

# Agenda Item 43.

<b>Development Management Ref No</b>	<b>No weeks on day of committee</b>	<b>Parish</b>	<b>Ward</b>	<b>Listed by:</b>
F/2015/0767 - (iLap) 151328 - (Civica)	13/23 – Extension of time to 18/9	Swallowfield	Swallowfield	Major

<b>Applicant Location</b>	Mr VJ and RJ Butler C/O Bradbeer Planning Ltd Hill Farm Jouldings Lane Farley Hill	<b>Postcode</b> RG7 1UR
<b>Proposal</b>	Proposed bio-gas anaerobic digestion power generation facility, to include the erection of three digester tanks, creation of a storage lagoon, together with associated plant and equipment, engineering works and landscaping.	
<b>Type</b>	Full	
<b>PS Category</b>	6 – All other large scale majors	
<b>Officer</b>	David Wetherill	

**FOR CONSIDERATION BY** Planning Committee on 19/08/15  
**REPORT PREPARED BY** Head of Development Management and Regulatory Services

## SUMMARY

The application is a full application and proposes a bio-gas anaerobic digestion power generation facility, to include the erection of three digester tanks (19m diameter), creation of a storage lagoon (38m x 60m), together with associated plant and equipment, engineering works and landscaping. The application is classed under the 'major' category and therefore needs to be determined by the planning committee, as the recommendation is for approval.

The site is located within the Countryside, in a high quality Landscape Character Area (Farley Hill Wooded Sand and Gravel Hills).

The primary existing business of the site is the production of hay and haylage for use as animal feed, both from the immediately adjacent land and from other rented land elsewhere within Berkshire. The farm has been operated as a family run business on this site for three generations, dating back to the 1940's. In addition to the agricultural activities, a number of the farm buildings are let out to tenants for storage and as bases to run businesses, which will continue (see planning history section). The site has a dedicated gated access road for HGV s, with an HGV licence (No. OH1116262 R) for unrestricted operation of one articulated lorry.

The full list of proposed plant and structures is given on attached drawing BPL 16.01 rev A. Each component of the proposed development is summarised below:

1. Solids Feeder
2. 2 No. Primary Digesters (19m diameter)
3. Secondary Digester (18m diameter)
4. Digestete Storage Lagoon (38m x 60m)
5. Container for controls and electrical equipment
6. Container for hot water distribution to the tanks

7. Container for Combined Heat and Power gas engine and alternator
8. Emergency flare for bio-gas and bio-methane
9. Transformer (11kV/414V) for connection to electricity grid
10. Existing silage clamps
11. Biogas upgrading container with adjacent skid mounted equipment
12. Permanent welfare facility cabin
13. Underground propane storage tanks
14. Bio-methane network entry controls kiosk
15. Existing farm buildings
16. Screw-press to separate solid from liquid digestate product
17. New Silage Clamp
18. Stand-by diesel generator
19. Underground silage liquor storage tank (10,000 litres)

All the above will be permanent structures. The only temporary structures will be welfare facilities for the contractors during the construction phase, comprising a porta cabin and portable toilet facilities.

The minimum design life of the plant will be 20 years. In practical terms however, concrete structures are very resilient and the mechanical components will be regularly overhauled and refurbished such that a significantly longer lifetime could be expected.

The proposed development is a farm diversification project comprises the installation of a Green Bio-gas Anaerobic Digestion (AD) plant to be sited upon part of the existing farm yard. The project will create a Green Bio-gas generation facility within an existing small farm, using Anaerobic Digester technology with a feedstock of locally grown energy crops to produce bio-methane gas for injection into the local gas network, sufficient to supply the energy needs for over 2,000 homes (projected 300m<sup>3</sup> approx. of bio methane gas produced hourly). The by-product of the process comprises liquid digestate which will be used as an organic fertiliser on the farm thereby replacing the use of nitrogen based fertilisers.

The plant will occupy two nearby areas. The three digester tanks and associated plant and equipment are proposed on the existing northern part of the hard surfaced yard.

A storage lagoon for liquid digestate is proposed to be formed within part of the field immediately to the south of the yard, which consists of an area of grassland. The lagoon will be formed by cut and fill and bounded by landscaped bunds.

The proposed AD Plant will convert organic matter, the 'feedstock', into 'biogas'. The proposed feedstock will comprise Maize Silage (15,500 t/a), Rye Silage (3,000 t/a), Grass Silage (3,000 t/a) and Wheat Grain (1,250 t/a). The 'biogas' will be purified by passing through a biogas upgrading plant before being supplied to the gas grid via the nearby gas main which passes through Hill Farm.

The applicant has produced evidence from Southern Gas Networks (SGN), who has carried out a feasibility study for the injection of gas and has confirmed that there is capacity and that the project is very economically viable given the forecast production rates. The applicants have agreed heads of terms to supply biogas to the grid.

SGN have agreed to provide a network connection to accept the AD plant output into the nearby gas main and is willing to invest in the Project by building and operating the

gas upgrading and injection equipment.

The applicant makes the case that there is justification for the siting of this site, given that it is central to the local sources of the feed stock, in close proximity to an appropriate gas pipe line and would be sustainable in transport terms.

The application includes the following supporting information:

- Planning, Design and Access Statement
- Business Plan (abridged)
- Ecological Appraisal
- Landscape and Visual Impact Assessment
- Arboricultural Impact Assessment and Method Statement
- Soft Landscape Specification
- Landscape Management and Maintenance Plan
- Transport Statement

Whilst not a planning consideration, for information the project will also be subject to the Construction (Design and Management) Regulations 2015 and the associated Approved Code of Practice (ACoP), as administered by the Health and Safety Executive. These require risk assessments to be carried out during the detailed design phase of the project. The following studies will be included in this HSE Plan:

- . HazID. This is part of an overall risk management process and involves designers, end users and management in assessing all the possible hazards and required safeguards in the proposed workplace.
- . HazOP. Focused more on the process design of the plant and equipment, this uses guidewords and brainstorming to identify hazards. The design can then be adapted to eliminate the risks, or mitigate the impact.
- . HazAN. Looking specifically at the construction risks, this ensures that the sequence of work, heavy lifts, laydown requirements, method statements etc. all address and minimise any possible hazards.

## **PLANNING STATUS**

The site is subject to the following designations:

- Landscape Character Area (Quality – High / Sensitivity - Moderate) – Farley Hill Wooded Sand and Gravel Hills
- Countryside
- Wyvols Copse Ancient Woodland 100m Consultation Zone (NW of site). Hornes Copse Ancient Woodland to the east.
- Wyvol Copse also a Local Wildlife site
- Gas Pipeline Consultation Zone
- Minerals Consultation Zone
- 5km and 7km Thames Basin Heaths Special Protection Area Linear Mitigation Zone
- Adjacent to Sand and Gravel Extraction Zone (south)
- Adjacent to Byway 33 (150m away)

- Adjacent to non EA watercourse (west)
- Bramshill SSSI (0.5km away)

## RECOMMENDATION

**That the committee authorise the GRANT OF PLANNING PERMISSION by the Head of Development, subject to the conditions as follows:**

### TIME

1. The development to which this permission relates must be begun not later than the expiration of three years beginning with the date of this permission.

*Reason: By virtue of Sections 91 to 95 of the Town and Country Planning Act 1990 as amended by section 51 of the Planning and Compulsory Purchase Act 2004.*

### MATERIALS

2. Before the development hereby permitted is commenced, samples and details of the materials to be used in the construction of the external surfaces of the buildings shall have first been submitted to and approved in writing by the Local Planning Authority. This shall include the colour finish of the proposed AD tanks. Development shall be carried out in accordance with the approved details.

*Reason: To ensure that the external appearance of the development is satisfactory.  
Relevant policies: Core Strategy policies CP1 and CP3*

### PLANS

3. The development hereby approved shall be carried out in accordance with the details shown on the following approved drawings and documents, unless otherwise agreed in writing by the Local Planning Authority:

Document No	Title	Scale	Revision	Date
<b>Drawings</b>				
-	Hill Farm and AD plant boundaries	1:2500 @A4	V6	23-Jul-15
BPL-16/01	Site Layout Plan	1:500 @A1	B	13-Jul-15
BPL-16/02	Plant Plans and Elevations Sht 1	1:100 @A1	A	20-Mar-15
BPL-16/03	Plant Plans and Elevations Sht 2	1:100 @A1	A	21-Mar-15
BPL-16/04	Access Road Elevations	1:100 @A1	A	22-Mar-15
BPL-16/05	Storage Lagoon Plan & Sections	1:200 @A1	B	13-Jul-15
BPL-16/06	Site Entrance Gate	1:100 @A1	A	24-Mar-15

PRI 19496 -03	Tree Protection Plan	1:500 @A1	A	14-Jun-15
PRI 19496-11 Sht 1	Landscape Proposals	1:200 @A1	E	23-Jul-15
PRI 19496-11 Sht 2	Landscape Proposals	1:200 @A1	E	23-Jul-15
PRI 19496 - 15	Lagoon Sections	1:200 @A2	C	23-Jul-15
<b>Documents</b>				
-	Planning Design and Access Statement	-	-	27-Mar-15
PRI 19496 M&M	AIA and method statement	-	A	14-Jul-15
PRI 19496 Ivia	Landscape & Visual Impact Assessment	-	-	14-Jul-15
PRI 19496 ECO	Ecological Appraisal	-	A	14-Jul-15
PRI 19496 Spec	Soft Landscape Specification	-	-	14-Jul-15
PRI 19496 M&M	Management and Maintenance Report	-	B	15-Jul-15
-	Transport Statement	-	02	26-Mar-15
-	Briefing Note on Environmental Classification	-	01	08-Apr-15
-	Business Plan (Abridged)	-	03	08-Apr-15
-	Briefing Note-Traffic Movement Queries	-	A	07-May-15
-	Responses to Planning Objections	-	A1	12-Jul-15

*Reason: To secure the proper planning of the area in accordance with Development Plan policies.*

#### LANDSCAPING & TREES

4. Prior to the commencement of the development hereby permitted a scheme for the landscaping of the site, including detailed information of the grass, herb, shrub and tree seeding and planting of the proposed lagoon bunds, other earthworks and adjacent

land and the proposed species- rich, native hedgerow with standard trees as shown indicatively on the approved plans, as well as planting to soften views of the proposed digester tanks and access road. The scheme shall be implemented as approved within 12 months of the final completion of the bunds and other earthworks and thereafter be maintained in accordance with the approved scheme. In the event of any of the trees or shrubs so planted dying or being seriously damaged or destroyed within 5 years of the completion of the development, a new tree or shrub or equivalent number of trees or shrubs, as the case may be, of a species first approved by (or a species otherwise agreed in writing by) the Local Planning Authority, shall be planted and properly maintained in a position or positions first approved in writing by the Local Planning Authority.

*Reason: In the interests of visual amenity and biodiversity. Relevant policies: NPPF, Core Strategy policy CP3 and CP7 and MDD Policies CC03, TB21 and TB23.*

#### LANDSCAPE MANAGEMENT PLAN

5. Prior to the commencement of the development a landscape management plan, including long term design objectives, management responsibilities, timescales, timetables and maintenance schedules for all landscape areas, shall be submitted to and approved in writing by the local planning authority. The landscape management plan shall be carried out as approved.

*Reason: In order to ensure that provision is made to allow satisfactory maintenance of the landscaping hereby approved.*

*Relevant policy: Core Strategy policy CP3, CP7 and Managing Development Delivery Local Plan policies CC03, TB21 and TB22.*

#### DETAILS OF EARTHWORKS

6. Prior to the commencement of the development, details of earthworks shall be submitted to and approved in writing by the local planning authority. These details shall include detailed plans and calculations showing existing and proposed land levels and the amount of soil required to form the earth bund, site areas and re-profiled land have been submitted to and agreed in writing by the Local Planning Authority. Details shall include a timescale for earth moving activities and the amount, character and quality specification (including particularly fill intended as a growing medium for future proposed landscape works under condition 4 above), of earth/ inert materials to be imported to the site. Details shall also include the means of construction for each element of the development. Development shall be carried out in accordance with the agreed details unless agreed otherwise in writing by the Local Planning Authority. No excess or unsuitable excavation materials shall be removed from the site.

*Reason: In the interests of the amenity and landscape character of the area.*

*Relevant policy: Core Strategy policy CP3 and Managing Development Delivery Local Plan policies CC03, TB21 and TB22.*

#### TREE PROTECTION

7a) The tree protection measures shall be implemented in complete accordance with the Approved Scheme (Prepared by ACD Arboriculture dated 14/06/15) for the duration of the development (including, unless otherwise provided by the Approved Scheme) demolition, all site preparation work, tree felling, tree pruning, demolition works, soil moving, temporary access construction and or widening or any other operation involving use of motorised vehicles or construction machinery and installation of site staff

facilities, temporary service and the storage of materials, plant, machinery, oil and fuel .

b) No development (including any tree felling, tree pruning, demolition works, soil moving, temporary access construction and or widening or any other operation involving use of motorised vehicles or construction machinery) shall commence until the local planning authority has been provided (by way of a written notice) with a period of no less than 7 working days to inspect the implementation of the measures identified in the Approved Scheme on-site.

c) No excavations for services, storage of materials or machinery, parking of vehicles, deposit or excavation of soil or rubble, lighting of fires or disposal of liquids shall take place within an area designated as being fenced off or otherwise protected in the Approved Scheme.

d) The fencing or other works which are part of the Approved Scheme shall not be moved or removed, temporarily or otherwise, until all works including external works have been completed and all equipment, machinery and surplus materials removed from the site, unless the prior approval of the local planning authority has first been sought and obtained.

*Reason: To secure the protection throughout the time that development is being carried out, of trees, shrubs and hedges growing within the site which are of amenity value to the area.*

*Reason: In the interests of visual amenity.*

*Relevant policies: NPPF, Core Strategy policy CP3 and MDD Policies CCo3 and TB21.*

#### CEASE USE

8. In the event of the plant becoming permanently disused or disused for a period exceeding one year, all equipment including the concrete plinth shall be removed and the site restored in accordance with a scheme to be submitted to and approved in writing by the Local Planning Authority within six months of the date of this permission.

The scheme shall include details of:

- a. The sequence of phasing of (backfilling and) restoration
- b. The re-spreading over the floor of the area of subsoil and topsoil in order that the site has an acceptable visual appearance
- c. The ripping of any compacted layers of final cover to ensure adequate drainage and aeration; such ripping should normally take place before placing of the topsoil;
- d. The machinery to be used in soil re-spreading operations;
- e. Drainage of the restored land including the formation of suitably graded contours to promote natural drainage and the installation of artificial drainage;
- f. Grass seeding of restored areas with a suitable herbage mixture to be approved by the Local Planning Authority;
- g. A scheme for the restoration of the lake and bunds to provide a 'natural' lake with profiles of banks and bunds (both above and below the water-line) re-profiles to reflect this as well as grassland, herbs, shrub, tree and aquatic and emergent planting to enhance the lake from an aesthetic and nature conservation perspective.
- h. A timetable for implementation and provision of a detailed aftercare programme for a five year period after completion of restoration;

and upon approval such scheme shall be implemented as approved unless a variation has been agreed in writing by the Local Planning Authority.

Reason: To ensure that the site is restored in an orderly manner to a condition capable of beneficial after use and in the interests of the amenities of local residents

*Relevant policies: NPPF, Core Strategy policy CP3 and CP7 and MDD Policy TB21 and TB23.*

#### FUEL

9. The anaerobic digestion plant hereby approved shall use only biomass energy crops as set out in the Planning Design & Access Statement and Business Plan (Abridged), unless otherwise agreed with the local planning authority. In particular no waste products shall be processed in the plant.

*Reason: Use of waste would potentially raise issues of traffic and odour which have not been considered as part of this application.*

#### ARCHAEOLOGY

10. No development shall take place until a programme of archaeological work (which may comprise more than one phase of work) has been implemented in accordance with a written scheme of investigation, which has been submitted to and approved in writing by the local planning authority.

*Reason: The site is within an area of known archaeological potential, particularly in relation to the Prehistoric and Roman periods, as illustrated by the Berkshire Archaeology Historic Environment Record.*

#### HIGHWAYS

11. The use hereby approved shall not commence until the turning space has been provided in full accordance with the approved plans. The turning space shall thereafter be retained in accordance with the approved details and shall be used for no other purpose unless otherwise agreed by the local planning authority.

*Reason To ensure a satisfactory form of development and to avoid adverse impact on the public highway in the interests of highway safety.*

*Relevant policy: Core Strategy policies CP3 & CP6.*

12. The use hereby approved shall not commence until the vehicular access has been surfaced with a permeable and bonded material across the entire width of the access for a distance of 10 metres measured from the carriageway edge.

*Reason To avoid spillage of loose material onto the highway, in the interests of road safety.*

*Relevant policy: Core Strategy policy CP6.*

13. No development shall take place, including any works of demolition, until a Construction Method Statement has been submitted to, and approved in writing by, the local planning authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:

- i) the parking of vehicles of site operatives and visitors,
- ii) loading and unloading of plant and materials,



- iii) storage of plant and materials used in constructing the development,
- iv) the erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate,
- v) wheel washing facilities,
- vi) measures to control the emission of dust and dirt during construction,
- vii) a scheme for recycling/disposing of waste resulting from demolition and construction works.

*Reason: In the interests of highway safety & convenience and neighbour amenities.  
Relevant policy: Core Strategy policies CP3 & CP6.*

14. The boundary gates as shown on plan no BPL-16/06 shall remain open at all times during the hours of operation of the ADP.

*Reason: To ensure that vehicles do not obstruct the highway whilst waiting for gates or barriers to be opened or closed, in the interests of road safety  
Relevant policy: Core Strategy policy CP6*

15. All access associated with the ADP shall be derived from the northern access to the site from Jouldings Lane.

*Reason: In the interests of highway safety.  
Relevant policy: Core Strategy policy CP6*

#### DRAINAGE

16. No development shall take place until full details of the Drainage System(s) have been submitted to and approved in writing by the Local Planning Authority. These shall include:

- a. Demonstration that the existing low risk of surface water flooding will not have a detrimental effect on the proposed development or neighbouring properties and that the proposed development will not exacerbate the risk.
- b. Full details of all components of the proposed 'Sustainable drainage system' including dimensions, locations, gradients, invert and cover levels and drawings as appropriate.
- c. Evidence of agreement with the Environment Agency or Wokingham Borough Council for discharge of surface water, including the agreed rate of discharge.
- d. Full details of the maintenance arrangements for the drainage system(s) covering every aspect of the development.

*Reason: To prevent increased flood risk from surface water run-off. Relevant policy: NPPF Section 10 (Meeting the Challenge of Climate Change, Flooding and Coastal Change) and Managing Development Delivery Local Plan policies CC09 and CC10*

#### WATER QUALITY

17. The storage lagoon shall be constructed and maintained at a minimum of 10 metres (m) from the ditch that is located on site which feeds into the River Blackwater. The lagoon shall be completed prior to operation of the development.

*Reason: To prevent risk of water pollution and protect water quality. This is sought in accordance with paragraph 109 of the National Planning Policy Framework (NPPF) which states that the planning system should contribute to and enhances the natural and local environment by preventing both new and existing development from*

*contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution.*

*This is also in accordance with the Water Framework Directive (WFD) which requires that all water bodies are protected and prevented from deterioration and pollution and in accordance with Wokingham*

#### LIGHTING

18. Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) (England) Order 2015 (or any Order revoking and re-enacting that Order with or without modification), no external lighting shall be installed on the site or affixed to any buildings on the site. If external lighting is to be installed, this should be in accordance with details which have been submitted to and agreed in writing by the Local Planning Authority. Details shall include the location, height, baffling to reduce light spillage, levels of illumination and a “lighting design strategy for biodiversity” and agreement to the effect that such lighting is for use during emergency maintenance and works only. Development shall be carried out in accordance with the agreed details and retained thereafter.

*Reason: In the interests of amenity, biodiversity and highway safety.*

*Relevant policy: NPPF Section 11 (Conserving and Enhancing the Natural Environment), Core Strategy policies CP1, CP3, CP6 & CP11 and Managing Development Delivery Local Plan policy TB21 and TB23*

#### CONTAMINATION

19. Unless otherwise agreed by the local planning authority, development other than that required to be carried out as part of an approved scheme of remediation must not commence until parts A to D of this condition have been complied with. If unexpected contamination is found after development has begun, development must be halted on that part of the site affected by the unexpected contamination to the extent specified by the Local Planning Authority in writing until condition D has been complied with in relation to that contamination.

#### *A SITE CHARACTERISATION*

An investigation and risk assessment, in addition to any assessment provided with the planning application, must be completed in accordance with a scheme to assess the nature and extent of any contamination on the site, whether or not it originates on the site. The contents of the scheme are subject to the approval in writing of the Local Planning Authority. The investigation and risk assessment must be undertaken by competent persons and a written report of the findings must be produced. The written report is subject to the approval in writing of the Local Planning Authority. The report of the findings must include:

- (i) a survey of the extent, scale and nature of contamination;  
an assessment of the potential risks to:
  - a) human health
  - b) property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,
  - c) adjoining land
  - d) groundwaters and surface waters
  - e) ecological systems
  - f) archaeological sites and ancient monuments.

- (ii) an appraisal of remedial options, and proposal of the preferred option(s)

This must be conducted in accordance with DEFRA and the Environment Agency's 'Model Procedures for the Management of land Contamination CLR 11

#### *B SUBMISSION OF REMEDIATION SCHEME*

A detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and the natural and historical environment must be prepared, and is subject to the approval in writing of the Local Planning Authority. The scheme must include all works to be undertaken, proposed remediation objectives and remediation criteria, timetable of works and site management procedures. The scheme must ensure that the site will not qualify as contaminated under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

#### *C IMPLEMENTATION OF APPROVED REMEDIATION SCHEME*

The approved remediation scheme must be carried out in accordance with its terms prior to the commencement of development other than that required to carry out remediation, unless otherwise agreed by the Local Planning Authority. The Local Planning Authority must be given two weeks written notification of commencement of the remediation scheme works. Following completion of measures in the approved remediation scheme, a verification report (referred to in PPS23 as a validation report) that demonstrates the effectiveness of the remediation carried out must be produced, and is subject to the approval in writing of the Local Planning Authority.

#### *D REPORTING OF UNEXPECTED CONTAMINATION*

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken in accordance with the requirements of condition A, and where remediation is necessary a remediation scheme must be prepared in accordance with the requirements of condition B, which is subject to the approval in writing of the Local Planning Authority. Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority in accordance with condition C.

*Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other off-site receptors in accordance with policy*

#### BIODIVERSITY

20. No development shall take place until full details of an amphibian and reptile mitigation strategy to the minimum standard outlined in sections 5.21 and 5.33 of the submitted Ecological Appraisal (ACD Ecology, Ref: PR119496Eco\_RevA, June 2015) has been submitted to and approved in writing by the local planning authority. The mitigation and contingency measures contained within the plan shall be implemented in accordance with the approved plan unless otherwise approved in writing by the local planning authority.

21. Prior to commencement of the proposed use a detailed wildlife enhancement

strategy to include the proposed enhancements outlined in section 5.36 of the submitted Ecological Appraisal (ACD Ecology, Ref: PRI19496Eco\_RevA, June 2015) shall be submitted and approved in writing by the local planning authority. The ecological enhancements shall be implemented strictly in accordance with the approved details and shall be retained in that manner thereafter.

*Reason: To seek wildlife enhancements within new developments, as per NPPF.*

22. Vegetation removal on site shall only be conducted outside the bird breeding season, March to August inclusive, or within 48 hours of an ecologist confirming the absence of breeding birds, if in March to August inclusive unless otherwise agreed by the local planning authority.

*Reason: To ensure that the Wildlife and Countryside Act 1981 (as amended) is complied with and breeding birds, their nests and eggs are not harmed or damaged.*

23. During the construction work, any deep excavation should be either covered overnight or a ramp should be placed in the works to allow any badgers to exit the excavation in the event they accidentally fall in.

*Reason: To ensure that badgers are not adversely impacted upon as a result of the development.*

24. No deliveries shall be taken in or dispatched from the site outside the hours of **09:00 – 16:00** Monday to Fridays nor at any time on Saturdays, Sundays, Bank or Public Holidays.

*Reason: To safeguard residential amenities. Relevant policy: Core Strategy policies CP1 and CP3 and Managing Development Delivery Local Plan policies CC06 and TB20*

### **Informatives**

1. The applicant is reminded that this approval is granted subject to conditions which must be complied with prior to the development starting on site. Commencement of the development without complying with the pre-commencement requirements may be outside the terms of this permission and liable to enforcement action. The information required should be formally submitted to the Council for consideration with the relevant fee. Once the details have been approved in writing the development should be carried out only in accordance with those details. If this is not clear please contact the case officer to discuss.

2. As per the letter dated 28<sup>th</sup> August 2015 from the Environment Agency, the applicant is advised environmental permits may be required for the operation of the anaerobic digester.

3. As per the letter dated 4<sup>th</sup> August 2015 from Southern Gas Networks, any work carried out will need to be in compliance with the rules and restrictions set out by Southern Gas Networks.

4. The applicant is advised that due to existing traffic around Farley Hill School pickup times, any vehicle movements associated with Hill Farm could exacerbate this. As such, every attempt should be made by the applicant to avoid entering or exiting the site during these times.

### **PLANNING HISTORY**

AG/2006/9490	Refuse	24-01-07	Application for an Agricultural Determination for the erection of barn for the storage of hay/straw.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
AG/2014/0714	Refuse	24-04-14	Application for agricultural prior determination for the erection of a new building for the storing of hay and straw.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
AG/2014/0728	Refuse	24-04-14	Application for agricultural prior notification for the erection of a hay barn.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
AG/2014/0963	REPLIED	12-05-14	Application for agricultural prior determination for the erection of a Hay Barn for storing feed.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
AG/2014/0964	REPLIED	12-05-14	Application for agricultural prior determination for the erection of a building for storing of hay and straw.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
AG/2014/1240	Refuse	24-06-14	Application for agricultural prior determination for the erection of a new building for the usage of farmyard manure and agricultural produce.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
CLE/2014/1713	Approve	23-10-14	Application for a certificate of existing use for purposes within Class (B8) for storage of motor vehicles.
<b>Reference</b>	<b>Decision</b>	<b>Decision</b>	<b>Notes</b>

<b>Number</b>		<b>Date</b>	
CLE/2014/2571	Approve	25-03-15	Application for a certificate of existing lawful development for use of building within Class B8 for storage of motor vehicles.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
F/2005/3760	Refuse	09-03-05	Proposed change of use of agricultural land to use for storage of scaffolding materials and containers. Retrospective.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
F/2008/2488	Approve	05-01-09	Application for continued use of agricultural land for the storage of scaffolding materials and containers.
<b>Reference Number</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Notes</b>
SO/2015/0791	EIA NONE	17-04-15	Application for a Screening Opinion for an Environmental Impact Assessment for the proposed development of a Green Bio-gas Anaerobic Digestion Plant.

<b>CONSULTATION RESPONSES</b>	
Highways Authority	No objection, subject to condition (11 – 15, 24)
Trees and Landscape	No objection, subject to condition (4 – 7)
Environmental Health	No objection, subject to condition (19)
Ecology	No objection, subject to condition (20 – 23)
Environment Agency	No objection, subject to condition (3) and informative (2)
Drainage Officer	No objection, subject to condition (16)
Berkshire Archaeology	No objection, subject to condition (10)
Natural England	No objection – consult with Council’s Biodiversity Officer
Berks, Bucks & Oxon Wildlife Trust	No objection, subject to condition (20 – 23)
Forestry Commission	No comments received
Southern Gas	No objection subject to informative (3)

Networks	
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<b>REPRESENTATIONS</b>	
John Redwood MP	Would be grateful if we could take account of the views of residents when determining this matter.
Ward Member(s)	<b>Cllr Munro</b> requests that the application is determined by Planning Committee if minded to approve. This is based on the concerns expressed by the Parish Council. He also understands that the ground (from landfill) may also be contaminated.
Swallowfield Parish Council	<p>The Parish Council recognises the need to promote green energy initiatives but in this case the adverse impact and harm outweigh the benefits by far. The Parish Council <b>strongly opposes</b> this application on the grounds that this is simply not the right place to locate such a large industrial scale facility and operation. There has been a total lack of community engagement.</p> <p>The key areas of concern relate to the following:</p> <ul style="list-style-type: none"> <li>a) The impact of an industrial scale facility and operation in a sensitive location</li> <li>b) Significant adverse impact on highways and traffic</li> <li>c) Harm to landscape character</li> <li>d) Loss of amenity for residents</li> <li>e) Environmental risks including proximity of the Primary School and pollution of water courses</li> <li>f) Questionable sustainability and green credentials</li> <li>g) Status as a Waste Management Facility.</li> </ul> <p>The Council therefore trusts that WBC will refuse this application. However, in the unlikely event that WBC is minded to approve it we also include some measures which WBC could take to mitigate its impact.</p> <p><i>In the Event that WBC Recommends Approval</i></p> <p>Construction would inevitably cause nuisance to residents living nearby and on the route of the construction traffic. It would be a source of noise, dust and fumes - potentially in unsocial hours. A management plan would be required to address these concerns and protect the amenity of residents.</p> <p>Strict conditions would be needed on highways along the following lines:</p> <ul style="list-style-type: none"> <li>a. Requiring all HGVs and tractor-trailer combinations to use the route along Church Lane from its junction with the A327 at all times, prohibiting travel past Farley Hill School or through the ford at the bottom of Jouldings Lane were this to be re-opened.</li> <li>b. Limiting the times of such vehicle movements to daytime hours on weekdays only.</li> <li>c. Prohibiting such vehicle movements during school drop off and pick up times.</li> <li>d. Restricting the overall total numbers of vehicle movements in any</li> </ul>

	<p>four week period and the total number and maximum frequency of such vehicle movements in any given day.</p> <p>On the basis that the analysis of vehicle movements relies on a reduction in the historic levels in order to meet the claimed levels, it is necessary for these conditions to apply to all vehicles using the farm site regardless of origin.</p> <p>The landscape management plan refers to the Butler family by name and should instead refer to the owner so that responsibility passes to any future owner and operator.</p> <p>Extra attention should be paid to minimising the impact on landscape and views by suitable measures.</p> <p>Measures would be needed to reduce the impact of the road access on residential amenity, particularly for those residents nearest the entrance.</p> <p>A commitment needs to be secured for the hiring of professional expertise to operate the facility.</p> <p>A condition is needed preventing (or restricting to an absolute minimum) the use of waste as feedstock for the digesters as an alternative to green vegetable matter.</p> <p><i>Additional comments (dated 15/07/15)</i></p> <p>The Parish Council have raised concern about the implications of growing maize and other shallow-rooted crops specifically to be rotted down in digesters, because of their effect of impoverishing the soil and making it susceptible to erosion “Department of Energy &amp; Climate Change (DECC)”. Consequently they claim that this practice is environmentally unsound and unsustainable and would render the land useless for crop production in the longer term, referring to the BBC Countryfile program broadcast 12/07/15.</p> <p><i>Additional comments (dated 27/08/15)</i></p> <p>The Parish council raise concern about the catchment area for the sourcing of feedstock in terms of the sustainability of the scheme and generation of vehicle movements as a result. Specifically, the vehicles used would be large, heavy vehicles unsuitable for the area. The Parish Council reiterates the fact the proposal is in close proximity to residential properties, a school and a nursing home. Additionally that landscaping should not be used to justify the lagoon’s appearance and location being an unsightly addition to the countryside.</p>
Finchampstead Parish Council (Adjoining Parish)	Concerns about the increased traffic movements.

<b>RESIDENT’S COMMENTS</b>
<b>80 letters of objection and 4 letters of support</b> have been received raising the



following issues:

Letters of **SUPPORT** raising the following issues:

AD plant green energy, availability of mains gas to Farley

Good farm diversification.

Don't get smell from purpose grown crops as its not waste and little noise

Traffic – farm will be using their own HGV's/tractors/trailers. No road impact, have been on site since 1943

Letters of **OBJECTION** raising the following issues, and applicants response to each:

No	Objection/Concern	Response
<b>Traffic</b>		
1.	The traffic report seems to be based on a very low count of current traffic.	<ul style="list-style-type: none"> <li>- Not all traffic using Jouldings Lane is attributable to Hill Farm, there are several other businesses operating on the Lane.</li> <li>- Refer to Highways section.</li> </ul>
2.	Traffic report does not include size and type of vehicles.	<ul style="list-style-type: none"> <li>- Full details of the anticipated vehicle types and sizes have been provided.</li> <li>- There will be one replacement farm owned HGV with 30 tonne trailer and a number of tractors, as at present, with various 14 to 18 tonne trailers.</li> </ul>
3.	<ul style="list-style-type: none"> <li>• Surrounding village roads not suitable for the type and frequency of vehicles.</li> <li>• Impact on the village of the additional large vehicles required for the development.</li> <li>• Any increase in commercial/HGV traffic will make existing road safety and highway issues worse.</li> <li>• 97% of feedstock is to be brought to site by HGVs</li> </ul>	<ul style="list-style-type: none"> <li>- The vast majority of the feedstock and digestate movement will be by tractors and trailers.</li> <li>- The daily feedstock requirement will be approximately 80 tonnes. This can be provided with one return trip by the HGV and 3 return trips by a tractor and trailer.</li> <li>- Vehicle movements will be traded off – existing movements will stop to be replaced by new movements, there will only be a slight increase in some months. Refer to Highways section (para 30-36).</li> </ul>
4.	<ul style="list-style-type: none"> <li>• AD plant traffic during school collection and drop-off times will increase risks to children, parents and residents.</li> <li>• What happens if one of the transporting lorries misses the Jouldings Lane turning? Where is it going to turn?</li> <li>• If it misses the HGV entrance and continues down Jouldings</li> </ul>	<ul style="list-style-type: none"> <li>- All vehicles associated with operation of the AD plant will be driven by employees of the farm operating company. These drivers are already familiar with the school start and finish times and, as at present, they time their journeys to avoid these. They also know the other constraints of the local road network and are not likely to get lost.</li> <li>- For very occasional deliveries that may be carried out by drivers unfamiliar with the</li> </ul>

	Lane, this is narrow, used by walkers and horse riders and a dead end at the bottom.	area, specific written instructions have been prepared for issue in advance to each driver.
5.	The junction between Church Road and Jouldings Lane is on a corner that includes access to Woodbury House Residential Care Home, making exit from the Home and Jouldings lane difficult and potentially dangerous	The sight lines up and down Church Road when leaving Jouldings Lane are more than sufficient to enable the largest of vehicles to exit safely.
6.	Increased traffic is a risk to people who walk up and down Jouldings Lane to reach the walks along the Blackwater River	There will be no AD plant traffic on the narrow and twisty parts of Jouldings Lane which are most hazardous to walkers. All AD plant traffic will use the dedicated HGV access to Hill Farm which is situated at the very top of Jouldings Lane, less than 10metres from the junction.
7.	<ul style="list-style-type: none"> <li>• Church Road is reduced to a single lane when parents drop off and pick up children from the school. Lorries could not get through or turn around.</li> <li>• Access to the village from Swallowfield is not suitable for HGVs.</li> <li>• The main road through the village is the site of the school and is effectively a single carriage road for 2 hours a day.</li> </ul>	The bulk of all the AD plant traffic will use the north Church Road access to the A327. Small quantities of feedstock will be grown in Stratfield Saye and Mattingly, resulting in some additional tractor and trailer movements through Swallowfield and up Church Road past the school. These vehicles will be driven by employees of the farm who are familiar with the roads and the school opening times. As with present farming operations, these journeys are arranged to avoid the school pick-up and drop-off periods.
8.	<ul style="list-style-type: none"> <li>• AD plant traffic could potentially be driving through the village 24 hours a day</li> <li>• Will HGV deliveries take place at night with headlights impacting resident's houses?</li> </ul>	There is no requirement or intention to deliver feedstock or remove digestate from the Hill Farm site during the hours of darkness.
9.	It is not believed to be possible to "double up" vehicles bringing in and taking out materials (those coming in would carry dry matter, those leaving would carry liquid/wet matter)	<ul style="list-style-type: none"> <li>- The raw digestate is a slurry that is separated into solid and liquid fractions, both of which will be applied to the land as a fertiliser. The solid matter will be transported to remote crop sites by vehicles that are fetching back feedstock. The liquid fraction will be transported from the lagoon to the remote sites by tractors with 4000 gallon tanker trailers and applied</li> </ul>

		<p>immediately as fertilizer at that location.</p> <ul style="list-style-type: none"> <li>- The transport study estimated a ratio of 25% liquid to 75% solid, giving just over 200 tractor movements a year dedicated to liquid removal (4 per week).</li> </ul>
No	Objection/Concern	Response
Environment & Ecology		
1.	<ul style="list-style-type: none"> <li>• Unpleasant odours and harmful gasses generated by plant affecting local wildlife, school and residents.</li> <li>• Feedstock storage arrangements will result in bad smells that impact the local area</li> </ul>	<ul style="list-style-type: none"> <li>- Anaerobic Digestion is by its very nature a sealed process. Oxygen is excluded in order to obtain the methane end product. The methane has high value and over 99% of it is used to generate electricity for the facility, or is immediately injected directly into the gas grid.</li> <li>- The Hill Farm digester will be run on purpose grown crops that are harvested as silage and stored in large clamps on the farm, sealed for preservation under sheets that keep out air. It is no different in principle to feeding the silage to a herd of cows, though with the AD plant the greenhouse gas methane is captured</li> <li>- Digestate is the other main by-product. It is high in nitrogen but has had all the other organic goodness stripped from it by the digestion process, meaning that there is little to decay and smell.</li> <li>- This is very different from commercial waste anaerobic digesters which sometimes hit the headlines. With these units the feedstock contains a variety of organic materials resulting in a wide range of by-products, all of which present a challenge to manage.</li> </ul>
2.	<p>Planning to be granted to include a condition that the development is to be implemented in accordance with recommendations in Ecological Appraisal Document (Feb 2015) by ACD Ecology.</p>	<p>This is agreed and an appropriate planning condition can be imposed.</p>
3.	<p>Noise from the plant and associated traffic impacts local residents, including Woodbury House Residential Care Home and the school</p>	<p>The two principal sources of noise in an AD plant are the gas engine, generating electricity, and the compressor raising the methane pressure to a high enough level for injection to the gas pipeline. These items of equipment are enclosed in insulated containers that provide acoustic deadening of the sound to a level of typically no more than 65 dB (A) at a distance</p>

		of 10 metres.
4.	The plant will produce CO <sub>2</sub> greenhouse gases	<ul style="list-style-type: none"> <li>- The carbon dioxide produced by an AD plant has been captured from the atmosphere in the prior growing season. This is quite unlike the burning of fossil fuels where the carbon being released is continuously adding to what is already in the atmosphere.</li> <li>- One of the options with AD plants is to capture the CO<sub>2</sub> being produced and either use it directly, accelerating crop growth in greenhouses for example, or upgrading it for use in food and medical applications.</li> </ul>
5.	The development is on the boundary between woodland and open fields, forming a barrier for small mammals and insects moving between these two habitats	The existing farm site proposed for construction of the tanks and silage clamps already forms a barrier for these animals and insects. The length of the site is small in comparison to the perimeter of the woodland and the wildlife has clearly adapted over time. The new landscaping and biodiversity measures will enhance biodiversity interest on the farm.
6.	<ul style="list-style-type: none"> <li>• Failure of digestate lagoon results in contamination of farmland and the Blackwater River</li> <li>• Groundwater contamination and release of methane gas</li> </ul>	<ul style="list-style-type: none"> <li>- The lagoon design is such that the primary containment is a purpose built liner with design life of over 20 years. Secondary containment is provided by an earth bund around the perimeter of the lagoon. Porous field drains are installed around the lagoon such that if the liner was to fail this would be detected by sampling of the water from these drains and corrective action can then be taken before any leak escalates.</li> <li>- In the event of a fault that means methane gas cannot be injected to the grid, it is first recycled through the digester tanks which have large double skinned domes for short term gas storage. If the upset cannot be resolved quickly then, when the domes are full, the excess methane will be burned in the flare. Operating experience at AD plants across Europe however shows that this is a rare event.</li> </ul>
7.	How will the plant affect ground	The components of the AD plant are

	water and water courses?	segregated from both ground water and nearby water courses. The silage clamps have primary and secondary means of collecting any effluent run-off, which is then re-cycled into the plant. The digester tanks are surrounded by a bund that will contain the entire contents of the largest tank in the event of leaks or failure. The lagoon has secondary containment and detection facilities to ensure that early corrective action can be taken should a leak occur.
<b>No</b>	<b>Objection/Concern</b>	<b>Response</b>
<b>Visual Impact and Loss of Amenity</b>		
1.	Development perceived to cause an adverse visual impact in an area of Outstanding Natural Landscape / Special Landscape Significance	The plant has been designed so that it is substantially screened by existing buildings, trees and hedgerows. Additional measures are being taken, including the setting of large plant below ground level, external finishes of structures in suitable recessive colours and new planting at strategic points to enhance the existing cover.
2.	Negative impact on amenity value of Woodbury House Residential Care Home properties	Refer to Neighbour impact section (para 25-29).
3.	The scale of the development is out of keeping with the nature of a working farm and surrounding area	The development is using land that has been made-up and used over the years for clamping silage, housing and management of livestock, storage of manure etc. The scale of the proposed crop and digestate movements is consistent with an intensive livestock operation on a farm of this size, with noticeably less impact in terms of emissions and odour.
4.	The flare will protrude above the native woodland, detracting from amenity of the area	The flare is 9m tall. It is slender and will be painted subdued colours to avoid it standing out. The trees behind the flare are considerably taller.
5.	Concerns have been expressed about loss of privacy arising from use of the gateway and access track, causing loss of residential amenity to the occupants of the former Fox and Hounds Public House	Refer to Neighbour impact section (para 25-29).
	<b>Objection/Concern</b>	<b>Response</b>
<b>Health and Safety</b>		

1.	EA recommendation that AD facilities should not be sited within 250m of residential property due to bio-aerosols from the plant which could cause lung infections and breathing difficulties, particularly in elderly residents and primary school children	This guidance is not applicable to AD plants using purpose grown crops (PGC) as feedstock.
2.	Insects may carry disease and impact health of local residents	<p>There is nothing in the Hill Farm AD plant process for insects to feed off. Unlike a livestock operation where the slurry and dung have nutritional value and attract insects, the digestate output from the AD plant has little value other than being a nitrogen rich fertiliser for use on the land bank.</p> <p>The AD plants that hit the headlines with smells and insect problems are generally using commercial waste as feedstock, which is difficult to store and manage. This is not the case with the Hill Farm facility since the feedstock is silage that is stored securely in clamps.</p>
3.	<ul style="list-style-type: none"> <li>• The chance of air pollution, explosion and toxic gases</li> <li>• The EA and Parliamentary Office of Science and Technology have issued warnings about AD facilities, including emissions, and combustion causing air pollution, risks of explosion and H<sub>2</sub>S poisoning and concerns about impact on soil and water quality by heavy metals, persistent organic compounds, nitrates and phosphates.</li> </ul>	<ul style="list-style-type: none"> <li>- Methane is not being stored under pressure at the site. There are strict regulations regarding the design and use of equipment for processing such flammable gases. Scotia Gas Networks (SGN) will provide the process plant in line with these regulations and will be under contract to operate this part of the plant, using their considerable experience in this area.</li> <li>- H<sub>2</sub>S is produced in very small quantities. It is more of a risk to the operations and maintenance personnel than to the community (see 4 below).</li> <li>- The warnings on soil and water quality generally refer to the effects of using the digestate from AD plants as fertiliser on arable land. If the feedstock is commercial waste then any trace contaminants can find their way into ground water, or be taken up by crops and so enter the food chain. This is not applicable to the Hill Farm facility as it uses PGC feedstock.</li> </ul>
4.	Risk to human health from Hydrogen Sulphide and pathogenic content of feedstock and digestate	<ul style="list-style-type: none"> <li>- Hydrogen sulphide is produced in minute quantities in the digester tanks. It is minimised by injecting very small quantities of oxygen at a certain point in the process. There are then special activated carbon</li> </ul>

		<p>filters that remove any remaining H<sub>2</sub>S from the bio-gas before it is used for electricity generation or upgrading to bio-methane for injection to the grid.</p> <ul style="list-style-type: none"> <li>- Warnings on H<sub>2</sub>S apply to personnel opening up the system for maintenance purposes. The volume of H<sub>2</sub>S produced is so small that it would not pose a threat to the local community even if residual quantities were released.</li> <li>- Regarding pathogenic contents of feedstock and digestate, this does not apply where the feedstock comprises purpose grown crops (see 1 above).</li> </ul>
5.	<p>Inadequate combustion of biogas produces carbon monoxide, nitrous oxide and volatile organic compounds</p>	<ul style="list-style-type: none"> <li>- The combustion of bio-gas in a combined heat and power gas engine is similar to running a commercial diesel engine, but using the methane component of the bio-gas as an alternative fuel. Provided the engine is serviced regularly and subject to regular testing of the exhaust emissions, the quantities of carbon monoxide and nitrous oxide will be minimal and well within the limits for equivalent motor vehicles.</li> <li>- Volatile organic compounds only arise where the input to the AD plant comprises commercial waste containing these components. They are not a by-product of purpose grown crops being used for feedstock in the proposed development.</li> </ul>
6.	<ul style="list-style-type: none"> <li>• Storage of methane near a school and residential homes is dangerous with incidents of explosions at similar sites being cited</li> <li>• Safety concern at having a methane storage facility so close to homes and a school</li> <li>• Danger associated with storage of an explosive gas so close to housing, a care home and the school</li> </ul>	<ul style="list-style-type: none"> <li>- Methane is not being stored under pressure at the AD plant site. There are no inventories of flammable or dangerous substances that would necessitate special measures to control risk of major accident hazards.</li> <li>- The bio-gas is collected at atmospheric pressure in the double skinned domes of the digester tanks. Any leakage from the flexible inner membrane is detected and leads to shut down of the plant.</li> <li>- The bio-gas is upgraded to bio-methane and is then immediately compressed and injected into the gas network, located less than 30 metres from the plant. The volumes of methane at high pressure downstream of the compressor are very small and do not present a hazard when managed in accordance with applicable regulations (see 3 above).</li> </ul>
<b>Objection/Concern</b>		<b>Response</b>

Other		
1.	No consultation with local community	<ul style="list-style-type: none"> <li>- The WBC consultation process for the planning application provides the mechanism for publicising and disseminating information on the proposed development and enables members of the public to express their views.</li> <li>- The NPPG does advise on pre-application consultations but there is no statutory requirement.</li> </ul>
2.	<ul style="list-style-type: none"> <li>• The ethics and sustainability of using purpose grown crops for fuel are questionable</li> <li>• 1354 acres of arable land will be used to grow purpose grown crops for fuel to produce 500kWe whereas offshore windfarms can produce 4 times the energy in this area</li> </ul>	<ul style="list-style-type: none"> <li>- The case for using PGCs to generate fuel is well documented. Refer to joint briefing paper “The Case for Crop Feedstocks in Anaerobic Digestion”</li> <li>- The land area required to support the AD plant is just under 1240 acres</li> <li>- In addition to 500kW of electricity, the plant will produce over 300 cubic metres of bio-methane per hour, enough to heat over 2000 homes</li> <li>- The digestate produced replaces man-made fertilizer and will be used on the land used to grow the crops, recycling the nitrogen from the crops</li> <li>- Crops take the greenhouse gas carbon dioxide from the atmosphere and the AD process provides an opportunity to capture and recycle this</li> <li>- The operation has to comply with tough European and UK Government regulations on sustainability in order to qualify for incentive payments</li> <li>- The Hill Farm operation will minimise its carbon footprint through having a relatively compact local landbank, reducing dependency on traditional fertiliser, utilising the latest farming techniques to reduce the ploughing and harrowing requirements and using the latest technology for heat recovery and raising the efficiency of the AD processes.</li> </ul>
3.	No details of point of entry to Scotia Gas network, or of propane injection facility	<ul style="list-style-type: none"> <li>- The Scotia Gas Network (SGN) pipeline passes across Hill Farm some 30 metres east of the proposed facility. SGN have offered to provide a connection, also to operate the biogas upgrade facility on behalf of the applicant.</li> <li>- Propane is required to raise the heat value of the upgraded bio-methane to the correct</li> </ul>



		level for domestic use. Propane will be delivered to the plant by LNG tanker, in much the same way as for domestic heating, and stored in underground tanks.
4.	Application form Q 22 regarding whether the facility is a waste management development has both YES and NO boxes ticked. The subsequent table is not completed.	The answer to this question is no, the proposed development is not a waste management facility.
5.	What are the benefits to the community?	Benefits include securing of existing jobs at Hill Farm, creation of new jobs, the possible creation of a local gas distribution network in Farley Hill, possible use of recovered heat from the plant for district heating or other similar purposes and the provision of green gas to supply local transport.
6.	<ul style="list-style-type: none"> <li>• No content in the application regarding management, ongoing governance or expertise in operating a sophisticated and potentially dangerous installation</li> <li>• There is very little evidence that and hence assurance that the applicant has any experience or expertise in building and operating a commercially viable AD plant</li> </ul>	<ul style="list-style-type: none"> <li>- Training will be given to all operating personnel, particularly in relevant specialist areas, to ensure high levels of competence when dealing with the plant, also to ensure adequate cover will be maintained during holidays and other absences.</li> <li>- The technology provider will be retained under contract once the plant has been commissioned to provide guidance and advice on operation of the digestion plant.</li> <li>- The bio-gas upgrading and bio-methane injection will be carried out by Scotia Gas Network operating under contract to the plant owners.</li> </ul>

7.	<ul style="list-style-type: none"> <li>• Feedstock could be rotting food waste and animal slurry</li> <li>• Waste and children do not mix</li> <li>• Lack of information on what waste material will be used to feed the AD plant and the potential risk hazards (i.e. risk to public health from pathogens in the atmosphere originating from animal waste)</li> <li>• Storage of liquid waste near children is dangerous and will create foul smelling odours</li> <li>• Odour is a critical factor affecting the viable operation of all biodegradable waste management facilities...</li> </ul>	<ul style="list-style-type: none"> <li>- The feedstock for the proposed AD plant will be crops that are grown specifically for the purpose (PGC), which will be controlled by condition.</li> <li>- The liquid digestate has had the nutritional content removed and does not decompose further to produce odours. It has high nitrogen content and will be used as fertilizer on the landbank to grow further crops for the AD plant.</li> </ul>
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A second consultation period resulted in the following:

- Three letters of support due to the production of green energy, farm diversification and limited impact on traffic.
- 10 letters of objection with regards to the following:
  - Rural area
  - Unsuitable road infrastructure
  - Proximity to school
  - No restriction of hours of operation
  - Incorrect figures for traffic generation
  - Increase in traffic in area and particularly at school times
  - Smells and environmental problems from the AD plant
  - Vehicle sizes too large for area
  - Instances already occur where cars are forced to mount pavements to accommodate tractors
  - Proximity of entrance/'waiting' area for vehicles to existing residential properties

**PLANNING POLICY**

National policies:

National Planning Policy Framework (NPPF)  
National Planning Policy (NPPG)

Wokingham Borough Local Development Framework – Core Strategy:

CP1 – Sustainable development  
CP3 – General Principles for Development

CP6 – Managing Travel Demand  
CP7 – Biodiversity  
CP8 – Thames Basin Heath Special Protection Area  
CP9 – Scale and location of development proposals  
CP11 – Proposals outside development limits (Countryside)

Managing Development Delivery Local Plan Document:

*Cross Cutting Policies:*

CC01 – Presumption in favour of sustainable development  
CC02 – Development Limits  
CC03 – Green Infrastructure, Trees and Landscaping  
CC04 – Sustainable Design and construction  
CC05 – Renewable energy and decentralised energy networks  
CC06 – Noise  
CC09 – Development and Flood Risk  
CC10 – Sustainable Drainage

*Topic Based Policies:*

TB12 – Employment Skills Plan  
TB21 – Landscape Character  
TB23 – Biodiversity and development

Other guidance:

- Borough Design Guide SPD
- Sustainable Design and Construction SPD

**PLANNING ISSUES**

**APPRAISAL**

Renewable energy:

1. The NPPF encourages the use of renewable resources in supporting the transition to a low carbon future in its Core Planning Principles (paragraph 17) and Section 10 (Meeting the Challenge of Climate Change, Flooding and Coastal Change) notes that planning has a key role in supporting the delivery of renewable and low carbon energy and associated infrastructure, which is central to sustainable development (paragraph 93). It requires that LPAs should:

*Have a positive strategy to promote energy from renewable sources (paragraph 97);  
Not require applicants for energy developments to demonstrate the overall need for renewable or low carbon energy; and,  
Approve applications (subject to other material considerations) 'if its impacts are (or can be made) acceptable' (paragraph 98).*

2. The NPPG ('Renewable and low carbon energy' Para 3) states "that all communities have a responsibility to help increase the use and supply of green energy, but this does not mean that the need for renewable energy automatically overrides environmental protections and the planning concerns of local communities. As with other types of development, it is important that the planning concerns of local communities are properly heard in matters that directly affect them."

3. It goes on to state examples of the considerations for particular renewable energy technologies that can affect their siting include proximity of grid connection infrastructure and site size, and:

- for biomass, appropriate transport links,
- for hydro-electric power, sources of water,
- for wind turbines, predicted wind resource, considerations relating to air safeguarding, electromagnetic interference and access for large vehicles.

4. Policy CP1 of the Core Strategy encourages development that minimises consumption of resources, but also requires that development proposals maintain or enhance the high quality of the environment. Paragraph 4.6 notes that delivering on sustainable energy can bring significant social, environmental and economic benefits to Wokingham Borough.

Policy CC05 of the Managing Development Delivery Local Plan states that: 'Local opportunities to contribute towards decentralised energy supply from renewable and low-carbon technologies will be encouraged'. Proposals for renewable energy (excluding wind turbines in this instance) must demonstrate that they are:

- a) Appropriate in scale, location and technology type;
- b) Are compatible with the surrounding area, including the impact on noise and odour;
- c) Do not have a damaging impact on the local topography and landscape; and,
- d) No significant impact upon heritage assets, including views important to their setting.

6. In addition, the Council has a strategy to promote sustainable development; the Sustainable Environment Strategy 2010. Whilst this is a material consideration this strategy is not adopted planning policy and therefore limited weight should be attached to it in determining the application. However, the Strategy notes that the Borough is falling short in terms of providing non-wind renewable energy technologies and that renewable energy is an area of significant growth for the economy.

7. In summary, there is support in principle for the proposal, subject to the impacts on the surrounding area.

#### Countryside and Landscape Impact:

8. Hill Farm is located to the south of Farley Hill and lies between the block of woodland at Wyvols Copse to the west and Jouldings Lane to the east. The site sits within landscape character area L2 Farley Hill Wooded Sand and Gravel Hills, which is a landscape of high quality whose retention is supported in policy, the design guide, the Landscape Character Assessment (LCA) and the NPPF. Key characteristics to be

retained are rural views, intimate pattern of pastures, rural lanes, woodland, arable farmland and vernacular settlement. It is a sensitive and high quality landscape. The applicant refers to an AD Plant at Icknield Farm Ipsden Oxon (permitted in January 2014 LPA SODC) which was permitted despite being located within the Chilterns AONB. This is a consideration for the determination of this application.

9. The application site is located within an area classified as outside of development limits within the countryside. Section 3 of the NPPF (*Supporting a Prosperous Rural Economy*) states that planning policy should support economic growth in rural areas by taking a positive approach to sustainable new development. This includes the development and diversification of agricultural and other land-based rural enterprises. Core Strategy policy CP11 (*Proposals outside Development Limits*) also encourages development in the countryside where it contributes to diverse and sustainable rural enterprises within the borough. The proposal could potentially be considered as diversification of the existing farm's activities as agriculture, in this instance the haylage business, which is the predominant use of the site at present.

10. The Hill Farm site is particularly suitable for location of an AD plant for the following reasons:

- . Proximity of two existing major gas pipelines which cross the farm within 30m of the proposed plant location. These can receive the bio-methane product, rather than shipping this out by road tanker, or facing a major capital cost for an additional gas pipeline to connect to the national gas grid.
- . Availability of an existing 11kV electrical connection at the farm. This enables import of power to start the plant up and, thereafter, export of any surplus electricity to the national grid.
- . Integration of the AD plant with the existing Hill Farm operation. This secures the supply of feedstock and provides an economic disposal route for digestate product. It also improves efficiency and provides synergies in terms of shared facilities, machinery and labour.
- . Central location within a relatively compact local land bank. This minimises the carbon footprint for obtaining feedstock when compared with many other AD plants.
- . Land being used for the development is non-productive from an arable perspective, having been reclaimed or made-up to support other farm activities over the last 30 years.

11. Policy CP11 (*Proposals outside Development Limits*) also encourages development which does not spread across the site. Wherever possible development has been located on previously developed non-agricultural land. The farm yard and farm building complex lies in a depression within the surrounding gently undulating landscape and is framed by the prominent block of woodland which lies to the west. The proposals involve the erection of three 15m high bio digesters (12m above ground level given that they are sunk 3m into the ground with retaining walls), and this development is on previously developed land, seen in context of established farm complex, with a multitude of buildings/structures and indoor/outdoor storage.

12. However it has not been possible to locate the proposed lagoon on previously developed land within the farmstead, as it needs a larger area and to be downslope of the bio digester tanks. Therefore there will be some encroachment but this is unavoidable to meet the functional requirements of the proposed lagoon.

13. The original design of the new lagoon was considered too large (80m x 47m with a max bund height of 5m) with a highly engineered approach which was not considered to be landscape led. The Landscape Officer suggested reducing the height of the bund (max of 3m) with more ground modelling to mask the engineered bunding of the proposed new storage lagoon. He suggested varying the height and width of the bunding taking it wider and higher in some places so making it appear part of the landscape rather than superimposed upon it. Revised plans have been received which meet these requirements.

14. In addition, the Landscape Officer requested restoration of the historic N-S hedgerow bisecting the large field to the south of the lake so that the lake and its woodland fringe form part of that restored landscape and sit in it. This ensures that the proposed lagoon planting isn't just an isolated, unconnected strip of planting and helps it to make sense within the wider landscape. Revised plans have been submitted showing this which are acceptable.

15. The hedgerow has been shown indicatively on revised plans, and further detail will need to be provided at the conditions (4 and 5) stage. It is anticipated that a 5m wide strip will be required. A suggested mix is of native species.

16. The native species mix will lead to a biodiversity enhancement, which is another factor in favour of the scheme. The landscaping condition will also secure planting to soften views of the proposed AD tanks, the foundations of which will not extend outside the wall of the digesters, thereby reducing the impact on surrounding trees. A condition will require the development to be built in accordance with the Arboricultural Impact Assessment and Tree Protection Plan (7).

17. There is no requirement for security fencing nor for all night security lighting, which would have a deleterious effect on the landscape. Restrictions on lighting will be controlled by condition 18. Other than a very brief reference in the Landscape Visual Impact Assessment no suggestions about the colours of the digesters have been made. The colour of the digesters and 9m high flare will be key in determining their landscape impact and this can be adequately addressed by condition 4.

18. In summary, the proposed development is likely to have some impact on the high quality landscape given its size and scale. However the applicant has revised the scheme in response to the Landscape Officers comments, and given the mitigation and enhancement, the impact is not significant enough to warrant refusal of the application.

#### Environmental Health:

##### *Noise and odour*

19. Anaerobic Digestion is by its very nature a sealed process. The Hill Farm digester will be run on purpose grown crops that are harvested as silage and stored in large clamps on the farm, sealed for preservation under sheets that keep out air. The digester by-products are principally water and carbon dioxide, neither of which creates a hazard to the local population. It is no different in principle to feeding the silage to a herd of cows, though with the AD plant the greenhouse gas methane is captured.

20. Digestate is the other main by-product. It is high in nitrogen but has had all the other organic goodness stripped from it by the digestion process, meaning that there is little to decay and smell. It is stored as a liquid and a solid, neither of which has

significant odour. It is also worth comparing the odour impact to the lawful agricultural use of the site, which could include the keeping of cows. This would have an odour impact from the manure etc. The only proposed input into the AD process is energy crop, and it is not proposed to use other waste products. The nature of the use will be controlled by condition (8 and 9).

21. The two principal sources of noise in an AD plant are the gas engine, generating electricity, and the compressor raising the methane pressure to a high enough level for injection to the gas pipeline. These items of equipment are enclosed in insulated containers that provide acoustic deadening of the sound to a level of typically no more than 65 dB (A) at a distance of 10 metres.

22. The Environmental Health Officer therefore considers that odours, emissions and noise arising from the development will be negligible.

#### *Lighting*

23. The plant will operate 24 hours a day, continuously injecting bio-methane into the gas pipeline. Operations staff will carry out their activities during daylight working hours, including receiving of feedstock deliveries and despatching outgoing digestate shipments. There is no requirement for all night security lighting, which could have a potential impact on neighbours. Restrictions on lighting will be controlled by condition 18.

#### *Contamination*

24. Part of the site was used for unauthorised landfill activity in 2006. This land use has the potential to give rise to contamination at the site. This contamination could be exposed as a result of the proposed groundworks/landscaping thereby posing a potential risk to site workers and nearby residential receptors. An assessment of potential contamination is therefore required for the proposed development in accordance with the NPPF and the principles of sustainable development and will be required by condition 19.

#### Neighbour impact

25. The closest residential property to the development is 100m away. Farley Hill Primary School is located approx. 500m away from the proposed digesters (and 3m away from the access), although it is understood that children use the adjoining copse which is closer. Woodbury House Residential Care Home is located approx. 150m away from the proposed development.

26. It is considered that with the proposed landscaping, planting and screening, and noise attenuation measures on certain equipment and routing of traffic through a dedicated access, there should be negligible impact on the neighbouring properties, including the school and care home.

27. The development is using land which has been used over the years for clamping silage, housing and management of livestock, storage of manure etc. The scale of the proposed crop and digestate movements is consistent with an intensive livestock operation on a farm of this size. There is not considered to be a loss of light, overbearing or overlooking impact.

28. Concerns have been expressed about loss of privacy arising from use of the gateway and access track, causing loss of residential amenity to adjoining neighbours. However this is a long established farm access and track which has been used for many years. Notwithstanding this, the proposed development will achieve a betterment by electrification of the inner access gate, with mobile phone recognition for authorised users, thus avoiding the need for vehicles to stop at this gate and unlock it to gain access. In any event the landscaping condition will require soft landscaping measures to improve the relationship with neighbours.

29. Objection letters have queried the safety of storing methane, particularly in relation to Farley Hill school. However methane is not being stored under pressure at the AD plant site and there are no inventories of flammable or dangerous substances that would necessitate special measures to control risk of major accident hazards. Further information on the submissions required to the Health and Safety Executive are provided in the summary section (non-planning consideration).

#### Impact on Highways, Access and Movement:

30. The application site is located off Jouldings Lane. There is more than one access into the site from Jouldings Lane. The submitted information indicates that the northern access will be used to serve the proposed ADP. Due to the nature of Jouldings Lane further to the south, it would be appropriate to restrict access for vehicles associated with the ADP to just the north access. This can be controlled by condition (15), as well as the requirement for the access to be resurfaced with an appropriate hard bound material to prevent loose material on the highway (condition 12).

31. It is proposed to provide gates further into the site. These are set back to enable large vehicles to pull clear of the public highway before entering the site. Adequate space has been indicated should there be more than one vehicle waiting to enter the site and this will be required to be kept clear for this purpose. It is noted that a temporary fence in this location has already been erected prior to this application being determined; however the applicant is able to do this under permitted development. The existing gates at the boundary will be retained however it would be appropriate to control by condition (condition 14) that these shall remain open during the AD Plant hours of operation. There is ample space within the application site for parking associated with the ADP and turning area has been indicated. This is also secured by condition 11.

32. A Transport Statement has been submitted which analyses existing and proposed monthly vehicle movements at Hill Farm. Additional information in respect of traffic generation has been submitted over the course of the application. The submitted details include the locations of other sites where crops for the process will also be sourced; some of which are outside of the Borough. Hill Farm is in relatively close proximity (less than 1km) to the main highway network of A327 Eversley Road and it is considered that this provides good ongoing access to many of the identified sites. In respect of sites at Beech Hill, the applicant has stated that they will avoid the peak school hours (when travelling west of the site) to reduce conflict at these times, when Church Road experiences on-street parking. From the information provided, the majority of the destinations are in the opposite direction to Farley Hill School reducing the need to travel in that direction. Some weight should be attributed to the fact the applicant would be detrimentally affected by travelling at school peak times. Nonetheless, an informative



to this effect has been included (informative 4).

33. The submitted details demonstrate that the introduction of the ADP will largely replace the existing predominant haylage use of the site. Therefore there would be a trade-off in terms of vehicle movements (i.e. the site currently has deliveries in respect of the haylage business). Based on the submitted Transport Statement and the Highways Officers understanding of the ADP operation, there will be an overall net increase in vehicle movements on a yearly basis, it is expected that there would be seasonal variations including some months where vehicle movements would be less than the current operations on the site. In terms of daily movements this is expected to be approximately 7/8 trips per day and, on average, over the year would be significantly lower. It is not considered that this will impact on the local highway network in terms of capacity and highway safety. It has been stated that all movements will be made by HGVs, predominantly tractor and trailer.

34. Weight should be attributed to the fact the farm could intensify its existing use, resulting in additional vehicle movements without the requirement of planning permission. Although the AD plant does require permission in itself, it does also give the opportunity to assess and restrict the current vehicle movements. Put simply, any significant changes to the AD process that may occur would result in a further application and again, the vehicle movements could be assessed at this point.

35. Access to the A327 is via Church Road, which although a rural road is a two lane carriageway generally sufficient for the majority of vehicles to pass a tractor/trailer. Indeed given its location, agricultural uses are expected in the area as well as the type of traffic they generate. Although Church Road has a derestricted speed limit, due to the alignment of the road, speeds are much lower. It is acknowledged that should two HGVs need to pass one another, there are sections of Church Road that would require such a manoeuvre to be undertaken at low speed; the likelihood of this occurring is considered low due to the operation of the ADP. Accident data for Church Road shows that one small accident has occurred in the past three years (05/05/2012); the main reason for this accident was not attributed to HGV movements. The recorded accident was a result of an animal / object being in the road which resulted in a single car leaving the carriageway.

36. The applicant has confirmed that there are currently no plans to expand the ADP and therefore any additional movements (above those submitted) will be restricted. Any future expansion is likely to result in a further planning application and the impact of this would be reassessed. The only proposed input into the ADP process is energy crop, and it is not proposed to use other waste products. The nature of the use will be controlled by condition (8 and 9). A construction vehicle management plan is recommended to ensure construction traffic is managed to minimise any adverse impact on the public highway (condition 13).

#### Impact on Biodiversity:

##### *Great Crested Newt*

37. The extra evidence and reasoning that has been presented in the updated Ecological Appraisal (ACD Ecology, Ref: PRI19496Eco\_RevA, June 2015) convinces the Biodiversity Officer that there is most likely only a risk to individual great crested newts that might be disturbed during construction. This risk could be appropriately

mitigated by working to a precautionary method statement and ACD Ecology has outlined minimum measures that would be in such a method statement. They have recommended that the final detail of the mitigation strategy is resolved at the condition stage (20). The production of the detailed mitigation strategy is mainly necessary to act as a standalone briefing document for those involved in the construction and maintenance of the proposed development (Outlining the risk, specifying the non-licensable avoidance and mitigation measures, giving identification guidance, identifying persons responsible, providing emergency contact numbers, etc.). Conditioning the detailed mitigation strategy for great crested newts will also allow synthesis of this strategy with a reptile mitigation strategy that the applicant's ecologist is also recommending (see below) and the Biodiversity Officer thinks that this would be a sensible approach to ensure their compatibility.

38. The Biodiversity Officer has considered the implications of this application against EC Habitats Directive 1992 and the Conservation of Habitats and Species Regulations 2010 (as amended) and considers that subject to condition (20), the actions authorised will not be detrimental to the maintenance of the great crested newts concerned at a Favourable Conservation Status in their natural range.

#### *Reptiles*

39. The Ecological Appraisal has identified a risk of encountering reptiles (and killing or injuring them) during construction. Their recommendation of including a pre-commencement condition (20) for the submission and approval of a detailed reptile mitigation strategy is reasonable and proportionate to the level of risk and habitat loss. The Biodiversity Officer does not think that it is necessary to request a full reptile survey prior to making a decision on this application provided a mitigation strategy is conditioned.

#### *Wildlife Enhancements*

40. The Biodiversity Officer recommends that a condition (21) is included to secure more detailed plans of the enhancements proposed and their implementation. :

41. As a general guide, the wildlife enhancement strategy should include:

- Detailed design of enhancements;
- Extent and location of the proposed enhancements;
- Timetable for implementation;
- Monitoring and measures of success;
- After-care and maintenance plans.

42. In relation to the planting of a new hedgerow, which will be one example of a wildlife enhancement, it may be more appropriate to install a new barn owl box on a pole along this hedgerow rather than at the back of one of the existing buildings with limited flight path in and out. However, the pros and cons of various locations can be covered within the enhancement strategy.

#### *Bats*

43. The proposed development is immediately adjacent to hedgerow / woodland on its western boundary. This is a predominantly rural area with ancient woodland nearby (approximately 100m to the West) and with several known bat roosts within foraging

distance. The applicant has confirmed that external lighting will not be necessary; however a lighting strategy for biodiversity is recommended should it become necessary and this is covered by condition 18.

#### *Birds*

44. As there will be some vegetation removal the Ecological Appraisal has appropriately highlighted the risk to nesting birds if done in the breeding bird season. This can be avoided by following the recommendations in the Ecological Appraisal. It is appropriate to secure the avoidance measures by condition 22.

#### *Badgers*

45. The Ecological Appraisal has made a not too onerous recommendation for mitigation the risk to badgers of becoming trapped in any excavations. It would be appropriate to secure this measure by condition 23.

#### *Soil*

46. The Parish Council have raised concern about the implications of growing maize and other shallow-rooted crops specifically to be rotted down in digesters, because of their effect of impoverishing the soil and making it susceptible to erosion "Department of Energy & Climate Change (DECC)". Consequently they claim that this practice is environmentally unsound and unsustainable and would render the land useless for crop production in the longer term. The Biodiversity Officer has commented that it is difficult to conclude that any potential soil erosion would be a direct outcome of AD plant, given the fall-back of the agricultural use which could lawfully include the growing of maize without restriction. It would therefore be difficult to object to the development proposed.

#### Flood Risk and Drainage:

47. The application site is less than 1 hectare and in Flood Zone 1, and as such is not required to submit a Flood Risk Assessment with the planning application.

48. The Environment Agency's Risk of Flooding from Surface Water map indicates that there are some low risk (between 1 in 1000 and 1 in 100 annual probability) areas of surface water flooding on the track running through the site, and some areas of low, medium (between 1 in 100 and 1 in 30 annual probability) and high risk (greater than 1 in 30 annual probability) of surface water flooding on areas of land adjacent to the site boundary.

49. Wokingham Borough SFRA (Paragraph 6.1.1.5) and Sustainable Design and Construction Supplementary Planning Document (Sustainability Issue 5) states that all development is expected to produce a Surface Water Drainage Strategy in compliance with the most recent guidance, and should involve the introduction of SUDS techniques and take into account climate change.

50. The Planning Design and Access statement states that the applicants have been engaging with the Environment Agency concerning a number of matters, including

surface water drainage. The Application Form states that the application site is located in Flood Zone 1 and surface water runoff will be discharged using a 'Sustainable drainage system'. The documents submitted with the application do not provide any further information on the features that will form the drainage system or where surface water runoff will be discharged.

51. The application does not give details of the proposed surface water drainage strategy, including the rate of discharge and capacity of the receiving water body or sewer. Therefore the Drainage Officer recommends that the application is approved subject to a condition (16) requiring the submission of an acceptable Drainage System to be implemented on site.

#### Impact on Employment:

52. It is estimated that the development will create 5 full-time equivalent positions. The plant itself will create two full time and several part-time jobs. Activities will include receiving and documenting incoming feedstock shipments, loading of the digesters, handling the solid and liquid digestate product, monitoring the health of the digestion process and the status of the bio-gas upgrading equipment, routine maintenance of the mechanical plant and general housekeeping duties to ensure that operations are safe and efficient. In addition, it is anticipated that there will be a further 2 full time jobs created within the Hill Farm agricultural operation, planting, harvesting and maintaining the land bank associated with the AD plant.

#### Loss of agricultural land:

53. The north of the site where the clamps and tanks will be sited has been used historically for management of livestock, storage of farm machinery and, more recently, for storage of haylage. It has been levelled with various types of infill and is surfaced with crushed concrete and hardcore. On this basis it cannot be considered to have value as arable land, it is simply being re-used in a slightly different manner.

54. The south of the site where it is proposed to locate the lagoon has a different composition and history. The area of land required for the lagoon will be at most 0.35 hectare and this land has soil that is shallow and of poor quality, such that it has been used variously over the years as a silage clamp, trailer park and for storage of muck and has not been used for the growing of crops due to its poor quality. The development does not affect land which is under cultivation.

55. There will be some loss of agricultural land as a result of the proposed hedgerow; however this is outweighed by the landscape and biodiversity benefits that the hedgerow will provide. Therefore no objection is raised.

#### Archaeology:

56. The proposed site is located less than 100m from the postulated route of the Roman Road between *Londinium* (London) and *Calleva* (Silchester). There is potential for Roman remains to survive close to the route of this road. A Roman coin hoard was discovered to the north of the site at Farley Hill and evidence of earlier activity, within the area, dating to the Bronze Age and Iron Age, has been identified at Riseley to the west in the form of find spots and crop marks.

57. The proposal includes substantial works that will require excavation for the lagoon

and digestate tanks. There is potential for buried remains to be present in this area and for the proposal to impact any deposits or features, and therefore a condition (10) requiring an archaeological investigation is required.

## **CONCLUSION**

The application is a full application and proposes a bio-gas anaerobic digestion power generation facility, to include the erection of three digester tanks (19m diameter), creation of a storage lagoon (38m x 60m), together with associated plant and equipment, engineering works and landscaping. The site is located within the Countryside, in a high quality Landscape Character Area (Farley Hill Wooded Sand and Gravel Hills).

The application has attracted a number of local objections, principally in respect of highway and environmental health concerns. However the Highway Authority and Environmental Health consider the implications of the scheme to be acceptable.

The broad principle of the development is acceptable and significant weight should be attached to the accordance with Policy CC05 of the MDD given the provision of renewable energy. The proposal clearly has significant benefits in terms of the amount of gas generation, the creation of jobs, and the benefits to the local economy, rural diversification and these benefits all weigh in favour of the development.

These benefits have to be weighed against any impact on the landscape. The proposed development is likely to have some impact on the high quality landscape given its size and scale. However the applicant has revised the scheme in response to the Landscape Officers comments. Given the scale of development it can never be completely screened and assimilated into this rural landscape, however given the level of mitigation and enhancement, the impact is not significant enough to warrant refusal of the application.

In this case there is justification for the siting of this site, which is central to the local sources of the feed stock, in close proximity to an appropriate gas pipe line and would be sustainable in transport terms.

Having given due weight and consideration to all comments received in relation to this application and for the reasons given above the proposal is considered to be in accordance with the requirements of the Development Plan. As such it is recommended that planning permission is granted.

## **CONTACT DETAILS**

<b>Service</b>	<b>Telephone</b>	<b>Email</b>
Development Management and Regulatory Services	0118 974 6428 / 6429	development.control@wokingham.gov.uk

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