

SECTION C
MINERALS AND WASTE DISPOSAL

Background Documents - the deposited documents; views and representations received as referred to in the reports and included in the development proposals dossier for each case; and also as might be additionally indicated.

Item C1

Erection of a 499kw anaerobic digestion facility to process farm yard manure and slurry produced on site, along with a proportion of crops which are grown on the farm, and 832 tonnes of imported chicken manure. The development comprises two 18m diameter tanks connected by a pump room, each topped with a gas dome, one feeder and a Combined Heat and Power unit at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent, TN17 4LG – TW/16/5690 (KCC/TW/0135/2016)

A report by Head of Planning Applications Group to Planning Applications Committee on 18 January 2017.

Application by Mr G Reynolds for the erection of a 499kw anaerobic digestion facility to process farm yard manure and slurry which is produced on site, along with a proportion of crops which are grown on the farm, and 832 tonnes of imported chicken manure. The development comprises two 18m diameter tanks connected by a pump room, each topped with a gas dome, one feeder and a combined heat and power unit at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent, TN17 4LG – TW/16/5690 (KCC/TW/0135/2016)

Recommendation: Permission be granted, subject to conditions.

Local Member: Mr Sean Holden

Classification: Unrestricted

Site

1. The application site of some 0.39 hectares is 1.9 miles (3km) south of Cranbrook and approximately 1.5 miles (2.5km) west of the village of Benenden within the High Weald Area of Outstanding Natural Beauty (AONB). The area surrounding the site generally consists of a mixture of open countryside and woodland. The site lies within an undulating area immediately to the north western side of the existing Forest Farm complex which houses a heifer rearing unit with some buildings being used in association with the applicant's arable farming activities. The site itself lies entirely within a plot of improved grassland which is subject to all year round grazing by cattle. With the exception of its AONB status the site is not subject to any other landscape or ecological designations although an area of Ancient Woodland lies approximately 11m from the northern corner of the site.
2. The site is afforded a high degree of visual screening by existing buildings and also by virtue of the site topography and field boundary hedgerow and woodland. In addition it is proposed that all excavated materials are used to form a 2m high bund

TW/16/5690 - Erection of a 499kw anaerobic digestion facility at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent.

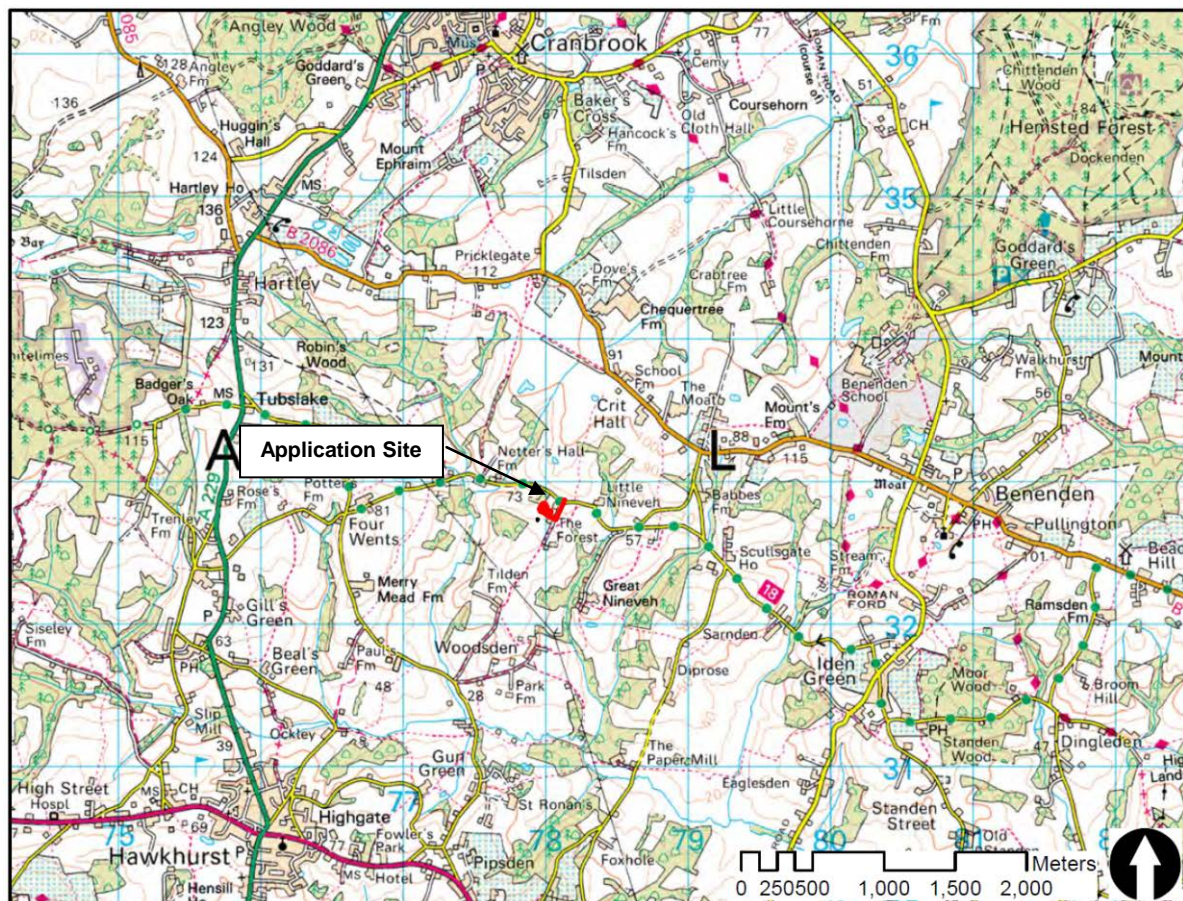
some 50m to the western side of the site layout which would serve as a protective barrier in the unlikely event of a spillage from the Anaerobic Digester (AD). The bund would be planted with a wild flower seed mix and the applicant considers that it would help serve to screen potential visual and noise impacts to the west. Additional screening would be added to the northern boundary of Forest Farm at Nineveh Lane, this would screen any views of the proposed development site from Nineveh Lane.

3. The applicant has discussed the proposal with the Environment Agency (EA) who have advised that in order to comply with a Standard Rules Environment Permit, amongst other matters the site must not be within 200 metres of a sensitive receptor unless there is a stack height greater than 7 metre (or "3m effective height"). The applicant has proposed that there be two stacks measuring 7.8 metres each.

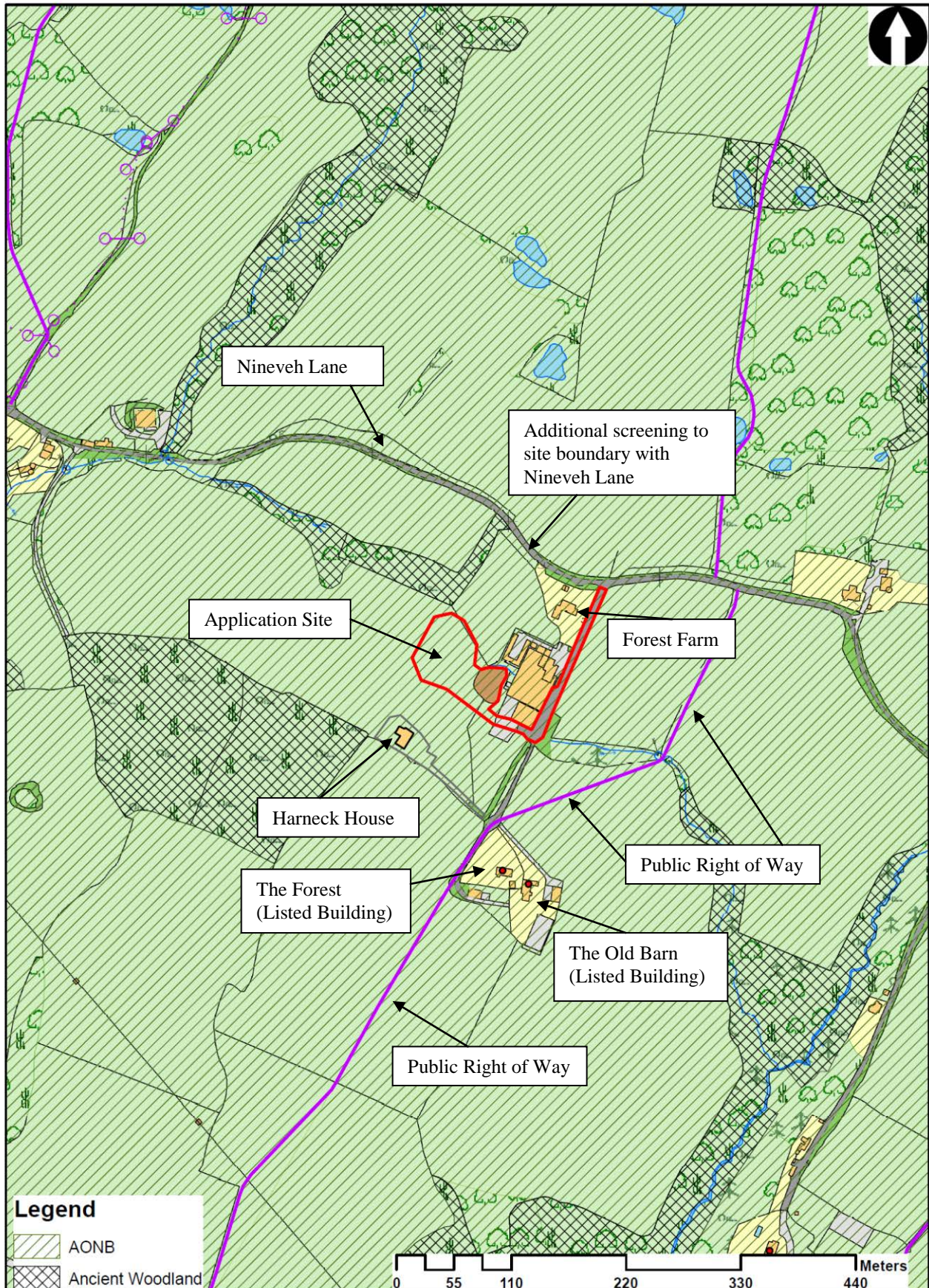
Recent Site History

4. This application is the third in a series of similar applications for the site at Forest Farm. The first was incorrectly submitted to Tunbridge Wells Borough Council in March 2015 and subsequently withdrawn in June 2015. The second was submitted to Kent County Council in October 2015, this application was broadly the same as the current application but with a higher throughput of 16,552 tonnes per annum compared to 12,450 tonnes now. A Members site visit for this application was undertaken on 10 February 2016; therefore some Members will be familiar with the proposed development site. This application was withdrawn in February 2016 following a decision by the applicant to utilise different AD technology than that previously proposed.

Location Plan

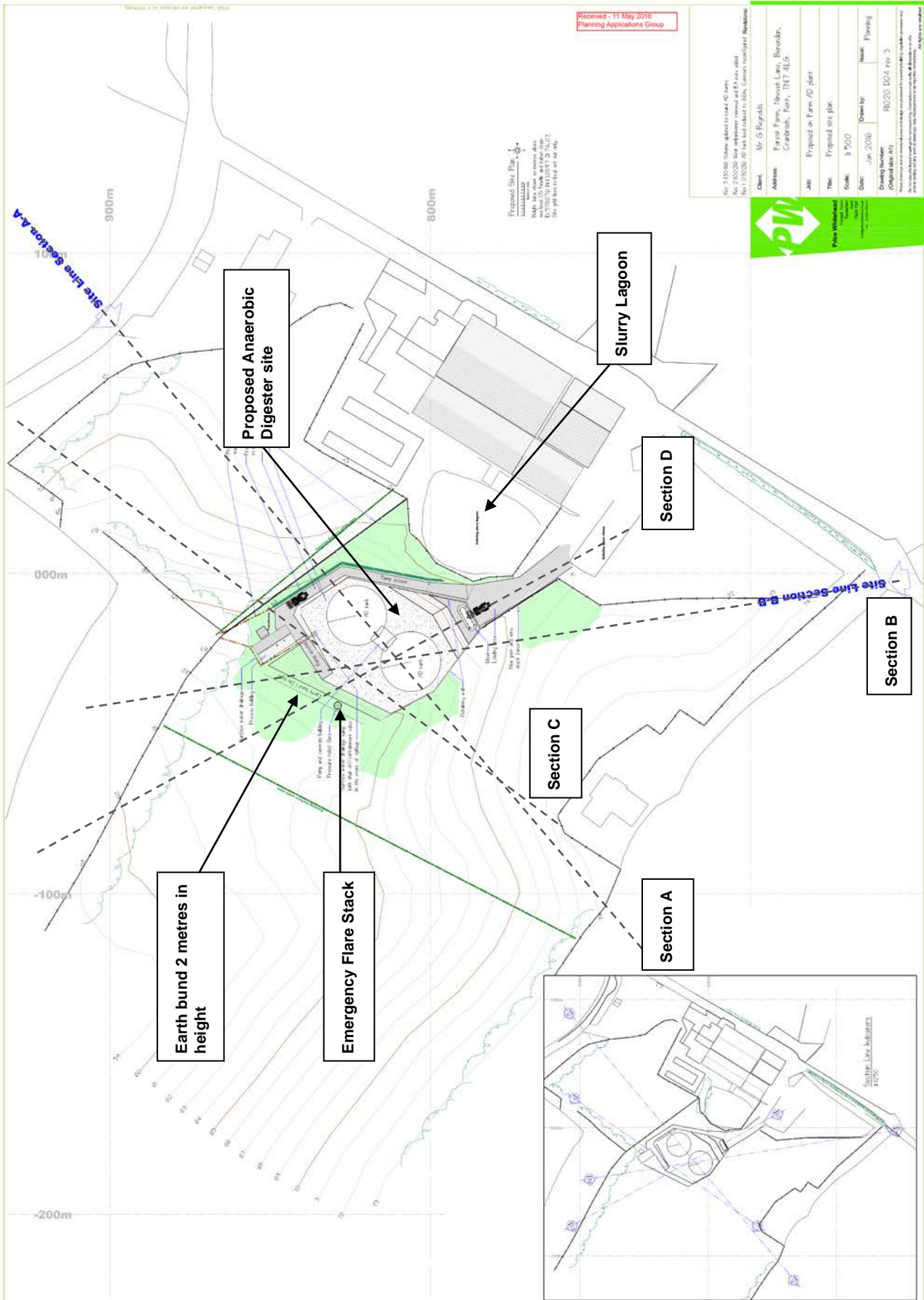


Site Location Plan



TW/16/5690 - Erection of a 499kw anaerobic digestion facility at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent.

Site Layout



TW/16/5690 - Erection of a 499kw anaerobic digestion facility at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent.

Proposed Elevations



TW/16/5690 - Erection of a 499kw anaerobic digestion facility at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent.

Proposed Process Building Elevations

Received - 11 May 2016
Planning Applications Group

M1020 Process Bld Rev 2.dwg

Rev 3 15/04/2016 Building reduced in size following change to road tank system

Rev 2 10/02/2016 Enhancement to West of removal

Rev 1 04/02/2016 Floor plan added. Elevations modified to reflect smaller size of lid and embankment. Revisions:

Client:	Mr G Reynolds
Address:	Forest Farm, Benenden, Kent, TN7 4LG
Job:	AD plant
Title:	Process Building Proposed Elevations
Scale:	1:100
Date:	September 2015
Issue:	Planning
Drawing Number:	RO20 D02 Rev 3
(Original size: A2)	

These drawings and all documents show and design are produced for the use of the client and are not to be used for any other purpose. Do not use these drawings for construction. Contractors must verify all dimensions and details on site. Any discrepancies to be reported immediately. All rights are retained.

Proposal

5. The applicants are seeking planning permission for an Anaerobic Digester (AD) to be sited on their main farm site at Forest Farm, Benenden. The facility is intended to process up to 12,450 tonnes per annum comprising of cattle farm yard manure (2500 tonnes) and slurry (3000 tonnes) from the existing heifer rearing unit together with the beef unit at Netters Farm some 430m to the north west of the application site. This would be supplemented by grass and rye silage (2618 tonnes), maize silage (2500 tonnes), crimped maize (500 tonnes), milled straw (500 tonnes) and poultry manure (832 tonnes). All of these feedstocks are already produced on farm land within the control of the applicant and his family, with the exception of the poultry manure which would be imported from the nearby Fridays Poultry Farm. The applicant asserts that the supply of this feedstock to the plant would be undertaken in unison with current farming practices and not in competition with the growing of high value crops, whereas crop residue from the farm is currently sold off site.
6. The combined annual throughput for the plant would be up to 12,450 tonnes per annum which the applicant claims would generate 4,240,103kWh of electricity annually (499kW/h). The electricity generation would be equivalent to the average requirements of 1250 homes; the anaerobic process also produces a constant supply of heat as a by-product up to 450kW/h thermal. The electricity generated would be used on the farm with the remaining balance being sold onto the National Grid.
7. The facility would consist of the following main elements:
 - Two digester tanks 18m in diameter with a 4m wide process room and office between the two tanks;
 - One 30 tonne static feeder;
 - One transfer compound 5m x 5m;
 - One 499kW/h Combined Heat and Power unit 20m x 12m with a ridge height of approximately 5m with two integral chimney stacks both measuring approximately 7.8m.
 - Pressure release flare measuring 6m in height.
8. Anaerobic digestion is a biological process by which naturally occurring anaerobic bacteria breakdown organic matter (farm crops and slurry in the case of Forest Farm) to produce biogas which is then fed to a combined heat and power plant (CHP) to produce renewable energy in the form of electricity. Once used within the digester the solid contents of the digester are taken to a storage area for drying in preparation for spreading on farmland as a fertiliser. The digestate which is rich in nutrients has very little odour and considerably less than that of raw slurries which are currently spread on the farm. The liquid digestate produced would also be spread on the farmland as a fertiliser, while the remaining liquid fraction produced is returned to the head of the process for reuse.
9. As well as the carbon savings made from the production of green energy the applicant asserts that further carbon savings would be made as a result of using slurries and farmyard manure in the plant instead of spreading it straight onto land. There would also be a considerable reduction in odour normally associated with the spreading of raw slurries and manures. The applicant considers that it would be possible to pump the liquid digestate from the plant over some 120 hectares (ha) of interlinked adjoining land within his ownership using a temporary flexible pipe and via umbilical injection

from a tractor and tanker without the need for vehicles to enter the public highway. The remaining material would be dried and transported to outlying fields using tractors and trailers generating in the region of 295 vehicle movements per annum. The applicant states that this compares with the 818 slurry/dung spreading and dung carting vehicle movements per annum that currently occur. The applicant states that 'for the provision and movement of feedstock, the farm would continue using the existing tractor and trailer method of transporting materials, no HGV transportation would be required for the operation of the plant'. There are also hay and silage sales currently occurring from the farm which are sold in small quantities of up to 16 tonnes per load. The applicant therefore argues that with the new system in place which provides for all of this material along with the cattle slurry to be processed through the AD plant this would give rise to a significant reduction in vehicles which currently use the local road network, falling from 5044 to 4231 movements per annum, a decrease in the region of 16%.

10. In addition to the production of green energy which reduces the carbon footprint along with a reduction in odour which is currently caused from the spreading of raw manure on the land, the applicant claims that other environmental benefits include a reduction in the need to use chemical sprays to control weeds as the AD process can also kill most weed seeds present in the feedstocks.
11. The following properties have been identified as falling within 250m from the CHP to the external property walls.
 - Forest Farm (owned by the farm) 93m NE
 - Harneck House (owned by the farm) 103m SSW
 - The Forest 231m SSE (Grade II Listed)
 - The Old Barn (applicant's residence) 249m SSE (Grade II Listed)

Planning Policy

12. The most relevant Government Guidance and Development Plan Policies summarised below are pertinent to the consideration of this application:

National Planning Policy Context

13. **The National Planning Policy Framework (NPPF) (March 2012):** Should be read in conjunction with the National Planning Policy for Waste which sets out detailed waste planning policies which local planning authorities should have regard to when discharging their responsibilities to the extent that they are appropriate to waste management.
14. The NPPF sets out the Government's planning policies and its aim to secure sustainable development in a timely manner. The role of the planning system is seen as contributing to the achievement of sustainable development. Of particular relevance this includes supporting the transition to a low carbon future in a changing climate by encouraging the use of renewable resources (for example by the development of renewable energy). In facilitating the delivery of such developments the Framework requires that local planning authorities should look for solutions rather than problems and are therefore expected to work proactively with applicants to secure development that improve the economic, social and environmental conditions of the area.

15. Planning policies should support economic growth in rural areas by amongst other matters promoting the development and diversification of agricultural and other land based rural businesses.
16. **National Planning Practice Guidance: (Renewable and low carbon energy):** Increasing the amount of energy from renewable and low carbon technologies will make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon infrastructure in locations where the environmental impact is acceptable.
17. **Waste Management Plan for England (WMPE) 2013:** The key aim of the WMPE is to help achieve the Government's objective of moving towards a zero waste economy as part of the transition to a sustainable economy. It summarises how the 'waste hierarchy' should be applied which gives top priority to waste prevention followed by preparing for re-use, then recycling, other types of recovery (including energy recovery), and last of all disposal (e.g. landfill). The term 'other recovery' includes anaerobic digestion. Any technology is considered more beneficial if both heat and electricity can be recovered. In this respect particular attention should be given to the location of the plant to maximise opportunities for heat use.
18. **National Planning Policy for Waste (October 2014) (NPPW):** The NPPW should be read in conjunction with amongst others the NPPF and the WMPE. It recognises the need to drive the management of waste up the waste hierarchy and the positive contribution that waste management can bring to the development of sustainable communities. Where a low carbon energy facility is considered as an appropriate type of development, waste planning authorities should consider the suitable siting of such facilities to enable the utilisation of the heat produced as an energy source in close proximity to suitable potential heat customers.
19. **National Policy Statements (NPS) EN1 and EN3:** These represent the Government's overarching National Policy Statement for energy which sets out the national policy for energy infrastructure. In England and Wales these statements are likely to be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended). They are concerned with impacts and other matters which are specific to biomass and including energy from waste. They consider electricity generation from renewable sources of energy is an important element in the Government's development of a low carbon economy.
20. **UK National Renewable Action Plan (UKNRAP) 2010:** The UKNRAP recognises the need for the UK to radically increase its use of renewable energy which should look to make the most of our resources in order to provide a secure basis for the UK's future energy needs. It seeks to increase the proportion of energy obtained from renewable resources in order to increase the security of our energy supplies. It is considered that the development of renewable energy sources along with other types of low carbon development will enable the UK to play its full part in international efforts to reduce the production of harmful greenhouse gasses. The UKNRAP sets out measures that will enable the UK to reach its target for 15% of energy consumption to be from renewable sources by 2020 although this should not be seen as representing an upper limit. It considers that this target is feasible through domestic action which could be achieved with a proportion of around 30% of electricity demand.

21. **The UK Renewable Energy Strategy (2009):** seeks a radical increase in renewable energy use in order to reduce greenhouse gas emissions and diversify energy sources to enable lower reliance on fossil fuels.

Local Planning Policy Context

22. **Kent Minerals and Waste Local Plan (KMWLP) 2013 -2030 Adopted July 2016.** As set out in the NPPF the purpose of the planning system is to contribute to the achievement of sustainable development. The NPPF requires that policies in local plans should follow the approach of the presumption in favour of sustainable development. The KMWLP is therefore founded on this principle. Policy CSW1 gives support where, when considering waste development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development as set out and supported by National Policy.
23. Consistent with one of the Government's key aims to reduce the volume of Municipal Solid Waste (MSW) and Commercial and Industrial Waste (C&I) being sent to non-hazardous landfill, the KMWLP seeks to establish a policy framework against which future proposals for waste related developments will facilitate the management of waste further up the Waste Hierarchy (Policy CSW2). Policy CSW4 of the Plan sets out the County Council's strategy for securing sufficient waste management capacity to manage at least the equivalent of the waste arising in Kent plus some residual non-hazardous waste from London. In order to achieve this, the KMWLP has to plan for all forms of waste management in the Waste Hierarchy which helps accommodate the transition towards those forms of waste development which sit towards the top of the Waste Hierarchy. The plan seeks to address this transition by seeking to rapidly provide a more sustainable option for the mixed non-hazardous waste that is going to landfill by identifying sites for energy recovery.
24. The preference identified in response to early consultations on the Plan was for a mix of new small and large sites for waste management. This mix gives flexibility and assists in balancing the benefits of proximity to waste arisings whilst enabling operators of large sites to exploit economies of scale.
25. Policy CSW7 provides a strategy for the provision of new waste management capacity for non-hazardous waste. The policy will increase the provision of new waste management capacity for recovery while recognising the need to drive waste up the waste hierarchy. In reflecting the relative positions of the different methods of waste management in the waste hierarchy it is considered preferable to process organic waste to produce compost as opposed to burning it to produce heat/power. The use of organic waste to produce gas that may be used as a fuel via anaerobic digestion is also considered preferable to its direct combustion.
26. Policy DM1 requires that proposals for waste development are designed amongst other matters, to maximise the re-use or recycling of materials. Policy DM2 of the KMWLP states that proposals for waste development must ensure that there is no unacceptable adverse impact on the integrity, character, appearance and function, biodiversity interests, or geological interests of sites of international, national or local importance unless it can be demonstrated that there is an overriding need for the development and any impacts can be mitigated or compensated for, such that there is a net planning benefit. Policy DM3 of the KMWLP states that proposals will be required to demonstrate that they result in no unacceptable adverse impacts on Kent's

important biodiversity assets and that proposals that are likely to give rise to such impacts will need to demonstrate that an adequate level of ecological assessment has been undertaken and will only be granted permission following (amongst other things): an ecological assessment of the site (including specific protected species surveys as necessary); the identification and securing of measures to mitigate any adverse impacts; the identification and securing of compensatory measures where adverse impacts cannot be avoided or mitigated for; and the identification and securing of opportunities to make a positive contribution to the protection, enhancement, creation and management of biodiversity. Policy DM11 requires waste developments to demonstrate that they are unlikely to generate unacceptable adverse impacts from noise, dust, odour, vibration, emissions, bioaerosols, illumination, visual intrusion, traffic or exposure to health risks and associated damage to the qualities of life and wellbeing to communities and the environment. Policy DM12 establishes the need to take into account the cumulative impacts of individual elements of a proposal to ensure there are no unacceptable adverse impacts on the environment or local communities. Policy DM13 requires waste developments to demonstrate that road traffic movements are minimised as far as practicable by preference being given to non-road modes of transport. Policy DM14 seeks to provide safeguards which satisfactorily protect the interests of any Public Rights of Way affected by proposed developments.

27. **Tunbridge Wells Borough Council Core Strategy (June 2010):** Policy CP4 seeks to conserve and enhance the character of the High Weald AONB. Policy CP5 seeks to apply and encourage sustainable design and construction principles and best practice in order to combat avoidable causes of climate change and to adapt to or mitigate already unavoidable impacts of climate change. Policy CP14 seeks appropriate development in villages and rural areas. The interrelationship between the natural and built features of the landscape will be preserved, enhanced and, where necessary restored, this being the principal determinant of the character of rural areas. The Rural Lanes Supplementary Planning Guidance document is to assist in making decisions on planning applications which may have an impact on rural lanes.
28. **The High Weald AONB Management Plan 2014-2019:** Objective G3: Climatic conditions and rates of change which support continued conservation and enhancement of the High Weald's valued landscape and habitats. Rationale: To reduce locally arising greenhouse gas emissions and allow the High Weald to play its role in mitigating climate change, whilst ensuring the landscape is best prepared for the impacts of climate change, including enhancing habitat interconnectivity and developing adaptable land management systems. Objective FH1: To secure agriculturally productive use for the fields of the High Weald, especially for local markets, as part of sustainable land management. Rationale: To contribute to sustainable domestic food and non-food agricultural production, to support a working countryside, and to reduce the dependency of the UK on non-sustainably managed agricultural land and the need for long-distance transport that produces air pollutants causing harm to health and the environment.

Consultations

29. **Amey (Landscaping) - No objection** subject to a condition covering final building design, earthworks and landscaping.

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30. **Amey (Noise, Air Quality & Odour) - No objection** subject to the following noise conditions and comments on odour and air quality.

31. Noise

- Noise levels from the facility at the nearest sensitive receptors shall be below 30dB $L_{Aeq,15min,freefield}$ from 1900 to 0700 Monday to Sunday and shall be below 50dB $L_{Aeq,1h,freefield}$ from 0700 to 1900 from Monday to Saturday and below 45dB $L_{Aeq,15min,freefield}$ from 0700 to 1900 on Sunday.
- Construction works shall be limited from 0700 to 1900 Monday to Friday and from 0700 to 1300 on Saturday. Construction noise levels at the nearest sensitive receptors shall be below 65dB $L_{Aeq,1h,freefield}$.

32. Air Quality

We have now reviewed the findings of the screening assessment of emissions from the CHP unit stacks and our opinion is that the calculations have been made with reference to the appropriate guidance documentation and tools (IAQM/EPUK) and are suitably robust to support the conclusion of the report. Background air quality is generally good in the area and the calculations show that there is sufficient separation distance between the stacks and the receptors of concern (Forest Farm (93m) and Harneck House (105m)) to protect human health. We have reproduced the calculations using a stack height of 4.39m and 7.8m and agree that the impact of emissions in both instances will be negligible. As fine particular matter emissions from the burning of natural gas are very low and background air quality is good we can safely conclude that the impact from stack emissions will be negligible at all receptors.

It is therefore our opinion that a detailed air quality assessment is not warranted and no new conditions pertaining to air emissions from the CHP are required as a result.

33. Odour & Dust

We maintain the opinion that the changes to the application (from the last submission) are insignificant enough to trigger the need for detailed dust and odour assessments which is driven chiefly by the remoteness of the application site from sensitive receptors. Considering that the amount of material to be processed in the current application has reduced to 12,450 tonnes (from the previous application) and the material spread will be largely odourless, the recommendations made in our previous response remain the same with respect to odour whereby it is likely that the new controlled AD process will result in an improvement in odour in the vicinity of the farm as the current spreading of untreated slurry will be replaced with the use of the less odorous digestate. The applicant will also be required to meet a number of odour conditions that will be attached to the permit to operate issued by the Environment Agency. However, we advise that in order to ensure that odour is fully addressed and controlled an odour management plan (OMP) should be secured by condition.

34. **Kent Highways and Transportation - No objection** given the development will result in an overall reduction in vehicle movements.

35. **Tunbridge Wells Borough Council - No objection.**

36. **Benenden Parish Council –** The Council stated that although generally supportive

they could not recommend approval of the application until a number of queries were answered. The applicant provided responses to the questions raised and no further comments were received.

37. **County Council's Biodiversity Officer** - No objection subject to conditions including the submission of a precautionary mitigation strategy and the incorporation of ecological enhancements into the development.
38. **CPRE (Protect Kent)**: No objection but raise the following points. Forest Farm is in the AONB and in a deep rural area with narrow lanes. The combination of owned and rented land means that the farming operation covers a wide area and also makes it hard to follow the logic of the proposed operation.

Feedstock – A key issue for these proposals is whether the input can be produced on the farm where the plant is installed; this would allow existing traffic movements to be maintained or reduced. This is particularly important when the AD plant is in an AONB or Greenbelt land and/or in a deep rural area. The proposal assumes the use of feedstock from outside the farming operation, chicken waste from Fridays. No justification is given for this (apart from the fact that the farm currently imports chicken waste to spread on the fields), and it seems unnecessary to the functioning of the plant. CPRE suggests that agreement to the proposal should be conditional on using only materials from the farming operation. This would remove the risk of 'creep' with increasing quantities of off-farm materials being brought in.

Vehicle Movements – The lanes around the farm are very narrow and Attwater Lane/Nineveh Lane has a high score in the Rural Lanes SPD. The proposal appears to show a reduction of vehicle movements compared with the current operation. Because the farming operation is spread over a large area, the existing number of movements is substantial. Several reasons are given for the proposed reduction in traffic, but the overall impact shown is small. This may be because the figures include vehicles of all sizes. We understand that there may be some local concern about the accuracy of the figures and in view of the importance of the effect any increase in heavy traffic could have on the rural lanes we would recommend that an independently verified study of vehicle movements be required. The more important movements – of the large tractors and trailers used and anything over 3.5 tonnes – should be calculated separately.

Visibility – There is no doubt that AD plants look like industrial operations, so, especially in an AONB, consideration also needs to be given to the visibility and impact on the landscape. It is stated in the proposal that the AD plant is partially shielded by existing buildings and hedges and that new screening will be built. It is not clear what will remain visible from which directions.

39. **County Council's Archaeological Officer** - No objection subject to the implementation of an archaeological watching brief.
40. **Environment Agency** - No objection subject to the following conditions:
- If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented

as approved.

- The development hereby permitted shall not be commenced until such time as a scheme to dispose of foul and surface water has been submitted to, and approved in writing by, the local planning authority. The scheme shall be implemented as approved.

41. **High Weald AONB Unit - No objection**. It is considered that the proposed facility will support the ongoing agriculturally productive use of the farmland around Forest Farm and will assist with mitigating the effects of climate change. It is therefore compatible with objectives FH1 and G3 of the High Weald AONB Management Plan. The design and position of the development is considered to be appropriate and not harmful to the High Weald landscape components, subject to control over the source and colour of the materials used for the new plant and buildings and over vehicular movements to and from the site; and lighting. Overall it is considered that the proposal is appropriate to the High Weald Area of Outstanding Natural Beauty and I therefore support this planning application.
42. **Kent Wildlife Trust - No objection**. Satisfied all potential risks of harm to wildlife interests have been considered but would urge the County Council to secure by conditions and/or legal agreement all the identified mitigation and enhancement measures identified in sections 5 and 6 of the Extended Phase 1 Habitat Survey report.
43. **Natural England - No objection**.
44. **County Council's Flood Risk Officer (Sustainable Drainage) - No objection** subject to the inclusion of a condition requiring the submission of a detailed design of the surface water drainage scheme. This shall demonstrate the run-off collected from new impermeable areas is disposed of to watercourse at rates no higher than greenfield rates and accommodate sufficient capacity to ensure the proposed plant site does not suffer significant flooding up to and including the 1 in 100 year climate changed adjusted critical storm. The detailed drainage scheme shall also provide details of surface water treatment to ensure pollution to watercourse does not occur as a result of contaminated surface water.
45. **UK Power Networks - No objection**.
46. No responses have been received from the **National Grid, Public Rights of Way, South East Water or the Forestry Commission**

Local Member

47. The local County Member, Sean Holden was notified of the application on 4 July 2016.
48. An objection has been received from the local Tunbridge Wells Borough Council Ward Member Lynne Weatherly stating that:

"I have serious concerns on behalf of my residents with regard to the number of lorries that are using and will be using our residential roads. I can only see that this will mean an increase in an area that already suffers from lorries exceeding the current weight limit on these roads."

Publicity

49. The application was publicised by the posting of two site notices, an advertisement in a local newspaper, and the individual notification of 103 residential properties.

Representations

50. In response to the publicity, I have received 65 letters of representation, 53 raising objections to the proposal and 12 in support.

51. The objections can be summarised as follows:

- Increase in traffic along narrow rural country lanes given that materials would be imported to and distributed from the site from a wide catchment area incorporating the Reynolds Family's other farms.
- It would be far more relevant to have such a plant adjacent to a more appropriate main road.
- Damage to highway verges.
- Adverse impacts on highway safety.
- Inappropriate development in the High Weald AONB.
- Increase in malodorous odours on sensitive receptors both from the process itself and vehicles importing/exporting materials to and from the site. The danger of leakage, into nearby water courses does not bear thinking about. We understand that there is likely to be a high volume of noise 24/7 and there is the danger of highly volatile gasses and inflammability also.
- Lack of suitable areas to store raw and processed materials.
- There will be insufficient volumes of materials arising from the farming operations to feed the digester therefore other materials will need to be imported from elsewhere.
- There is no energy balance calculation to demonstrate the claim that the plant will be CO₂ neutral. It does not account for the energy consumed in the planting, production and transportation of the material to feed the plant.
- Where would the by-products of the digester be disposed of? This could be a potential health hazard.
- The facility and the output it produces would damage this environment.
- Many inaccuracies in the application.
- It appears to be an attempt to achieve change of use from traditional mixed farming to the production of electricity by creating a large scale Anaerobic Digester.
- The business proposed will increase emissions in the local area and whilst it claims to be renewable energy, I don't see any positives to deliberately using fields that could be used to grow local produce to grow crops in order to place it in a digester.
- There is a real risk that further areas of the valley around the already very large digester will be covered in heaps of seeping silage and/or digestate.
- The smell will be overbearing, the danger of leakage, into nearby water courses does not bear thinking about. We understand that there is likely to be a high volume of noise 24/7 and there is the danger of highly volatile gasses and inflammability also.
- There is no explanation as to how this proposed plant can produce 8% more power from 30% less input compared to the plant proposed in the previous

application.

- The applicant has only provided evidence in the application of land under his control of around 200 hectares. We do not understand the bridge between these numbers and the 800 hectares described in the application.
- If either farm were sold or ownership affected by change of ownership such as the death of one of the owners, then the future of the scheme may be uncertain.
- Fridays Chicken Farms have their own AD facility; therefore there is no need to transport their manure to Forest Farm.
- The applicant may switch to importing organic waste for which they can charge a gate fee and use the farm land for normal farming production.
- The scheme would provide no wider community benefit and the proposed form of electricity is neither green nor renewable.
- A digester in Oxfordshire was struck by lightning in June 2016 and caused a massive fireball.

52. The representations received in support of the proposal can be summarised as follows:

- There will be no extra movement of vehicles and less need for feedstock to be transported off site.
- It is important in the current economic climate that farmers should be allowed to diversify in order to remain viable.
- The proposal represents a sustainable source of green energy.
- There would be environmental benefits by virtue of the production of low carbon energy contributing towards renewable energy targets, a reduction in methane emissions and a reduction upon the reliance on the use of chemical fertilisers and a reduction in malodorous odours.
- The level of activity at the farm will be less than that currently associated with the existing farming operations.
- The scheme seems a sensible, green and safe way of disposing of waste.
- The plant will be almost unseen from anywhere, using existing infrastructure, and the tanks will be largely sunk under the ground.
- There will be no need to spread raw manure on the land anymore, which creates strong unpleasant smells.
- There would be a reduction in odour by using the digestate on the land and this has got to be advantageous to the local community.
- I think it is important to make every effort to increase and promote the use of renewable sources of energy.
- The one or two houses that are closest to the site currently overlook a slurry pit and working farm with its associated smells and noise in any event.
- Concerns have rightly been raised about traffic. I regularly ride horses on these lanes and find all traffic, especially farm traffic, to be very considerate and driven with care.
- We approve of the concept of a local supply. This is particularly relevant at a time when conventional base load generating capacity in the UK is being decommissioned for environmental reasons and very little new reliable capacity is planned or under construction.

Discussion

53. In considering this proposal regard must be had to the Development Plan Policies outlined in paragraphs 12-28 above. Section 38(6) of the Planning and Compulsory Purchase Act (2004) states that applications must be determined in accordance with the Development Plan, unless material considerations indicate otherwise. Therefore the proposal needs to be considered in the context of the Development Plan Policies, Government Guidance and the AONB Management Plan and other material planning considerations arising from consultation and publicity. In my opinion, the key material planning considerations in this particular case can be summarised by the following headings:
54. The main issues to be considered relate to:-
- Need for increased renewables/low carbon solutions;
 - Landscape and visual impact (including lighting & AONB);
 - Local amenity impacts (e.g. noise, odour and air quality);
 - Highways and transportation;
 - Feedstock;
 - Water environment (groundwater impacts);
 - Ecology.

Need for increased renewables/low carbon solutions

55. There is strong government and policy support for renewable energy, with the UK Renewable Energy Strategy (2009) seeking a radical increase in renewable energy use in order to reduce greenhouse gas emissions and diversify energy sources to enable lower reliance on fossil fuels. The aim is to increase the proportion of energy we obtain from renewable sources which will not only increase the security of energy supplies in the UK but will also provide opportunities for investment in new industries and new technologies. The UK Government will help businesses develop in this area to put the UK at the forefront of new renewable technologies and skills. The goal is to maximise the environmental, economic and employment opportunities for the UK from renewables. This strategy and the wider UK Low Carbon Transition Plan published in parallel with it will enable the Government to build a low-carbon economy, that promotes energy security and takes action against climate change.

Landscape and Visual Impact

56. National planning policies relating to landscape and visual impact are set out in the NPPF. Paragraph 109 of the NPPF states that the planning system should contribute to and enhance the natural and local environment by (amongst other things) protecting and enhancing valued landscapes. Tunbridge Wells Borough Council Core Strategy Policy CP4 also seeks to conserve and enhance the character of the High Weald AONB, therefore the proposed development must be found to accord with these policies and the objectives of the High Weald AONB Management Plan 2014-2019.
57. The site is located within the High Weald AONB, and accordingly is afforded the highest level of landscape protection. The surrounding landscape is a mosaic of pasture and arable fields with a strong network of woodlands, tree belts and hedgerows set within a varied rolling topography. Within this part of the High Weald AONB there are scattered houses and farmsteads many of which are of historic

importance and which are set alongside quiet and winding lanes.

58. The site for the proposed AD facility is to the west of the main farm yard adjacent to an existing slurry lagoon and cattery. The proposed site area is in a valley with the main tanks and built element of the development proposed to be sited at the bottom of the valley, significantly reducing the visual impacts of the proposed development. There would be minimal opportunity for the development to be visible from any property outside the ownership of the applicant. Views from The Forest (the only neighbouring property outside of the applicant's ownership and shown on the site location on page C1.3) and the Old Barn would generally be screened by hedgerows and other intervening vegetation. Both The Forest and the Old Barn are Grade II Listed Buildings, I do not consider that the proposed development would have any impact on the setting of these listed buildings given the distance from the site of the proposed development and that built element of the development would be seen within the context of the existing farm buildings. Harneck House is located to the southwest of the site along a further farm track, there are potential open views towards the site from this property but it would be seen within the context of the adjoining large barns. There is the possibility of the development being visible from the public right of way, however, the built development would be seen as part of the wider fabric of the existing farm yard complex, as the PROW rises in elevation a good hedgerow blocks views towards the site. The applicant has stated that they will be enhancing the existing hedgerow on the boundary of the site along Nineveh Lane (irrespective of the outcome of this application), mature trees further screen the site from this area, all ensuring that the development would not be visible from this direction.
59. Objections on the grounds of the impact of the development on the surrounding landscape and AONB have been received from the owners of The Forest and from residents further afield. These objections have centred on inappropriate development in the AONB, the visual impact of the built development and the flare stack. The built development would consist of two digester tanks 18m in diameter with a 4m wide process room and office that would be sited between the two tanks, a transformer compound and CHP unit measuring 5m x 5m and 20m x 12m respectively. Both the transformer compound and CHP unit will be clad in timber weather-board which will weather down to a natural grey colour. The AD plant would be fed once a day over an hour long period via a 30 tonne feedstock loader. This would be sited at the south eastern corner of the site, which is the most visible part of the site, however, it will be sited lower than ground level and would be below the height of the top of the tanks rendering it virtually unnoticeable from the wider farm setting.
60. I note that our landscaping consultants have no objection to the application and have commented that given the digester would be located close to the existing farm development and set within a shallow valley that its visual impact would be reduced. Whilst it is acknowledged that there would be the potential for slight adverse visual impacts on some visual receptors, including a short length of the PROW, the cattery and Harneck House, these impacts would not be significant. They further state that any adverse impacts could be mitigated by suitable landscaping and appropriate colouring of the facility which would both be secured by planning condition.
61. I have also received no objection from the High Weald AONB Unit, who have stated that the design and position of the development is considered to be appropriate development within the AONB and would not be harmful to the High Weald landscape and furthermore is compatible with Objective FH1 of the High Weald AONB

Management Plan. Overall the High Weald AONB Unit is supportive of the planning application, subject to control over the source and colour of the materials used for the new plant and buildings.

62. The proposed development includes a pressure release flare which would be used for emergency purposes only and be sited on the earth bund shown of the Site Layout plan on page C1.4. It is a safety requirement for the flare to be a standalone structure. The height of the flare, at around 6m would be similar in scale to the surrounding existing agricultural buildings and therefore I do not consider that it would be unduly intrusive within the wider landscape. I consider it to be prudent to include some lower level timber screening to the structure in order to tie it in with the other built elements and to create an overall cohesive design, along with some suitable planting, which, when combined, would reduce any adverse landscape and visual impacts to an acceptable level.
63. Numerous objections have been received regarding the use of excessive lighting on the development and the impact this would have on the overall darkness of this rural area. These objections are unfounded as the applicant is not proposing lighting that would be switched on permanently during the hours of darkness, rather a series of motion controlled lights, as is currently the case on the existing farm buildings. In the event of an emergency, there would be a manual override switch which would allow the lighting to remain switched on as required. I am therefore satisfied that there would be no negative impacts on the wider landscape and local amenity as a result of lighting on the proposed development.
64. I am satisfied that the proposed development is acceptable in landscaping terms and that there would be no significant adverse visual impact. The development conforms with national and local policies and is considered to be an acceptable form of development within the AONB. No objections have been received from any statutory consultees in this regard, subject to conditions on additional landscaping and building finish, which would be imposed on any planning consent.
65. Notwithstanding the objections that have been raised by residents in the vicinity of the development site, and the wider area, the harm that would arise from the proposed development is not significant and would be seen within the context of the existing farm buildings. The visual impact would be further mitigated by being sited in the bottom of a valley; I therefore do not consider that the landscape and visual impacts would be unacceptable or overriding. The minor impacts associated with the development would be mitigated by the inclusion of conditions in relation to additional landscaping. On the basis of the mitigation measures proposed and having regard to consultee responses, I do not consider that there are any overriding reasons to refuse the application on landscape or visual impact grounds given the benefits of providing renewable energy and the contribution that this would make more generally to securing sustainable development. On the basis that the impacts are not unacceptable, the proposed development would not be contrary to the above development plan policies subject to the imposition of appropriate conditions as discussed above.

Local amenity impacts

66. National planning policies relating to local amenity impacts associated with mineral working and waste disposal are set out in the NPPF. Paragraph 144 of the NPPF

states that local planning authorities should ensure that there are no unacceptable adverse impacts on human health when granting permission for waste development and that any unavoidable noise, dust and particle emissions are controlled, mitigated or removed at source and appropriate noise

67. Policies CSW1, DM1, DM11 and DM12 of the KMWLP are also relevant. Policies CSW1 and DM1 of the KMWLP support sustainable development. Policy DM11 of the KMWLP states that waste development will be permitted if it can be demonstrated that it is unlikely to generate unacceptable adverse impacts from noise, dust, odour, emissions or exposure to health risks and associated damage to the qualities of life and wellbeing to communities and the environment. Policy DM12 of the KMWLP states that permission will be granted for waste development where it does not result in an unacceptable adverse, cumulative impact on the amenity of a local community.
68. Objections have been received in relation to an increase in malodourous odours both from the anaerobic digestion process and from vehicles importing and exporting materials; an increase in emissions in the area; surrounding areas covered in heaps of silage and/or digestate; leakages into watercourse; high volumes of noise; danger of highly volatile gas and risk of inflammability.

Noise

69. The applicant has submitted a noise assessment with the application. Whilst it is the same assessment that was submitted with the previous application, the County Council's noise consultants Amey have commented that as there are no substantial differences regarding the noise elements between both applications and therefore have no objection to this assessment being used now. The noise assessment uses the criteria and guidance in the NPPF and the Noise Policy Statement for England and follows the methodology stated in the standards BS4142 and ISO 9613-2 which are considered the appropriate documents to use.
70. The nature of anaerobic digester facilities are that they operate on a 24 hours basis, however, some of the processes involved, such as the digester feeding, only take place within daylight hours. This feeding element of the application is among the noisier aspects of the proposal and has caused some significant local concern, primarily that the telescopic handler used to transport feedstock from the storage clamps to the digester would operate for extended periods of time both during the day and night. The digester would be fed once a day, in the morning, via a 30 tonne feedstock loader, this process would generally not exceed one hour. The feedstock loader would be sited lower than ground level and the activity involved will be very much akin to a tractor moving around a farm yard, so would effectively cause no greater impact on the local amenity than the existing activities associated with farming operations at the site.
71. The application proposes the use of an existing storage clamp to the south of the site, adjacent to The Forest, as a site to store feedstock, whilst this clamp has been in existence, and use, for approximately forty years for a similar use, objections were received from the residents of The Forest in terms of both noise and odour. Whilst the applicants are within their rights to continue to use this clamp for the storage of agricultural products they have stated that they will not use the clamp for the storage of feedstock associated with the proposed development. This would significantly reduce the impacts in terms of both noise and odour for the residents of The Forest

and I do not consider there to be a significant impact to their residential amenity as a result of the proposed development.

72. I note that the County Council's noise consultants Amey have no objections to the application and consider that the expected noise levels at the nearby receptors are acceptable, however they do recommend the inclusion of conditions limiting the noise levels at certain times of the day and night and during the construction of the development, these conditions can be found at paragraph 31 above.

Odour

73. The current operations at Forest Farm i.e. cattle farming, spreading of slurry of fields are by their very nature are malodorous processes and there is a clear argument to be made that the proposed AD facility would likely reduce the amount of odour associated with the current farming operations. As such the County Council's air quality consultants Amey have not recommended that a detailed assessment of odour be undertaken as it is likely there would not be any adverse impacts and that there may reasonably be expected to be an improvement in odour in the vicinity of the farm buildings and wider farmland as the current spreading of untreated slurry would be replaced with the use of the less odorous digestate. Any odour generated from the AD facility under normal operating conditions would be small as the facility would be entirely enclosed. Any surplus biogas would be burned through the CHPs stacks and as such is not a source of odour (air quality impacts will be discussed below).
74. Modern AD facilities such as these have control over odours captured from the digester tanks to minimise releases and in addition to measures such as these the applicant would be required to meet a number of stringent odour conditions that would be attached to any permit that would be required to operate the facility issued by the Environment Agency. A number of queries have been received regarding the proficiency of the applicant to operate the AD plant safely. As part of any future environmental permitting application the Environment Agency would require the applicant to provide evidence of technical competence or registration on the relevant scheme. This is not a matter for the planning authority to consider.
75. The existing slurry lagoon has been in its current position for many years and is used for the storage of raw slurry, which is collected from the adjoining cattle yard via a series of connecting pipes. This pipe system would remain operational with the exception that the raw slurry would be pumped directly to the AD facility instead of the lagoon. The slurry lagoon has already undergone a number of remediation measures on the recommendation of the Environment Agency, which included the removal of a number of trees on the northern boundary that were causing the lagoon walls to be unstable. These works were required irrespective of the current planning application. The lagoon would be used for the storage of the liquid digestate which would be pumped directly from the AD plant into the lagoon; this material is virtually odourless and would represent a marked reduction in odour based on the current use for the lagoon. Therefore I am satisfied that the proposed development would mark an improvement to the current levels of odour within this area of the farm complex.
76. The farm is in a Nitrate Vulnerable Zone (NVZ) which means it is in an area designated as being at risk from agricultural nitrate pollution and that at times the nitrate levels are too high which prevents material from being spread onto fields. This has prompted concerns from local residents that the applicants do not have sufficient

capacity for storage of digestate during the NVZ closed periods. The applicant has provided capacity calculations for the existing slurry lagoon to the Environment Agency to demonstrate that there is sufficient capacity, the EA have no objection to this and I am therefore satisfied that the applicant has sufficient storage capacity available to them during the periods of time that they are not permitted to spread digestate/fertiliser onto their fields.

77. Currently the farm imports around 2000 tonnes of chicken manure per annum which is used as fertiliser. This material is stored at various sites around the farm. Therefore as a result of the proposed development the quantity of chicken manure imported will reduce to 832 tonnes per annum. There may be some short periods where chicken manure will need to be stored at Forest Farm, prior to being fed into the digester, however, where at all possible it will be imported and fed immediately into the digester. Whilst there may be occasions when chicken manure would be stored at the site for short periods this will, overall, represent a marked improvement to the current situation where the manure is stockpiled on fields for sustained periods. Whilst there may be some short-term impact from manure being stored at Forest Farm, this is to be expected within a working farming environment and is not considered to be significantly detrimental to local amenity.
78. I have been advised by our air quality consultants that they do not object to the proposal, however they do recommend that odour be fully addressed and controlled in an odour management plan (OMP), and this would be secured by condition on any planning permission.

Air Quality

79. The application has been screened against the latest Institute of Air Quality Management (IAQM) Land-Use Planning & Development Control: Planning for Air Quality (May 2015 v.1.1) guidance screening criteria. The indicative criteria in the latest guidance state that any combustion plant with a single or combined thermal input >300kW requires an air quality assessment, given the proposed thermal input of the AD plant is 499kW the applicant has provided an Air Quality Screening Assessment.
80. The Air Quality Screening Assessment considered that the background air quality is generally good in the area and the calculations showed that there is sufficient separation distance between the CHP stacks and the nearest receptors of concern (Forest Farm (93m) and Harneck House (105m)) to protect human health. The report also concluded that fine particulate matter emissions from the burning of natural gas are very low and given background air quality is good it can be safely concluded that the impact from stack emissions will be negligible at all receptors in the wider vicinity.
81. I received no objection from the County Council's air quality consultants who were satisfied that the calculations made in the screening assessment were made with reference to the appropriate guidance documentation and tools (IAQM/EPUK) and are suitably robust to support the conclusion of the report that there would be no risk to human health to any of the nearby sensitive receptors and that a detailed air quality assessment is not warranted and conditions pertaining to air emissions from the CHP would not be required.

Highways and Transportation

82. National planning policies relating to highways and transportation are set out in the NPPF. Paragraph 143 of the NPPF states that in preparing local plans local planning authorities should set out environmental criteria against which planning applications should be assessed to ensure that permitted operations do not have unacceptable impacts on the natural and historic environment and human health from traffic. Paragraph 144 states that local planning authorities should have regard to such matters when determining planning applications and Paragraph 32 states that development should only be prevented or refused on transport grounds where the residual cumulative impacts of the development are severe.
83. Policy DM13 of the KMWLP requires waste developments to demonstrate that emissions associated with road transport movements are minimised as far as practicable and by preference being given to non-road modes of transport. It also states that where new development would require road transport, proposed access arrangements must be safe and appropriate, traffic generated must not be detrimental to road safety, the highway network must be able to accommodate the traffic generated and its impact must not have an unacceptable adverse effect on the environment or local community.
84. The majority of objections raised from local residents comment on matters relating to highways and transportation. The perception locally is that the proposed development would result in a significant increase in the number of vehicle movements to and from Forest Farm along Nineveh Lane, an assertion that the applicant refutes. There are also more general objections in relation to adverse impacts associated with traffic and highway safety, damage to verges and the potential risks to other users of the surrounding lanes, including cyclists, horse riders and walkers. The proposed development would not result in an increase in HGV transportation required for the operation of the plant and the movement of feedstock to the farm would continue to utilise the tractor and trailer method as is the case currently.
85. The applicant has provided a detailed breakdown of vehicle movements to and from Forest Farm, based on historical, current and future movements as a result of the proposed development. Historic vehicle movements associated with the daily milking of 250 dairy cows amounted to 10,840 per annum, this included daily collections from a 30 tonne tanker along Nineveh Lane. Current daily movements amount to 5044 per annum, these movements include:
- Haulage of crops from field to storage at Forest Farm;
 - Selling of crops to other farms (currently 66% of yield);
 - 6000 tonnes of manure and slurry spread to fields;
 - Chicken manure delivered and spread to fields;
 - Fertiliser delivered and spread to fields;
 - Cattle rearing operations;
 - Daily ancillary movements;

Future movements would total 4231 per annum a reduction of some 16% to the current situation. The main areas where vehicle movements would reduce are the spreading of bagged (imported) fertiliser on fields (-106), the sale of silage (-214), slurry spreading (-170), dung spreading (-318) and dung carting (-270). These decreases would be offset against an increase in vehicle movements associated with

the spreading of digestate (+295). Overall the number of vehicle movements would decrease by 813 per annum.

86. Liquid digestate would be pumped over 120 hectares of interlinked adjoining land using an existing pipe line and via umbilical injection from a tractor and tanker, these methods would not impact the public highway. The dried digestate produced would be transported to outlying fields using a tractor and trailer and would replace the significant numbers of current manure spreading trips. The applicant has further stated that the tractor and trailer used to transport the dried digestate off site would return with a load of chicken manure from Fridays Farm. The digestate that would be produced by the proposed AD facility would reduce the need for the current quantity of chicken manure imported from 2000 tonnes to 832 tonnes, further reducing vehicle movements on the highway.
87. KCC Highways and Transportation have raised no objection to the proposed development on the basis that no additional movements on the public highway are proposed. I acknowledge that there have been a significant number of objections on the basis that the proposed development would result in an increase in vehicle movements. However, I am satisfied that this will not be the case and that the development would generate fewer movements on the public highway than currently present. I am satisfied that the vehicles associated with the proposal are already in operation at the site, and there would be no HGV vehicle movements associated with the proposal.

Feedstocks – Inputs and Outputs of digestate

88. The facility is intended to process cattle farm yard manure and slurry from the existing heifer rearing unit at Forest Farm together with the beef unit at Netters Farm, totalling up to 5500 tonnes per annum. This would be supplemented by grass and rye silage (2618 tonnes), maize silage (2500 tonnes), milled straw (500 tonnes) crimped maize (500 tonnes) and poultry manure (832 tonnes) up to total of 12,450 tonnes per annum. All of these feedstocks are already produced on farm land within the control of the applicant and his family, with the exception of the poultry manure which would be imported from the nearby Fridays poultry farm. Currently the applicant imports 2000 tonnes of poultry manure per annum from Fridays for spreading on fields, this practice would cease as a result of this proposal, along with a reduction of 1168 tonnes per annum and associated vehicle movements. The applicant asserts that the supply of this feedstock to the plant would be undertaken in unison with current farming practices and not in competition with the growing of high value crops, whereas crop residue is currently sold off farm.
89. A significant number of objections have focussed on the belief that the applicants are unable to produce sufficient feedstock from land that is under their control and that this would mean that they would have to import waste from external sources, including from farms outside of their control and food waste, for which they could charge gate fees. Irrespective of the applicant's assertions to the contrary on this point, this situation would be strictly controlled by conditions that only permit the sources of feed stocks outlined in the application. In the event that the applicant wishes to amend this in the future they would have to apply formally to do so, and would be at risk of enforcement action should they fail to comply with conditions imposed on any planning consent. Moreover, the applicant would be restricted to certain feedstocks by their Environmental Permit, which they would be required to obtain from the Environment

Agency in order to operate the site and which would place strict controls over the material fed into the digester. Indeed, when a digester is set up to receive feedstocks such as crop residues and slurry, the sudden introduction to the mix of food waste, for instance, can have severely damaging consequences to the overall functioning of the digester, leading to costly shutdowns of the equipment whilst it is cleaned, in order to be permitted to operate again by the Environment Agency.

90. Whilst the applicant contends that they can produce sufficient feedstock from land that they own as opposed to land that they own and rent as part of their current farming practices they require a degree of flexibility to fit in with their crop rotation policy. This has been confirmed in the application as referred to below:

'We operate a crop rotation system across the entire farm (including land owned and rented), which enhances soil conditions, and where possible we block drill crops. For example, this year, all our seed oats are at Apple Pie Farm, our triticale is at Great Swifts Farm, and we have two blocks of grass seed, one at Forest Farm and the other at Parkwood. This means that at harvest time, we do not constantly have to move the combine and other machinery from one site to another. Although we have shown that we would be able to produce enough to sustain the AD plant on land we own, we would not want to do this long term, as it would shorten our rotation. Produce we grow on our rented ground still needs to be brought back to Forest Farm for storage'.

91. The applicant states *'Although we have shown that we would be able to produce enough to sustain the AD plant on land we own, we would not want to do this long term, as it would shorten our rotation'*. They are not stating that they intend to import waste from external sources rather that they can provide sufficient feedstock for the AD plant from land solely within their ownership, however, it would be beneficial from a crop rotation viewpoint to utilise both the land that they own and rent.
92. The total farm size, both owned land and rented, extends to some 800 hectares, however the applicant has provided a detailed breakdown of the cropping schedule for the 100ha of land closest to Forest Farm. This shows that there is sufficient feedstock available from land that is in close proximity to Forest Farm that requires either no highway movements at all; a short journey on the public highway not passing any dwellings; or land that is within a maximum of 2 miles from Forest Farm requiring movements on the public highway (an area covered from paragraph 94 onwards). This information refutes the views held that the applicants are unable to source sufficient feedstock for the AD plant when they can in fact comfortably source sufficient material from around 12.5% of their overall land holdings, this further refutes the claims that they are purely growing crops for AD feedstock. With regards to the feedstock crops, the grass silage that would be used is a waste product of the applicant's grass seed production, as is the straw from their cereal seed production. Maize is grown primarily as cattle feed but also forms a vital part of the farm's crop rotation, in order for the applicant to be able to grow high quality seed crops (grass, wheat and oats), they need clean ground and adding a crop of maize into the rotation enables them to produce clean ground. It enhances organic matter in the soil, which subsequently enhances soil quality.
93. Average crop yield from the 100 ha of land closest to Forest Farm is 9200 tonnes per annum as detailed in the table below.

TW/16/5690 - Erection of a 499kw anaerobic digestion facility at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent.

BLOCKS OF LAND	DISTANCE ON HIGHWAY	WEIGHT OF CROP		
		Maize	Grass	Hybrid Rye
22.5ha at Forest Farm	N/A		2250	
11.5ha Crit Hall	N/A		1150	
21ha Netters Farm	500metres (passing no dwellings)	1050		800
45ha east of Forest Farm	Max 2miles from Forest Farm	2250		1700
		3300	3400	2500
100ha in total		Total 9200 tonnes		

94. The table above demonstrates that the applicants are able to comfortably source sufficient material (9200 tonnes) per annum from the 100ha closest to the farm, should they wish to do so. However, the intention is to use material from the wider farm holdings as detailed in paragraph 92, without creating any further burden on the highway network, as the vast majority of crops from the outlying farmland are currently brought back to Forest Farm for processing, storage and onward selling.
95. The applicant has advised that comparable AD facilities to the one they are proposing have improved in technological efficiency and productivity in recent years and can often operate at maximum efficiency whilst using up to 20% less feedstock. Whilst this information is largely anecdotal it does have the potential to significantly reduce the impact of the development including vehicle movements on the public highway. This anecdotal evidence is supported, to a degree, by the fact that this iteration of the proposal sees the AD plant require less feedstock per annum yet still be able to generate more power from the CHP plant.

Water environment (groundwater impacts)

96. National planning policies relating to the water environment are set out in the NPPF. Paragraph 143 of the NPPF states that in preparing local plans local planning authorities should set out environmental criteria against which planning applications should be assessed to ensure that permitted operations do not have unacceptable impacts on the natural and historic environment and human health from flooding, the flow and quantity of surface and groundwater and contamination (including cumulatively). Paragraph 144 states that local planning authorities should have regard to such matters when determining planning applications. Further policy on flood risk and related climate change issues is contained in paragraphs 93 to 104 of the NPPF and advice on these how water quality issues should be addressed in preparing and determining planning applications is contained in the Planning Practice Guidance (PPG) relating to water supply, wastewater and water quality.
97. Policies DM1 and DM10 of the KMWLP are also relevant. Policy DM1 of the draft KMWLP states that waste proposals should demonstrate that they have been designed to utilise sustainable drainage systems wherever practicable. Policy DM10 of the KMWLP states that permission will be granted for waste development where it does not: result in the deterioration of physical state, water quality or ecological status of any waterbody (e.g. rivers, streams, lakes and ponds); have an unacceptable impact on groundwater Source Protection Zones; and exacerbate flood risk in areas prone to flooding and elsewhere, both now and in the future.

98. During the consultation process some concern was raised by the Environment Agency with regards the level of detail around flooding, surface/groundwater protection and contamination. As a consequence the applicant produced a drainage and water management plan, this plan satisfied the reservations that had been raised by the Environment Agency and provided a suite of improvement measures in relation to the existing site infrastructure and in relation to the proposed development. These measures include:
- Surface water drains to be installed to a number of the site's retaining walls in order to divert clean water away from the site;
 - Land drains placed underground around the retaining walls to the north and south of the site in order to manage any shallow levels of groundwater around the site. These will protect groundwater and also help to relieve hydrostatic pressure on the retaining walls;
 - The bund that would be created as part of the proposed development would be placed and sized in order to capture any liquid and in the worst case scenario would be able to hold all the liquid from both digester tanks. The bund would be constructed of engineered clay and at the lowest point of the site within the bund, there would be a dirty water holding tank whereby dirty water can be collected and pumped back into the AD process;
 - A new effluent reception pit will be installed on the eastern side of the existing farmyard. This will collect all run-off from the yarded area and the maize silage clamp. The yard will also be re-levelled so that areas where cattle walk out to grazing will also drain to the new effluent pit. This will divert contaminated waters away from the existing surface water drain.
99. Any areas of the site where there would be potential for contamination, such as around the digester tanks, the feeding area and feedstock storage areas would be constructed of an impermeable material. The roadway to the feeder and down to the CHP unit and base of the site would also be impermeable to avoid contamination from dirty vehicle wheels. All these areas would fall away to dirty water drainage facilities where any liquid would be collected and pumped directly back into the process.
100. I am satisfied that the measures outlined in the application are robust and would prevent any negative impact to surface and groundwater and any risk of contamination to nearby watercourses. These would be conditioned should planning permission be granted. The Environment Agency are satisfied with the measures outlined by the applicant and would require all of these to be installed and operational before the grant of a permit to operate the facility.

Ecology

101. National planning policies relating to ecology are set out in the NPPF. Paragraph 143 of the NPPF states that in preparing local plans local planning authorities should set out environmental criteria against which planning applications should be assessed to ensure that permitted operations do not have unacceptable impacts on the natural environment. Paragraph 144 states that local planning authorities should have regard to such matters when determining planning applications. Paragraph 109 of the NPPF states that the planning system should contribute to and enhance the natural and local environment by (amongst other things) minimising impacts on biodiversity and providing net gains in biodiversity where possible. Paragraph 118 states that when determining planning applications, local planning authorities should aim to conserve

and enhance biodiversity by applying (amongst others) the following principles: if significant harm resulting from development cannot be avoided, adequately mitigated or (as a last resort) compensated for, then planning permission should be refused; and planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats unless the need for, and the benefits of, the development in that location clearly outweigh the loss. Paragraphs 007 to 023 of the Natural Environment Planning Practice Guidance (PPG) include advice in respect of biodiversity, ecosystems and green infrastructure.

102. Policies DM1, DM2, DM3 of the KMWLP are also relevant. Policy DM1 of the KMWLP states that waste proposals should demonstrate that they have been designed to protect and enhance the character and quality of the site's setting and its biodiversity interests or mitigate and if necessary compensating for any predicted loss. Policy DM2 of the KMWLP states that proposals for waste development must ensure that there is no unacceptable adverse impact on the integrity, character, appearance and function, biodiversity interests, or geological interests of sites of international, national or local importance unless it can be demonstrated that there is an overriding need for the development and any impacts can be mitigated or compensated for, such that there is a net planning benefit. Policy DM3 of the KMWLP states that proposals will be required to demonstrate that they result in no unacceptable adverse impacts on Kent's important biodiversity assets and that proposals that are likely to give rise to such impacts will need to demonstrate that an adequate level of ecological assessment has been undertaken and will only be granted permission following (amongst other things): an ecological assessment of the site (including specific protected species surveys as necessary); the identification and securing of measures to mitigate any adverse impacts; the identification and securing of compensatory measures where adverse impacts cannot be avoided or mitigated for; and the identification and securing of opportunities to make a positive contribution to the protection, enhancement, creation and management of biodiversity.
103. No objections have been received on ecological grounds from any technical consultees. The applicant has provided an extended Phase 1 Habitat Survey to assess the potential presence of protected species. No rare or endangered species, habitats or botanical species were found present at the site. With regard to the close proximity of the Ancient Woodland in order to avoid any direct impacts it is recommended that >10m buffer zone is established using HERAS fencing or similar. The survey concluded that the proposed development is unlikely to affect any statutory designated sites of conservation importance or Biodiversity Action Plan Priority Habitats and that provided the measures recommended to safeguard the adjoining Ancient Woodland are undertaken, it is unlikely that there would be any adverse impacts. Having regard to the requirements of the National Planning Policy Framework (NPPF) opportunities to enhance biodiversity are recommended by way of the incorporation of rough grassland and/or wildlife friendly planting between the edge of the proposed site and Ancient Woodland edge together with the provision of bird nesting boxes within the elevations of the proposed buildings. KCC Biodiversity and Kent Wildlife Trust have recommended that the ecological enhancements contained in this report are conditioned on any future planning consent.
104. The proposed development also has the potential for wider ecological improvements to be made as the digestate produced by the facility would then be spread back on to the applicant's fields. This in turn increases the organic matter levels and thus improves the soil and reduces the need to import chemical bagged fertiliser to the site,

allowing the farming operation to be a more environmentally sustainable enterprise. I am therefore satisfied that the proposed development is in accordance with ecological planning policies and indeed has the potential to enhance and preserve the ecological interests associated with the site.

Conclusion

105. I acknowledge that this proposal has attracted significant local concern; however, it is important to note that this proposal is a small scale operation and the operation of the proposed AD plant would effectively form an integral part of the applicant's existing farming activities. By utilising crop residues which currently arise out of the existing farming activities together with other waste products including cattle slurry, as a fuel to feed the plant would, in my opinion be consistent with national and regional policy relating to waste along with meeting the objectives of relevant development plan policies in respect of how waste should be treated as a valuable resource and recovered for some other useful purpose, which in this case is the generation of electricity. On the basis of consultee responses together with the imposition of those conditions as recommended in this report, I am satisfied that the plant would be able to operate without causing any adverse effects on the local environment. Arguably, the proposal will in my view serve to improve upon the existing impacts arising out of the current farming activities at the site and surroundings both in terms of reducing the amount of associated odour being generated along with a reduction in traffic on the local highway network. On this basis the proposal is in my opinion fully consistent with the principles of sustainable development as set out in the NPPF and should therefore be supported.
106. I am satisfied that the applicant would be able to source adequate feedstock material from their own farm holdings and I would impose a condition restricting it so that only crops under their control can be used in the facility. Whilst the proposed development would give rise to some minor harm in terms of landscape and visual impact, I do not consider that these adverse impacts would be unacceptable or overriding. The landscape and visual impacts associated with the development and operation of the site would be acceptable and give rise to benefits described elsewhere in the report. I do not accept that the proposed development would have a significant impact on the AONB or its setting and constitutes development that is appropriate within the AONB.
107. I do not consider that the application should be refused on landscape grounds given the benefits of providing a sustainable and renewable energy source sufficient to provide the electricity for up to 1250 homes. On the basis that the impacts are not unacceptable, the proposed development would not be contrary to the policies relating to landscape and visual impact referred to in paragraphs 56 to 65 above subject to the imposition of the conditions relating to these matters referred to in this report.
108. Whilst the proposed development would give rise to some adverse effects on local amenity (particularly during the construction phase), KCC's Noise, Odour and Air Quality Consultants are satisfied that noise, odour and air quality impacts would be acceptable provided the development takes place as proposed and appropriate controls are imposed by condition (including noise limits and odour management plans). On this basis, and subject to other conditions restricting hours of feedstock loading, I am satisfied that the proposed development would be acceptable in terms of noise, odour and air quality / dust impacts and accord with the policies referred to in paragraphs 66 to 81 above.

109. Whilst there would be some adverse impacts associated with vehicle movements to and from the site, this will cause no greater impact than the current situation and given KCC Highways and Transportation have no objection to the proposed development, I am satisfied that the proposed development would be acceptable in terms of highways and transportation and accord with policies referred to in paragraphs 82 to 87 above.
110. I am also satisfied that the proposals are acceptable in terms of the water environment and ecology (paragraphs 96 to 104), subject to the imposition of the conditions.
111. Having regard to all of the above, I am satisfied that the proposal represents sustainable development and recommend permission be granted subject to the imposition of the conditions referred to under paragraph 112 below.

Recommendation

112. I RECOMMEND that PERMISSION BE GRANTED SUBJECT TO the imposition of conditions covering (amongst other matters) the following:
- Implementation of the permission within 3 years of the date of the permission;
 - The development being carried out in accordance with the approved details and drawings set out in the application;
 - Submission and approval of an Odour Management Plan;
 - Noise levels from the facility at the nearest sensitive receptors shall be below 30dB $L_{Aeq,15min,freefield}$ from 1900 to 0700 Monday to Sunday and shall be below 50dB $L_{Aeq,1h,freefield}$ from 0700 to 1900 from Monday to Saturday and below 45dB $L_{Aeq,15min,freefield}$ from 0700 to 1900 on Sunday;
 - Construction works shall be limited from 0700 to 1900 Monday to Friday and from 0700 to 1300 on Saturday only. Construction noise levels at the nearest sensitive receptors shall be below 65dB $L_{Aeq,1h,freefield}$;
 - The need for an Archaeological Watching Brief;
 - Details of final building design, earthworks and landscaping;
 - Feedstock will only be permitted from the sources outlined in the application documents.
 - Precautionary ecological mitigation strategy and the incorporation of ecological enhancements into the development;
 - If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.
 - The development hereby permitted shall not be commenced until such time as a scheme to dispose of foul and surface water has been submitted to, and approved in writing by, the local planning authority. The scheme shall be implemented as approved.
 - Detailed design of the surface water drainage scheme.

TW/16/5690 - Erection of a 499kw anaerobic digestion facility at Forest Farm, Nineveh Lane, Benenden, Cranbrook, Kent.

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Background Documents: see section heading