
Lincolnshire Minerals & Waste Local Plan: Core Strategy & Development Management Policies (2016)	

This report was written by Marc Willis, who can be contacted on 01522 782070 or dev_planningsupport@lincolnshire.gov.uk

LINCOLNSHIRE COUNTY COUNCIL

PLANNING AND REGULATION COMMITTEE 5 MARCH 2018



Location:
Harpswell Grange
Harpswell Lane
Harpswell

Application No: 137107

Scale: 1:10 000

Description:

Construction of a lined and covered lagoon for the
storage of anaerobic digester digestate

This page is intentionally left blank