



Norfolk County Council

Town and Country Planning Act 1990

PINS Ref: APP/L2630/W/23/3324060
LPA Ref: 2022/1108

Summary Proof of Evidence of Jonathan Hanner

**Planning Appeal by
Deal Farm Biogas Limited**

Construction of an Anaerobic Digestion Facility (Part Retrospective), Comprising: 1 № Digester Tank and 1 № Secondary Digester/Digestate Storage Tank, Silage Clamps, Liquid and Dry Feed System; Digestate Separation, Handling and Pasteurization, Biogas Upgrading and Mains Gas Grid Connection; Carbon Capture, CHP, Agricultural Building; Office Buildings, Weighbridge, 2 № Covered Digestate Storage Lagoons, and Associated Plant, Vehicular Accesses, Roads and Landscaping (Including Earth Bunds). Revised Application Following Withdrawn Planning Application 2021/2788

**Deal Farm, Kenninghall Road, Bressingham,
Norfolk, IP22 2HG**

1.0 **Introduction**

1.1 My name is Jon Hanner, I have over 20 years' experience in highway development management; highway design; highway maintenance; and traffic management. I currently hold the position of both Developer Services Team Manager and Principal Engineer (Developer Services).

2.0 **Scope**

2.1 My evidence addresses the highway related reasons for refusal: -

1. The highway network serving the site has poor alignment, restricted width, lack of passing provision, substandard construction, and restricted forward visibility.
2. Insufficient information to demonstrate the development will not prejudice highway safety and/or functionality.

3.0 **Site and Highway Network**

3.1 The Appeal Site sits adjacent to, and within, the wider Deal Farm site which is an existing operational livestock and arable farm.

3.2 The Appeal Site is not well related to the major road network as it is positioned remotely from it and is linked to it by a series of single-track rural roads. The major roads comprise the A1066, which is approximately 3km to the south (as the crow flies) and the B1077 which is some 2km to 3km away (as the crow flies) and runs to the east and north.

3.3 There are several routes linking to the major road network, but all are narrow; single-track; rural lanes; with either no or very limited passing provision and no designated pedestrian facilities. None of the routes can accommodate the Appellant's traffic, even with the mitigation proposed.

3.4 The deficiencies outlined herein are equally applicable whichever route is chosen.

4.0 **Relevant Planning Policy and History**

4.1 The *NPPF* requires development to ensure safe and suitable access and that any significant impacts on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated.

4.2 Additionally, development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

4.3 The LPA and the CPA Policies contain similar requirements.

4.4 **Planning Application 2015/0595** - Permission granted for an AD plant, subject to restrictions. The Local Highway Authority (LHA) did not object because (i) the Applicants nearby AD plant would be revoked; (ii) feedstock limited to 22,360t per annum; (iii) feedstock would be farming products, 60% from the applicant's farm and 40% elsewhere within 5km; (iv) pipelines would pump liquid digestate to fields, claimed to reduce associated vehicles by 85%.

4.5 **Planning Application 2021/2788** - Part retrospective - would vary onsite layout and double the feedstock throughput. The LHA raised concerns (i) remote from major roads; (ii) significant increase in feedstock resulting in more traffic; (iii) Catchment area for feedstock and digestate increased; (iv) all routes to/from the site unsuitable for the extra vehicles to navigate.

4.6 **Planning Application 2022/1108** - Proposals amended seeking to claim (i) reduced feedstock close to the 2015 permission; (ii) feedstock and digestate would all be within 5km; (iii) a decrease in vehicles; (iv) one lagoon deleted, but two others remain. The LHA maintained its concerns.

4.7 **Planning Application 2023/0087** - No significant changes. Additional information and comment, but still lacks meaningful detail. The Application remains undetermined.

5.0 Fall Back Position - 2015 Application

5.1 The starting point for a highway assessment is to establish a baseline against which to measure traffic growth. The LPA advised the 2015 Application had expired, as the works differed too far from the consent.

5.2 The Appellant claims their proposals are acceptable without fall-back and acknowledge they are not pursing a fall-back argument.

5.3 Accordingly, the highway baseline is set against a site without an existing AD plant permission in place.

6.0 Highway concerns

6.1 Both parties agree the issues to be addressed relate to adequacy of the highway network to serve the development and adequacy of the transport information submitted.

6.2 The LHA's main areas of concern relate to:

- (i) the quality of and conflicting information provided by the Appellant in relation to the impact of its proposals.
- (ii) the suitability of the **highway road network**.
- (iii) the **traffic generation** outlined for both the existing & proposed scenarios.
- (iv) the offsite **highway mitigation** proposed by the Appellant.
- (v) **the 'local' catchment** serving the site.
- (vi) the capacity of **throughput** (feedstock) material; and the availability and effectiveness of measures to control and enforce this.

7.0 Inadequacy of and contradictory nature of information provided by the Appellant

- 7.1 In support of the Appeal proposals the Appellant has provided a series of assessments including a Transport Statement (TS - Plandescil June 2022 (CD1.32)), Transport Statement Addendum (TSA - Royal HaskoningDHV October 2022 (CD2.7)), Transport Statement (TS - Royal HaskoningDHV June 2023 CD5.9 and 5.10) and a Transport Skeleton Proof (Royal HaskoningDHV December 2023 (CD5.15)).
- 7.2 To date, the information provided by the Appellant has been (a) inadequate in that it is based upon assertion with little hard evidence to back it up and, in any event (b) contradictory with little explanation.
- 7.3 Whilst within the assessments outlined in the TS (CD1.32) and TSA (CD2.7) the Appellant claimed that the AD plant will reduce traffic levels contrasting information was submitted. The LHA's concerns include overestimate of existing traffic; under representation of proposed traffic; general lack of evidence. Other concerns relate to assumptions applied; reliability of data; certainty over feedstock supply; and digestate use.
- 7.4 An updated TS (CD5.9 and CD5.10) was submitted with this Appeal, but it largely mirrors previous information without moving the case forward.
- 7.5 The Appellant's Skeleton Proof (CD5.15) appears to (i) acknowledge significantly more digestate will be produced and (ii) the AD plant would lead to 'new' traffic. Nevertheless, it is claiming that even if all their traffic was considered 'new', the surrounding roads would still be adequate, which I dispute.

8.0 Highway Network

- 8.1 Guidance within *Manual for Streets (MfS)* indicates a minimum width of 4.8m is needed for a large vehicle and car to pass safely; 5.5m for heavy goods vehicles; whilst below 4m the carriageway is too narrow even for two cars.
- 8.2 The Appeal Site gains access onto Common Road, which is typically only 3.1m wide. Several routes link to the major road network, but the running surface on all is predominantly restricted to between 2.8m and 4m, considerably short of *MfS* recommendations even to allow two cars to pass. Accordingly, safety concerns also apply to increases in cars and LGVs as well as HGVs and large agricultural vehicles.
- 8.3 A material increase in vehicles would also pose a safety concern for pedestrians and cyclists who need to use the carriageway and may be unable to avoid approaching vehicles.
- 8.4 Due to their limited width and the fact they are unable to cater for large vehicles, all roads serving the site are subject to a 7.5T weight restriction. Several are designated Quiet Lanes, intended for walkers, cyclists, horse riders and other vulnerable users.

- 8.5 Opportunities to pass on these routes are limited with only a few informal passing places, private accesses, and field gateways present. Having evolved due to vehicles overrunning verges, many informal passing places are rutted and uneven. Vehicles using them carry loose material onto the carriageway, represents a skidding hazard to cyclists and motorcycles.
- 8.6 Whilst there are no recorded personal injury accidents near the site access, there have been four on the connecting links. One was serious, involving a cyclist who fell whilst passing an HGV due to material deposited on the carriageway.
- 8.7 Areas of verge erosion are a strong indicator the route is already struggling to cope with the current level of traffic.
- 8.8 The areas utilised by vehicles to pass are not typically long enough to contain more than one large vehicle. Drivers following larger vehicles need to anticipate, accurately, the arrival of an opposing vehicle to avoid reversing the previous stretch. This is difficult and hazardous for some and for drivers of some large vehicles, and particularly in poor light, dusk, and darkness. Reversing movements on these narrow lanes with restricted forward visibility are a safety hazard increasing the risk of both rear end shunts and cars colliding as they attempt to pass in narrow areas.

9.0 **Traffic Assessment**

- 9.1 The Appellant has submitted several documents and updates which are not consistent. The LHA does not accept the TS (CD1.32), TSA (CD2.7) and TS (CD 5.9 & 5.10) have correctly set out the traffic generation of either the existing farming operation or the proposed AD facility. In particular, the LHA does not accept the proposals will reduce existing traffic as claimed and the LHA's concerns are still not addressed.
- 9.2 The LHA has identified several issues in relation to the Appellant's assessment which include an overestimate of the existing traffic movements, an under representation of the likely proposed movements generated by the AD facility, as well as a lack of evidence to substantiate their assessment.
- 9.3 The Appellant recently updated its position (Transport Skeleton Proof (CD5.15)) and outlined that whilst the proposals would lead to an increase in traffic of 13 cars/LGVs and 2 HGVs per day however, "*the network can accommodate the new trips associated with the AD plant in operational and road safety terms*".
- 9.4 Given the divergent information which has been presented by the Appellant, I consider that it is sensible for me to address the assessment of the traffic generation of the proposal on three parts.
 - 1) **Scenario where the 'new' traffic generation in relation to HCVs, cars and vans only**

9.5 It is outlined (Transport Skeleton Proof (CD5.15)) that there would be some 3,413 new trips per annum in association with the AD plant (15 trips per day). These figures have not been fully explained/justified. However, I set out in my that this level of traffic generation would result in an unacceptable highway safety impact. Nonetheless, the LHA does not accept that the traffic generation of the proposal would simply be the 3,413 trips claimed. Rather, the traffic generation of the proposal should include all movements relating to feedstock and digestate.

2) Scenario where all traffic is considered to be 'new'

9.6 The LHA considers that all AD traffic movements should be considered as additional (including feedstock and digestate) and 'new' to the highway network. This is due to (a) the discrepancies and doubts within the assessment and (b) the fact that the Appeal is considered a wholly new use (with it accepted by all parties there is no 2015 fallback) with no control over the wider farming enterprise and that therefore the offset movements would in time be replaced.

9.7 If this were the case, based upon the information provided by the Appellant within the Transport Skeleton Proof (December 2023 (CD5.15)), the LHA estimate that this would lead to 12,287 vehicle movements per annum, which would represent 47 movements per day based on 260 working days per annum. Of this figure, 9,270 (75%) movements would be via large agricultural vehicles or HGVs.

9.8 Alternatively if the figures produced by the Council's expert in anaerobic digestion, Dr Gornall, are used. Then the transport movements (based upon the most recent feedstock figures and payloads provided by the Appellant) would be 11,616 vehicle movements per annum, which would represent 45 movements per day based on 260 working days per annum. Of this figure, 8,598 (74%) movements would be via large agricultural vehicles or HGVs.

3) Scenario where some of the feedstock/digestate trips could be considered as replacement or diverted trips

9.9 Notwithstanding the above, the LHA has sought to engage with the figures provided by the Appellant, and I have considered a scenario where **some** of the feedstock/digestate trips could be considered as replacement or diverted trips.

9.10 The TSA (CD2.7) concludes that as a worst-case scenario where all agricultural movements (feedstock and digestate) would be replacement/diverted within the assessment, however this view is not shared by the LHA.

9.11 It is considered that unreasonable assumptions mean that even if the Appellant's figures are to be taken as a starting point there would be a significant increase in HGV, large agricultural traffic and other traffic on the road network in the vicinity of Deal Farm. Even if the diversion of existing stored crops grown at Deal Farm and manure into the AD plant could be guaranteed with no further use of the existing or new stores, the figures provided by the Appellant to justify both the existing traffic movements which are said to be 'replaced' or 'diverted' do not stand up to scrutiny.

9.12 It is the LHA's view that, the 'existing' volume of traffic that would be removed/replaced is in fact lower than the Appellant's suggested figure due to unsubstantiated assumptions made in relation to the 'double handling' of manure, lower levels of manure production than suggested and the straw importation and exportation activities.

9.13 Rather than the suggested figure of 5,128 (in and out) movements per annum, it is considered that a reduction be applied in relation to manure (972) and to straw (870), which would reduce this figure to 3,286 movements per annum. A further reduction should also be applied due to the fact that less manure is produced than previously suggested.

9.14 In addition, that the traffic generation figure in association with the AD plant proposals would be considerably higher than that outlined. It is considered that by applying a more realistic payload to the vehicles used for the importation of third-party manure, the removal of the allowance for backhauling of solid digestate and a further allowance for all liquid digestate to be transported by road this would increase the figure shown in table from 4,142 (by 1,354) to 5,496 movements per annum. These figures would be significantly increased if the increase digestate tonnages and reduced payloads outlined in Skeleton Proof Appendices (CD5.15) or Dr Gornal's assessment are also applied.

9.15 It would then be necessary to add to this figure the new information relating to the operation of the AD facility provided in the recent Royal HaskoningDHV letter (CD5.15) (i.e. the 3,018 staff, visitor and LGV vehicles per annum).

9.16 In the absence of any updated assessment, and on the basis of the information submitted, I have tried to provide an estimate of the likely overall traffic generation assuming that it could be guaranteed that traffic could be diverted/replaced by the AD plant.

9.17 The LHA estimate that there would be 12,287 traffic movements per annum associated with the AD plant, based upon the increased digestate production and reduced payloads outlined within the Skeleton Proof (CD5.15). If the figure of 3,286, which is the 'existing' movements suggested by the LHA, were subtracted from 12,287, then this would still lead to in the region of 9,000 new vehicle movements generated per annum.

- 9.18 Even if the suggested lower figure of 5,128, which the Appellant suggest would be the existing movements diverted, were subtracted from 12,287 this would still lead to in the region of 7,000 additional, movements per annum which would not be acceptable.
- 9.19 It is accepted that above calculations are an estimate however they are based upon the information provided to date. It is for the Appellant to demonstrate a robust assessment of the traffic impact, which as outlined previously they have not achieved.

Summary Traffic Assessment

- 9.20 As such the LHA considers that there will be a material increase in traffic. Whether this is (a) the latest figure of 3,414 provided by the Appellant (with all other traffic being considered as replacement movements), (b) a figure which includes all movements associated with the AD facility as new movements (12,287 or 11,616), or (c) a figure which counts some movements as replacement movements (7,000 - 9,000), the impact is unacceptable from a highway safety perspective.
- 9.21 This issue is compounded further by the nature of the Application, given that the importation of feedstock is a very intensive process involving the transportation of the harvested crop over a concentrated period each year.
- 9.22 During that time, the vehicle movements, which are usually by tractor and trailer, would continue at high frequency over a very long working day, extending from early morning until late evening, and into periods of dusk and darkness. The proposals would result in all of these movements being concentrated on the network in the immediate vicinity of the site which is considered detrimental to highway safety.
- 9.23 Given the highway safety issues, identified in relation to any material increase in traffic on the local network, this is a cause of significant safety concern to the LHA. In the main, the road network surrounding the site is not wide enough to allow two cars to pass and the safety concerns relate to vehicles passing other vehicles (whether car, LGV or HGV) and also the potential for conflict between vehicles and pedestrians/cyclists and further verge overrun depositing material onto the carriageway.

10.0 Proposed Highway Mitigation

- 10.1 The Appellant has identified an on-highway haul route and associated improvements linking the Appeal Site with the A1066 to the south only for HCVs.
- 10.2 The route is considered wholly inadequate to ensure the safe use of the route. The entire route is typically single track (2.4m to 3.7m wide), not even wide enough for two cars to pass, flanked by narrow/banked verges and ditches, sinuous in nature and designated as a Quiet Lane.

- 10.3 Whilst improvements to the route are proposed, the drawings submitted are lacking in detail and have not addressed the issues raised within the RSA. As with any mitigation, the Appellant would need demonstrate that there is a reasonable expectation that what they are proposing can be safely provided on the ground and if it could be provided within land under the Appellants' control/or within the highway. This has not been demonstrated.
- 10.4 Notwithstanding the above, even if the haul route were acceptable, given the previous routes proposed to/from the site and the obvious links to the north, east and west the LHA strongly question if these routes would be adhered to and how its use would be practically enforced by the LPA and in the LHA's view would not pass the tests set out within the *NPPF*.
- 10.5 Further, it should be noted that the suggested SDP and haul route condition, along with the proposed conditions 2 and 3, are in relation to and would not restrict the movement of agricultural vehicles. Given the nature of the proposals, and as demonstrated by the Appellant, agricultural vehicles will form the majority of the likely traffic generated by the proposals.
- 10.6 Therefore, even if the conditions as suggested could be enforced they would not control the volume or routes used by other vehicles or provide mitigation on other routes which would likely experience a material increase in other vehicle movements. It should be noted that in terms of their size, agricultural vehicles generate the same highway safety concern with regard to the increase in use on the network as HGVs/HCVs. Further, the safety concern does not merely relate to large vehicles but also relates to cars meeting and being unable to pass each other.

11.0 'Local' Catchment Serving the AD Plant

- 11.1 The Appellant indicates both that the feedstock inputted into the AD plant will be sourced locally and that the digestate produced would be accepted by local farms.
- 11.2 The Appellant has outlined that they would be prepared to enter into a S106 agreement which would ensure that the muck and the feedstock is supplied by Mr Aves and Partners with the ability for the LPA to view records to demonstrate that this is the case.
- 11.3 A draft S106 has recently been submitted for consideration however the LHA continues to have concerns regarding how an agreement of this nature could practically be enforced by the LPA.
- 11.4 If such a legal agreement is not practically enforceable, the LHA's significant concern (as outlined in Section 9 above) remains that there is the possibility that a significant level of (if not all) feedstock would be sourced (and digestate transported) further afield than the 5km 'local' catchment. This is another reason why all traffic associated with the AD plant would be 'new' and in addition to the existing traffic on the network, as the landowners permitted operations (and associated traffic) could continue.

12.0 Throughput of Feedstock Material

- 12.1 In relation to Application reference 2021/2788, which was subsequently withdrawn, the Appellant indicated the plant was capable of processing 46,750 tonnes of material (on-waste 56%/farm waste 44%).
- 12.2 The current Application proposes that the same size AD plant but proposes restricting it to processing an annual feedstock of 23,950 tonnes per annum with the restriction secured by condition.
- 12.3 The LPA share the LHA's concern regarding the enforceability of such a condition. Furthermore, the LPA have commissioned an independent assessment from AD Ingenuity LLP. This assessment concludes that the capacity of the plant is far in excess 23,950 tonnes.
- 12.4 It is the view of the LHA that, in this instance, the suggested condition to limit throughput to 23,950 tonnes per annum would fail the tests set out in the NPPF in these paragraphs, due to the concerns outlined above.
- 12.5 Given the above concerns regarding the enforceability of conditions and the S106 the LHA concerns remain that the throughput limit could be exceeded given the obvious available capacity on the site which would lead to significant levels of further traffic to/from the site on the local network.

13.0 Difference in Traffic Between the 2015 and Current Appeals

- 13.1 It is acknowledged that planning permission was previously secured at this site in 2015 for the construction of an AD plant and the LHA did not recommend refusal.
- 13.2 The current Appeal however, and what has been built, has significantly more capacity than previously proposed and the proposals have been the subject of significantly more scrutiny than the 2015 Application. Further the 2015 permission ensured that other AD facilities would not be built out. This has led to the identification of the concerns outlined within this Proof.
- 13.3 Accordingly, from a highways perspective this proposal should be considered on its own merits and on the basis of the evidence which now exists.

14.0 Conclusions

- 14.1 All routes to/from the site are via the single-track rural road network and, in the main, the carriageway is not wide enough for two vehicles to pass except at the existing informal 'passing places'.
- 14.2 Whilst it is acknowledged that there have been no trends of recorded accidents this does not act as justification for the development. The LHA look to ensure accidents do not occur, which is precisely why development of this nature accessed via a substandard highway network should be resisted.

14.3 Significant concerns remain both in relation to the suggested limit in capacity of the AD plant (which in turn controls traffic generation) and the suggestion that the supply can be guaranteed in perpetuity from the immediate local catchment. Without such assurances the proposals would generate significant 'new' traffic movements on the network in addition to current traffic.

14.4 Furthermore, it is the LHA's view that submitted assessment is flawed, and the proposals would significantly increase and intensify HGV/agricultural movements on a focused part of the rural network which by virtue of their widths and restricted visibility are not suitable.

14.5 Whilst a haul route is proposed it is not considered to be appropriate or likely to be sufficiently adhered to, nor will it be used by the large agricultural movements or cars and LGVs generated by the AD plant.

14.6 It is of course acknowledged that in this agricultural area, some movement of crops in large vehicles - tractor/trailer combinations, tankers, or other HGVs - is 'normal' and to be expected by other road users. Nevertheless, the traffic movements generated by this proposal would be problematic for the following reasons: -

- They would be very frequent and concentrated on this particular stretch of road over a concentrated time period each year.
- During that time the movements would continue at high frequency over a very long working day, extending from early morning until late evening, and into periods of dusk and darkness.
- The existing mix of traffic on the road includes domestic cars, agricultural vehicles, tankers and other HGVs and conflict would occur with the Applicant's traffic.
- In relation to the narrow sections of the routes - the only option would be to reverse or overrun the highway verge (thus depositing debris onto the road).

14.7 In conclusion, it is the LHA's view that if permitted, the proposed development would generate additional HGV and agricultural type traffic movements, as well as cars and LGVs, onto a substandard and narrow section of the rural highway network which would give rise to conditions detrimental to highway safety and the convenience of other highway users, particularly pedestrians, cyclists and those with wheelchairs and children's buggies. As such the proposal would be contrary to Policy DM 3.11 of the *South Norfolk Local Plan, Development Management Policies Document, Adopted Version October 2015*, and the NPPF Paragraphs 114 and 115.

14.8 Should the proposals be considered a waste application, then the proposals are also considered to be contrary to Policies CS6, CS7, CS15 and DM10 of *Norfolk Minerals and Waste Core Strategy and Development Management Policies DPD (2011)*. Further, the proposal is not well related to the major road network which is relevant to the application of Policy CS5.

- 14.9 Paragraph 114 b) of the *NPPF* which requires development to demonstrate that *“safe and suitable access to the site can be achieved for all users”*, which for the reasons detailed above is not the case here.
- 14.10 In this instance the proposed development would lead to significant highway safety issues and therefore would have an unacceptable impact upon highway safety contrary to Paragraph 115 of the *NPPF*.