3/14/1058/FP – Change of use of land from agriculture to mixed use for agriculture and use for the generation of renewable energy (solar) at Mill Farm, Mentley Lane, Great Munden, Ware, Hertfordshire, SG11 1JR for Stuart Bradshaw, Push Energy Ltd and Mr D Livings

<u>Date of Receipt:</u> 12.06.2014 **<u>Type:</u>** Full – Major

Parish: GREAT MUNDEN

Ward: MUNDENS AND COTTERED

RECOMMENDATION:

That planning permission be **GRANTED** subject to the following conditions:

- 1. Three Year Time Limit (1T121)
- 2. Approved plans (2E103) (16/PA001B, 16/PA002C, 16/PA003, 16/PA004, 16/PA005, 16/PA006A, 16/PA007, 16/PA008, 16/PA009A, 16/PA010, 16/SK001, 16/SK002)
- 3. The solar photovoltaic panels and associated infrastructure shall be removed from the site and the land shall be reinstated to agricultural use within a period of 6 months from the 1st January 2040 in accordance with a scheme to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development. The scheme shall include management and timings of the works and a traffic management plan and shall be implemented as approved.

Reason: To prevent the landscape impact of the development existing beyond the productive lifetime of the solar panels and to enable the active agricultural use of the land in accordance with policies SD3, GBC3 and GBC14 of the East Herts Local Plan Second Review April 2007

4. The Local Planning Authority shall be notified in writing of the date when electricity from the development is first supplied to the grid and if the solar farm hereby approved fails to produce electricity for supply to the national electricity grid for a continuous period of 6 months the solar photovoltaic panels and associated infrastructure shall be removed from the site and the land shall be reinstated to agricultural use within a period of 6 months of the end of that 6 month period in accordance with a scheme to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development. The scheme shall include management and timings of the works and a traffic management plan and shall be implemented as approved.

Reason: To prevent the retention of development in the Rural Area Beyond the Green Belt that is not being used for its intended purpose in accordance with policies SD3, GBC3 and GBC14 of the East Herts Local Plan Second Review April 2007.

5. Prior to commencement of the approved development, the access to the site shall be reconstructed and surfaced between the edge of the carriageway and the field gate. The existing hedgerow shall also be cut back in both directions in accordance with details to be submitted to and approved in writing by the local planning authority, to ensure adequate visibility splays onto the C16. All shall be completed in accordance with the approved plans and constructed to the specification of the Highway Authority and to the Local Planning Authority's satisfaction.

Reason: To ensure that the access and proposed roadworks within the highway are constructed to an adequate standard.

- 6. No development shall take place unless and until a Construction Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority. Thereafter the construction of the development shall only be carried out in accordance with the approved Plan. The Construction Traffic Management Plan shall identify details of:
 - Phasing for the development of the site, including all highway works;
 - Methods for access the site, including construction vehicle numbers; sizes of vehicles to be used and their routing to the site;
 - Location and details of wheel washing facilities
 - Associated parking areas and storage of materials clear of the public highway.

Reason: To ensure that the development takes place in a comprehensive manner having due regard for highway safety and capacity and to ensure that the impact of construction traffic on the local road network is minimised

7. No development shall take place within the proposed development site until the applicant, or their agents, or their successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, which has been submitted to the planning authority and approved in writing. This condition will only be considered to be discharged when the planning authority has received and approved an archaeological report of all the required archaeological works, and if appropriate, a commitment to

publication has been made.

<u>Reason:</u> To secure the protection of and proper provision for any archaeological remains in accordance with policies BH2 and BH3 of the East Herts Local Plan Second Review April 2007.

8. Prior to the commencement of the development hereby approved details of the installation of the solar panel arrays and all associated works, such as cable runs, transformer enclosures and substations shall be submitted to, and agreed in writing by, the Local Planning Authority. The development shall thereafter be carried out in accordance with the approved details.

<u>Reason:</u> To secure the protection of and proper provision for any archaeological remains in accordance with policies BH2 and BH3 of the East Herts Local Plan Second Review April 2007.

9. Prior to the commencement of the development hereby approved a detailed Biodiversity Management Plan for the enhancement of biodiversity at the site shall be submitted in writing to and approved by the local planning authority. The development shall thereafter be carried out in accordance with the approved Management Plan.

<u>Reason:</u> To enhance biodiversity at the site in accordance with the aims of policy ENV17 of the East Herts Local Plan Second Review April 2007 and the NPPF.

- 10. Tree/hedge retention and protection (4P055)
- 11. Prior to the commencement of the development, full details of both hard and soft landscape proposals shall be submitted to and approved in writing by the Local Planning Authority. These details shall include, as appropriate: (a) Proposed and existing functional services above and below ground (e.g. drainage, power, communications cables, pipelines, etc. indicating lines, manholes, supports, etc.) (b) Retained historic landscape features and proposals for restoration, where relevant (c) Planting plans (d) Written specifications (including cultivation and other operations associated with plant and grass establishment) (e) Schedules of plants, noting species, planting sizes and proposed numbers/densities where appropriate (f) Implementation timetables. Thereafter the development shall proceed in accordance with the approved details.

Reason: To ensure the provision of amenity afforded by appropriate landscape design, in accordance with policies ENV1, ENV2 and ENV11

of the East Herts Local Plan Second Review April 2007.

12. Landscape works implementation (4P135)

Directives:

- 1. Other legislation (01OL1)
- 2. Under the terms of the Water Resources Act 1991, and the Thames Land Drainage Byelaws 1981, the prior consent of the Environment Agency is required for any proposed works or structures, in, under, over or within 8 metres of the top of Dane End Tributary.
- 3. The attention of the applicant is drawn to the Control of Pollution Act 1974 relating to the control of noise on construction and demolition sites. In connection with all site demolition, site preparation and construction works, no noisy working shall be carried out on the premises outside the following hours: 0730 to 1830 Monday to Friday, 0730 to 1300 on Saturdays and at no time on Sundays or bank holidays.
- Where works are required within the public highway to facilitate the improved vehicle access the highway authority requires that the construction of such works to be undertaken to their specification and by a contractor who is authorised to work in the public highway. The applicant is also advised that if any of the works associated with the construction of the vehicular access affects or requires the removal and/or the relocation of any equipment, apparatus or structures (e.g. street name plates, bus stop signs or shelters, statutory authority equipment, etc.) the applicant will be required to bear the cost of such removal or alteration. Before works commence, the applicant will need to apply to the Eastern Herts Highways Area Team, Hertfordshire County Council, County Hall, Hertford, SG13 8DN (Telephone: 0300 123 4047) for further information and to determine the necessary procedures.

Summary of Reasons for Decision

East Herts Council has considered the applicant's proposal in a positive and proactive manner with regard to the policies of the Development Plan (Minerals Local Plan, Waste Core Strategy and Development Management Policies DPD 2012 and the 'saved' policies of the East Herts Local Plan Second Review April 2007); the National Planning Policy Framework and in accordance with the Town and Country Planning (Development Management Procedure) (England) Order 2012 (as amended). The balance of the

considerations having regard to those policies, the other material considerations present in the case, and the pre-application advice given is that permission should be granted.

(105814FP.MC)

1.0 Background

- 1.1 The site is shown on the attached Ordnance Survey plan. It comprises agricultural land of a total area of approximately 17 hectares to the north of the villages of Nasty and Great Munden. The land is part of the agricultural holding of Mill Farm, the farmhouse of which lies around 600 metres to the west of the application site. The total area of the Mill Farm agricultural holding comprises 283 hectares of land. The application site therefore comprises approximately 6% of the total area of the farm holding.
- 1.2 The land lies within the Rural Area Beyond the Green Belt and has no known historic use other than for agriculture. It falls within the Cherry Green Arable Plateau, area 141 of the East Herts District Landscape Character Assessment as detailed in the Council's Supplementary Planning Document. The site occupies an irregular footprint, 650 metres at its widest from west to east, and 330 metres from north to south. The site slopes upwards from the south-east up to the northwest, rising by approximately 10 metres in elevation between the lowest ground to the highest points.
- 1.3 The proposal is for the use of the land for a mixed use comprising the creation of a solar farm and agriculture. The solar farm would comprise a total of 38,864 solar panels on 768 mounting racks at the site, together with 4 transformers/inverter pods, 1 grid connection and communications cabinet and 1 substation. A cable is currently proposed to run underground from the site to connect the panels to the National Grid around 900 metres to the northwest of the site. However, due to archaeological concerns, the provision of overground cables may be required and this would be subject to details being agreed by way of planning condition. During operation of the solar farm, sheep would be able to graze on the land around the panels which would be raised above ground level.
- 1.4 The racks would be arrayed in rows running east-west across the land, with the panels angled to the south to maximize exposure to the sun. The highest point of the panels would be 2 metres above ground level. Each row of panels would be separated from the next by around 3.7 metres. A vehicle access to serve the site is proposed from where an

- access track then runs from north to south approximately central to the site, with the panels lying to the east and west.
- 1.5 The transformers/inverter structures would be sited in 2 pairs to either side of the track, each pod being 2.6 metres tall with a footprint of 18 square metres. The grid connection and communications cabinet and substation would be sited at the south end of the track. The substation would be the largest individual structure on the site, 3.5 metres tall with a footprint of 39 square metres. The cabinet would be around 7 square metres in area, and 1.6 metres tall.
- 1.6 No permanent lighting is proposed and the site would be enclosed by 1.8m high livestock fencing with a double five-bar gate entrance.
- 1.7 As part of the proposed development new planting would be provided to the south-east of the site to create an orchard. The mature vegetation to the eastern boundary of the site would also be reinforced with additional planting.
- 1.8 The proposed solar farm is projected to generate 9.6 megawatts (9,600,000 watts), sufficient to provide power to 2,160 homes.
- 1.9 The applicants indicate that a public consultation was held into the proposals on Monday 2nd December 2013 at Church Farm, Ardeley and a Statement of Community Involvement is included within the application.
- 1.10 The application is also supported by a Design and Access Statement, an Agricultural Report, desk-based Archaeological Assessment, a Flood Risk Assessment, an Ecological Appraisal, a Construction Management Plan, a Transport Statement, and a Landscape and Visual Appraisal.

2.0 Site History

2.1 The site has no previous planning history.

3.0 Consultation Responses

- 3.1 The <u>Environment Agency</u> has commented that the site falls within an area of 1 in 100 flood risk, and flood protection measures should be incorporated into any new development.
- 3.2 The Council's <u>Environmental Health</u> department has commented that works should only take place at reasonable times, and without causing

disturbance to neighbouring residents.

- 3.3 The County Council's <u>Highways</u> department has stated that they have no objection to the principle of the proposed development. They have stated that the proposed use of 16.5M lorries in the construction of the development would be unsuitable on the local rural road network. They have requested that a Construction Traffic Management Plan be submitted as part of the application to confirm that alternative measures would be used. As this additional information has not been received, Highways have recommended a condition requiring the submission of the Management Plan prior to works commencing on site, and also requiring some limited improvement of the site access.
- 3.4 The County Council's <u>Historic Environment</u> advisor states that the development would be acceptable on archaeological grounds, subject to the carrying out of an archaeological survey prior to any construction works beginning on site.
- 3.5 The Council's <u>Landscape</u> Officer comments on the potential visibility of the site as set out in the applicants Landscape and Visual Impact Statement (LVI). His view is that the appraisal of predicted landscape effects, set out in the LVI, does not sufficiently identify the landscape effects of the proposed development and he has made his own assessment of the proposals accordingly.
- 3.6 The Landscape Officer has commented on the various locations from where views may be had. In relation to the views from the Nasty to Cherry Green lane, he notes that the appraisal conclusion (that the solar farm would not have much influence on the outlook from the road) does not appear to be supported by commentary on views set out elsewhere in the appraisal.
- 3.7 With regard to views from Mill Farm, he comments that the topography of the land results in the site being obscured from this location. From footpath 1 west of Nasty and north of Great Munden, field hedges and the topography of the land make the solar farm visually recessive.
- 3.8 To the north, from byway no 59, there would be some vantage points where parts of the solar farm will be visible and more so in winter. From Cherry Green itself views would be similar, but more distant and for the users of the lane to the north of Cherry Green, more distant still. To the south east of Cherry Green there would be wintertime views of the solar farm.
- 3.9 The Landscape Officer's view is that, given the scale of the proposed

solar farm and its visibility from some local viewpoints, the impact on receptors will be at least moderate, given the high sensitivity of those receptors.

- 3.10 The Officer comments on the matter of agricultural land quality. He refers to the agricultural land classification maps and the additional field survey work undertaken by the applicant. The Natural England Technical Note TIN049 (2012) advises how important agricultural land is and that it should be protected from inappropriate development. He also notes that the NPPF advises that areas of poorer quality land should be used in preference to higher quality.
- 3.11 In summary then, he considers that the proposals will have a relatively high magnitude of impact on the landscape character of the local area as perceived by residents in Nasty but not necessarily in the wider area. The site is visible from some viewpoints and given the characteristics of the arrangement of the panels dense regular stripped pattern it will appear conspicuous in those viewpoints where it can be seen. Mitigating planting will however improve generally the existing level of screening, as will the proposed orchard planting, albeit that it will be a number of years before this has a significant impact.
- 3.12 The Landscape Officer considers generally that solar farms of this nature are better suited to brownfield, industrial, urban fringe and/or low grade agricultural land. On those grounds therefore, rather than on visual impact or landscape character grounds, he considers that the application should be refused in favour of the siting of solar panels on brownfield land unless the developer can make an over-riding justification.
- 3.13 The Landscape Officer has reviewed the Sequential Analysis Study subsequently submitted by the applicant. He maintains that the siting of such development on brownfield land is the preferred option.
- 3.14 The <u>Campaign for the Preservation of Rural England</u> has objected to the application on the grounds of visual impact and the use of agricultural land.

4.0 Parish Council Representations

4.1 <u>Great Munden Parish Council</u> objects on the grounds that the development would result in harmful visual impact in a rural area, and be contrary to local and national policy. The Council has further objected on the grounds that construction traffic associated with the development would be prejudicial to road safety.

- 4.2 The Parish Council refers to Government policy advising that solar panels should be sited on brownfield land and the rooftops of existing buildings, rather than in inappropriate rural locations. They have also referred to the Solar Trade Associations '10 commitments' for solar developers, including avoiding the use of high grade agricultural land and minimising visual impacts.
- 4.3 The Parish Council refers to recent refusals for solar farms by Councils in Suffolk and Somerset. It also questions whether the proposed landscaping would be effective in lessening the visual impact of the development.
- 4.4 The Parish Council also note that pre-application advice given by Officers earlier this year was provided prior to the Government's issuing of the UK Solar PV Strategy, and therefore should be viewed in the context of this further national policy development.
- 4.5 The Parish Council has reviewed the additional information submitted by the applicant to address concerns over the use of agricultural land, as well as the visual and landscape impact of the proposed development. The Council maintains their objections to the development, and does not feel that the additional information submitted addresses the concerns raised.
- 4.6 The Parish Council also considers it unfair that the applicant was given more than 2 months in which to respond to the various objections and concerns raised, while the second consultation period for residents and objectors has only been for 2 weeks.
- 4.7 <u>Standon Parish Council</u> has expressed its support of the principle of solar energy. They recommend that if consent is granted that the panels be sited at sufficient height to allow the grazing of livestock beneath the panels in order that the site remain agriculturally productive

5.0 Other Representations

- 5.1 The application has been advertised by way of press notice, site notice and neighbour notification.
- 5.2 At the time of this report, 69 letters of objection have been received from 57 local residents/households which can be summarised as follows:
 - Visual impact of development on countryside; Scale of development inappropriate in this location

- Poor access to the site along narrow country lanes restricting access to the site and with limited passing places
- Concerns regarding visual impact of overhead cables
- Impact of loss of arable agricultural land; Inappropriateness of alternative use of agricultural land at a time when the UK imports 40% of its food
- The development would be contrary to local policies regarding the protection of the Rural Area and only allowing development where it would be appropriate
- Ecological impact of development
- The development should take place on brownfield land, in line with Government regulations
- Concerns regarding the potential for pollution during construction, operation and dismantling of the panels
- Potential for disturbance to significant archaeological remains
- Potential for visual impact of farm to distract road users
- Potential for glare to distract pilots
- Solar panels are an inefficient means of generating energy
- Potential for noise disturbance to neighbouring residents.
- 5.3 At the time of this report,7 letters of support have been received from 6 residents, giving the following reasons:
 - The permission is for a temporary period, at the end of which the advances in technology could mean the removal of the array
 - The effects of climate change require the implementation of renewable energy measures
 - The site can continue to be used for grazing sheep
 - The visual impact of the development would be limited
- 5.4 Councillor Jim Ranger has objected on the grounds that the site comprises greenfield land rather than the Government's preferred rooftop or brownfield location. Councillor Ranger also expressed concerned about the suitability of the local road network for construction traffic.
- 5.5 Sir Oliver Heald MP has expressed support for Councillor Ranger's comments, and asked that the various objections made be taken full account of by the Council.
- 5.6 Following the receipt of additional information in October relating to the landscape and visual impact of the development, and the selection of this site over others in the area, an additional 2 week consultation period was carried out. The consultation period will close after the date

of this report, but any additional representations received will be reported to Members before the Committee.

6.0 Policy

Local Plan policy

6.1 The relevant 'saved' Local Plan policies in this application include the following:

ENV1	Design and Environmental Quality
ENV2	Landscaping
ENV11	Protection of Existing Hedgerows and Trees
ENV16	Protected Species
SD3	Renewable Energy
GBC3	Appropriate Development in the Rural Area Beyond the
	Green Belt
GBC8	Rural Diversification
GBC14	Landscape Character

- 6.2 Policy SD3 indicates that proposals for the development of renewable energy facilities are supported in principle. Particular emphasis is placed on promoting energy generation from solar power both on a small scale and commercially. The policy indicates that proposals for harnessing solar power will be judged primarily on their visual impact.
- 6.3 In association with policy GBC14, regard will also be given to the Supplementary Planning Document Landscape Character Assessment.
- The first consultation on the draft District Plan has recently been completed. In respect of proposals for renewable and low carbon energy generation it is proposed to similarly support such development whilst ensuring that an appropriate balance is maintained between the benefits of renewable energy and other consideration such as visual amenity and landscape character. Members will be aware, however, that, as the District Plan is at an early stage of production, very little weight can currently be given to the policies contained therein.

National Planning Policy

6.5 The National Planning Policy Framework (NPPF) supports development of renewable energy and the transition to a low carbon future, encouraging the use of renewable resources, for example, by the development of renewable energy resources (paragraph 17).

- A presumption in favour of sustainable development is set out in paragraph 14 of the Framework and this indicates that, in respect of decision taking, planning permission should be granted for such development unless any adverse impacts of a proposal would 'significantly and demonstrably outweigh the benefits'.
- 6.7 Paragraph 97 of the NPPF indicates that local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable sources. Authorities should have a positive strategy to promote such development while ensuring that any adverse impacts are addressed satisfactorily.
- 6.8 Paragraph 98 of the NPPF states that local planning authorities should not require applicants for energy development to demonstrate the overall need for renewable energy development and should approve such development if its impacts are (or can be made) acceptable.
- 6.9 In summary, there is therefore a clear presumption in favour of development for renewable energy development within the NPPF in principle, provided that the impact of the development is, or can be made, acceptable.

Government advice

- 6.10 In October 2013 and April 2014 the Government released parts 1 and 2 of the UK Solar PV Strategy. The Strategy emphasises that proposals for solar photovoltaic development should be "appropriately sited, give proper weight to environmental considerations such as landscape and visual impact, heritage and local amenity, and provide opportunities for local communities to influence decisions that affect them." It encourages the deployment of solar panels on rooftops and brownfield land, in the words of Gregory Barker MP seeking "to turn rooftops into power stations" but also notes that the "high levels of solar PV we wish to see deployed, particularly on domestic rooftops and mid-size roofs, will require breakthroughs in innovation, cost reduction, grid solutions, and financing solutions, in order to be realised".
- 6.11 In respect of large scale ground-mounted proposals, such as proposed within this application, the Strategy indicates that they provide greater opportunities for energy generation than small or medium scale projects but can have a negative impact on the rural environment "if not well planned and well screened". They can, however, when well-managed, be beneficial to wildlife.
- 6.12 The Strategy also states that national guidance should be followed in

assessing applications for large-scale solar development, such as this current application and also sets out best practice guidance for solar farm developers (known as 'Solar Farms 10 Commitments'). This best practice indicates that, inter alia, developers will focus on non-agricultural land or land which is of lower agricultural quality; they will be sensitive to nationally and locally protected landscapes and will minimise visual impact where possible.

- 6.13 In addition to the UK Solar PV Strategy the Government published the National Planning Practice Guidance (NPPG) in March 2014. This highlights that Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable. It reiterates that the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively.
- 6.14 The NPPG sets out particular factors that a local planning authority will need to consider including, inter alia, the following:
 - focusing large scale solar farms on previously developed and nonagricultural land, provided that it is not of high environmental value;
 - where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.
 - careful consideration of the impact of large scale solar farms on heritage assets such as listed buildings, sites of archaeological interest.
 - the potential to mitigate landscape and visual impacts through, for example, screening with native hedges;
- 6.15 In summary, therefore, both local and national planning policy supports the provision of large scale renewal energy projects such as proposed here, provided that the impacts of the development are, or can be made, acceptable. In addition, national planning guidance, recommends the use of previously developed land rather than best agricultural land.

7.0 Considerations

7.1 The main planning issues for consideration in assessing this application are considered to be:

- The principle of development in the Rural Area Beyond the Green Belt
- The use of this specific site rather than any other brownfield or greenfield site within the District, and the acceptability of siting the proposed solar farm on agricultural land considering its grade
- The visual and landscape impact of the proposed development
- The impact of construction traffic on the local road network
- The potential for the development to have a harmful impact on significant archaeological remains
- The potential for the development to have a harmful impact on the setting of listed buildings
- Any other matters

Principle of development in Rural Area Beyond the Green Belt

- 7.2 Policy GBC3 of the Local Plan identifies development that will be considered appropriate within the Rural Area. The creation of solar farms, or any type of renewable energy development, is not among the identified forms of development.
- 7.3 However, policy SD3 of the Local Plan supports proposals to harness renewable energy "in principle" and states that applications for solar power development will be judged primarily on their visual impact.
- 7.4 A number of national and local policy statements refer to the benefit and requirement for the UK to move away from fossil fuel sources of energy generation and to move more toward renewable production. Whilst Local Plan GBC3 does not identify renewable solar energy generation facilities as an appropriate form of development in the rural area, it is considered that only limited weight can be given to the policy in the context of this matter given the considerable weight of more recent national policy development.
- 7.5 In principle then, there is support for developments which have the objectives demonstrated by these proposals. Policy statements, however, all set out that a range of requirements also have to be considered, not least the landscape and visual impact. It is considered inappropriate to reach a conclusion on matters of principle, therefore, without consideration of the more detailed matters listed above in paragraph 7.1.

Site selection: Use of agricultural land

7.6 Agricultural land in England and Wales is classified by quality as falling

within 5 grades from 1 (Excellent) to 5 (Very Poor) in accordance with guidelines set by the Department for the Environment, Food and Rural Affairs (DEFRA) in "Agricultural Land Classification of England and Wales – Revised guidelines and criteria for grading the quality of agricultural land" published in October 1988.

- 7.7 Natural England's Agricultural Land Classification map for the Eastern Region, published in August 2010, states that all land in Hertfordshire falls within Grades 2 or 3. Land in the vicinity of the application site is generally classified as Grade 2 (Very Good) land, although Natural England note that the map is "not sufficiently accurate for use in assessment of individual fields or sites".
- 7.8 As part of the supporting documents for the application, an agricultural report has been prepared assessing in detail the quality of the land. Overall, the land was considered to fall within sub-grade 3a, which DEFRA recognises as "Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops".
- 7.9 In reaching this assessment, the report noted that topsoil across much of the site was of primarily clay composition, making it more difficult to work. Soil towards the west end of the site had higher chalk content, making it easier to work. In both areas evidence was found that drainage was impeded at around 90 centimetres below the surface. Soil towards the east end of the site was a sandy clay topsoil over gravelly clay subsoil.
- 7.10 National guidance on the use of agricultural land for large-scale solar farms is that the lowest quality land should be used. The site is considered to be the lowest quality land in the ownership of the applicant, with land further to the west likely to all be Grade 2 land, based on Natural England records. Furthermore, Natural England's Agricultural Land Classification map for the Eastern Region suggests that there will be no other lower quality land in Hertfordshire, with all of the County falling within Class 2 or 3.
- 7.11 The site would continue to be used for the grazing by sheep during the operation of the proposed solar farm, and therefore would remain partially in agricultural use during this time and ultimately, of course, the site would be restored to solely agricultural use once the solar farm ceases operation. The panels, racks and other infrastructure could be removed from the site without detriment to the agricultural value of the

site.

7.12 The consultation response of the County Council's Historic Environment advisor confirms that the application site has been in agricultural use for hundreds of years. The site is a small part (around 6% by area) of the full holding of Mill Farm. Its use as a solar farm would not lead to the permanent loss of agricultural land at the site, nor a significant loss in the production capacity of the wider holding.

Site selection: Sequential approach

- 7.13 The proposal for creation of a solar farm on this particular site has been informed by the applicant's survey of potentially suitable sites falling within a 10 kilometre radius of the site. The Sequential Analysis Study October 2014 has considered the relevant national and local policies and guidance and assessed the following factors:
 - Whether a site is capable of providing an equivalent output (9.6 Megawatts) to the application site
 - Whether any brownfield sites are available for development
 - Whether any greenfield sites are of a poorer quality of agricultural land than the application site
 - Whether the environmental impact of the development would be less than at the application site
 - Whether the site is accessible for public transport, and whether a connection to the national grid can be made without crossing third party land
- 7.14 A review of records provided by the Office of National Statistics shows that within 10 kilometres of the site there is approximately 60 hectares of unused brownfield land that is not considered suitable for residential development. Of this land, 2 parcels of comparable size to the application site, and therefore considered to be capable of producing an equivalent output, have been identified.
- 7.15 One of these sites is identified by the applicant at Frogmore Hall. However, Frogmore Hall is a Grade II listed building which lies within the Green Belt. For both of these reasons, the site is considered to be less sequentially preferable than the application site.
- 7.16 The second site lies to the north of Ware, and is a former gravel extraction site. This site lies too far from any overhead line for a connection to be made to the national grid.

- 7.17 For the avoidance of doubt, Officers would, in any event, dispute the classification of either of these sites as 'brownfield'. Gravel extraction is an appropriate development in rural locations, and therefore such sites are not considered to be previously developed land. Frogmore Hall occupies a large site together with a relatively small number of dwellings and other buildings. Officers would not consider the grounds of the site to be brownfield land.
- 7.18 Generally, Officers would agree with the results of the applicants Sequential Analysis Study; that there is very limited brownfield land within the District which is not allocated for, or required for, new housing development, particularly in view of the Councils current lack of housing land supply. The use of brownfield land for solar energy production would put additional pressure on the Council's housing land supply and ultimately, of course, could result in additional greenfield land then being required for housing development.
- 7.19 The siting of an equivalent number of solar panels on commercial roofspace within the District, which can be viewed as the Government's preferred option, would be an undertaking of great difficulty. Such developments can only realistically be initiated by the owners or occupiers of such properties. The Council is typically supportive of such development, and encourages the inclusion of solar panels and other renewable energy measures in new developments, but the contribution of individual sites can only ever be limited in comparison to a dedicated solar farm of the scale proposed in this instance.
- 7.20 While incrementally there are opportunities for roofspace provision of solar power, it is considered then that there is no prospect of any urban or brownfield site in the District being brought forward for a renewable energy development of this nature or on this scale.
- 7.21 Turning to other greenfield sites that might be of a lower agricultural quality, 11 such sites were identified within the study area. None of these sites were considered to be sequentially preferable to the application site, however, for the following reasons:
 - Land between 14 and 90 Town Lane, Benington The site lies immediately adjacent to the village of Benington and is open to public view.
 - 2. Fields north of High Elms Lane, Whempstead The site wraps around and ancient woodland and a County Wildlife Site with public rights of way close to the site.
 - 3. Fields south of High Elms Lane, Whempstead The site lies adjacent to Loefield Grove ancient woodland and County Wildlife

- Site with public rights of way along the south and west boundaries of the site
- 4. Fields at Walkern Park Farm The site is adjacent to the farmhouse, and has rights of way along its north and east boundaries with limited access.
- 5. Fields west of Moor Green, Ardeley There are a number of houses to the east of the site, and rights of way to the south and west.
- Fields at Stag Hall Farm, Great Munden There are houses to the immediate north of the site and rights of way to the south and north-west. The site also falls partly within an Area of Archaeological Significance.
- 7. Fields to north of Aspenden Hall, The Street, Aspenden The site is isolated, with no access to any public highway.
- 8. Fields to north of Warren Lane, Braughing The site lies in close proximity to 4 listed buildings. A number of houses in the area face towards the site. The southern part of the site falls within Flood Zone 2 for the Braughing Warren Bourne, and the site falls partly within an Area of Archaeological Significance.
- 9. Fields to south of Warren Lane, Braughing The site is close to a number of dwellings and New Wood, which is ancient woodland and a County Wildlife Site. The site falls partly within an Area of Archaeological Significance.
- 10. 3 fields to north of Standon Road, Little Hadham There are rights of way to the north, east and west of the site, with a number of dwellings close to the site. Albury End Wood, which is ancient woodland, lies adjacent to the north-west corner of the site.
- 11. 2 fields to north of Standon Road, Little Hadham The site is close to the village of Little Hadham to the east, with the Conservation Area abutting the south-east corner of the site. There are rights of way to the west and north.
- 7.22 No detailed soil surveys have been carried out at any of the 11 sites, so it is not possible to say whether any of the sites are of materially poorer land quality (Grade 3b or lower) than the application site. However, Officers consider that the reasons cited above are sufficient to discount each of the sites as less sequentially preferable.
- 7.23 Officers are confident therefore that no alternative greenfield sites more suitable for this development exist within the Study area of the District.
- 7.24 With regard to ground-mounted solar panels in rural locations, planning permission has recently been granted for such development in the following locations within the District:

- 3/13/1453/FP Land to rear of Carldane Court, Bromley Lane, Much Hadham – a site of 673 square metres for a total of 50,000 watts generated – Rural Area site
- 3/13/0647/FP Whitehall Farm, Walkern Road, Watton at Stone 222 panels on a site of 314 square metres for a total of 50,000 watts generated – Green Belt site
- 3/13/0646/FP Lordship Farm, Walkern Road, Benington 218 panels on a site of 308 square metres for a total of 50,000 watts generated – Rural Area site
- 3/13/0192/FP The Office, Parsonage Farm, Parsonage Lane, Sawbridgeworth – 88 panels on a site of 120 square metres for a total of 20,680 watts generated – Green Belt site
- 3/12/2008/FP Brookfield Farm, Aston End Road, Aston 198
 panels on a site of 280 square metres for a total of 45,500 watts –
 Green Belt site
- 3/12/0452/FP Woolston Farm, Haultwick 16 panels for a total of 4,000 watts generated – Rural Area site
- 7.25 In summary, therefore, Officers are satisfied that there are sound and justifiable reasons for supporting the provision of a solar farm in this location on agricultural land. There is insufficient brownfield land available in the District to meet this need (as brownfield land is generally needed for new housing, commercial or other purposes); development on existing commercial buildings is unlikely to bring forward the energy benefits needed both locally and nationally, and no sequentially preferable greenfield sites have been identified.
- 7.26 The site will continue to be used for grazing sheep in the Autumn/Winter/Spring period and managed to encourage wild flower areas surrounding the panels in the summer. Some agricultural use of the site will therefore remain in any event.

Landscape and Visual Impact

- 7.27 As indicated, policy SD3 of the Local Plan notes that proposals for solar energy generation "will be judged primarily on their visual impact, particularly where it affects Listed Buildings, Conservation Areas or other areas of particular visual quality or sensitivity". This accords with national policy as set out in the NPPF as referred to earlier in the report.
- 7.28 Government guidance in the NPPG states that "in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero".

- 7.29 The site lies within the Cherry Green arable plateau, Area 141 of the adopted Landscape Character Assessment Supplementary Planning Document. The Assessment states that "The area is principally an open arable landscape with extensive views over a gently undulating plateau. The area retains a historic ambiance through the winding lanes. However many of the features have been eroded or disappeared completely including a deserted medieval village. Settlement comprises isolated farms and the occasional cottage. There are few features of note within the area with the most prominent landmarks being outside the area."
- 7.30 The Landscape Character Assessment characterises the key characteristics of the area as:
 - open arable plateau with some very large field units
 - minimal settlement, restricted to individual farmhouses
 - remote and isolated feel
 - minimal woodland cover
 - degraded landscape pattern with few hedgerows and associated trees
 - organic winding lanes with few direct connections across the plateau, (except for A507)
 - water towers, LV electricity cables and aerial masts locally prominent features due to open landscape
 - open views across plateau and to valley of the Rib
- 7.31 The surrounding area is typically rural in character, but the enclosed fields, small groups of dwellings and the rural road network all provide clear physical evidence that this is a landscape that has been shaped by human intervention.
- 7.32 Viewpoints referred to in this following section are given in reference to the location plan provided at Essential Reference Paper A at the end of the report. These viewpoints are considered to be the areas from which views of the development would have the greatest visual impact. For the avoidance of doubt, Officers have also assessed the potential visual impact beyond these points but in light of the limited visibility have not addressed the impact in detail in this report.
- 7.33 The site is an irregularly shaped area of land located around 60 metres to the west of the road running north from Nasty. The local topography is generally rolling/undulating. The landscape context of the site is described in the appraisal as being very rural and feeling isolated from larger settlements.

- 7.34 The site is largely screened from view from the road running north from Nasty by the substantial mature trees and other planting that forms the eastern boundary of the Mill Farm site. This is the closest point from which it is possible to view the site from public land. While the site is visible from footpaths and roads in the general area, these are longer views. Proposed planting on the east side of the site would significantly reinforce this screening and Officers consider that this would mitigate the visual impact of the development in this location.
- 7.35 At the time of receipt of this application and the carrying out of the initial site visits by Officers the planting along the eastern edge of the site (viewpoint 1) was mainly in full leaf, and restricted views towards the application site mainly to limited views and brief glimpses. However, much of the planting is deciduous and therefore the screening effect is reduced during the autumn and winter months.
- 7.36 The topography of the land is such that the application site is raised above the level of the road along the eastern edge of the farm. From this angle little will be visible of the panels and racks, with the view further softened by the proposed planting in the south-east corner of the site. This would face onto the vehicle access to the site, an area cleared of vegetation and from which one of the clearest views from this road towards the site is possible.
- 7.37 The site would be more clearly visible from the north (viewpoint 2), with right of way Great Munden 059 running broadly parallel to the northern boundary of the site and at roughly the same elevation. There is little screening of the site from this viewpoint, but the footpath is around 400 metres from the application site at its closest point.
- 7.38 The level of the footpath rises to the north-west of the application site, reaching a high point of around 5 metres above the level of the site some 700 metres away from the nearest part of the site. From this aspect Officers consider that the panels would be largely screened by intervening landscaping and, given the separation, they would be a feature of the landscape without dominating the views.
- 7.39 The site is approached from the east by the road from Knights Hill. This offers elevated views towards the site (viewpoint 4), with the road dropping down from east to west. In this area there are also three footpaths (Great Munden 061 to the east and Great Munden 010 and Westmill 002 to the north-east) which have high points offering views towards the site.

- 7.40 Views from the south of the site would be more limited than those from the east and north. The nearest house to the site is more than 300 metres to the south/south-east in Nasty (viewpoint 5). The houses in this village are arranged along a north/south road, and therefore generally have main aspects to the west and east, from which the site would be a peripheral presence. Officers note that the slope of the application site would make the south-eastern aspect, roughly towards Nasty, the one from which the panels would be most visible. As the site rises from south-east to the north-west, this aspect would potentially offer the greatest visibility of the rows of panels, where other aspects would offer views from the side (from the east) or rear (from the north) where the overall visibility of the panels would be lessened.
- 7.41 However, at this distance Officers consider that the panels would not be a prominent feature of the landscape, with some screening from the existing hedge along the southern boundary of the site. There are no immediate views of the site from private residences.
- 7.42 The nearest right of way to the south of the site, Great Munden 001, runs roughly parallel to the southern boundary of the site. It lies around 400 metres from the site (viewpoint 6), and there are very limited views of the application site due to the existing hedges between the path and the application site.
- 7.43 Views from public land to the west of the site (viewpoint 7) are the most distant. The site is located towards the eastern edge of the Mill Farm holding, and the nearest public land to the west is some 600 metres distant. The ground rises and falls away between the road and application site, and Officers consider that any view of the panels would be very limited from this aspect and would not cause any material harm to visual amenity.
- 7.44 The transformers, substation and other infrastructure associated with the development would be small structures individually, and would have no material visual impact on the site and wider area, given their setting amongst and alongside the proposed solar panels, which would be the most prominent aspect of the development. Although objections have been raised to overhead cables, Officers consider that, if this proves necessary on archaeology grounds, they could be provided without significant harm to the character of the area. Condition 8 will ensure that details of any cables are agreed with Officers prior to the commencement of the development.
- 7.45 The panels proposed would have a low level of reflectiveness, lower than the comparative brilliance of crops or grassland, which otherwise

- comprise much of the surrounding area. Solar panels function most effectively by absorbing light, and therefore the proposed panels would be coated with an anti-reflective coating.
- 7.46 To summarise on visual amenity and landscape character, the site is predominantly rural in character, with very gradual change evident over the course of centuries. Within the context of this setting, a solar farm covering 11 hectares of land would be an object of high contrast, and one that would impact on the visual character of the landscape. The Council's Landscape Officer notes that the proposals would have a relatively high impact on the landscape of the local area as perceived by people living in or around Nasty, although not a significant wider impact. He also confirms that the proposed gap fill planting will improve the existing level of screening, even though this may take a number of years to mature.
- 7.47 However, the majority of wider views of the site would be at long distance, in most cases at several hundred metres removed. While the solar farm would remain a high contrast feature of the landscape, at these distances it would be one item of many in the landscape.
- 7.48 In addition to this, there are only a limited number of places from which the solar farm would be viewed clearly from the surrounding area. Although the solidity of vegetation cover will vary with the seasons, the contours of the land are fixed.
- 7.49 Viewpoints from the road and rights of way to the east of the site, and from the right of way to the north, would offer the clearest views of the site. In the colder months, when the screening from trees and other vegetation would be at its thinnest, the solar farm would be a prominent feature of the landscape.
- 7.50 However, Officers consider that even allowing for this impact, the development would not be unacceptable on visual amenity or landscape character grounds such as to warrant the refusal of planning permission. Views from elsewhere in the vicinity of the site would offer little or no view of the solar farm, and where it would be visible it would be from such a distance that it would not result in material harm to the open and rural character of the countryside.
- 7.51 Having regard to the limited visual harm and the substantial benefits to be gained from the renewable energy generated by the development, Officers consider that the development would, with the landscaping scheme proposed, be acceptable on grounds of visual impact and landscape character.

Construction traffic

- 7.52 The construction period is proposed to occur over a period of approximately 16 weeks, allowing for a total of around 1 or 2 large vehicle movements onto and off the site each day. Construction workers would arrive at the site either by car or light vans. Large vehicles would approach the site from the A10 from the east, and depart in the same direction.
- 7.53 The County Council's Highways department will require additional information regarding the size of the construction vehicles, having expressed concerns about the ability of large 16.5M vehicles to negotiate the narrow roads between the A10 and the site. As of the date of this report, no further submissions have been received from the applicant in this respect, but any further details will be reported to Members at the committee meeting.
- 7.54 Officers note that the proposal is nonetheless acceptable in principle to Highways, subject to agreement of a Construction Traffic Management Plan. A condition to this effect is proposed, should no further details be submitted prior to the determination of the application.
- 7.55 All development construction will involve traffic movement and a degree of disruption. This is not commonly viewed as justifiable grounds for refusal of planning permission. Officers are satisfied that the level of traffic associated with the development would not be unduly harmful to the amenities of local residents, and the precise number of vehicle movements per day, as well as their timing to avoid school traffic, for example, could be specifically controlled via the suggested Management Plan. The small number of vehicle movements associated with the construction period would not be a significant increase in traffic on the local roads.
- 7.56 Once constructed, maintenance is typically only carried out by the use of vans rather than lorries and only occasional maintenance visits are necessary; approximately 4-5 times a year.

Archaeology

7.57 The County Council's Historic Environment Advisor initially raised concerns that the development could cause disturbance to significant archaeological remains. Following this response, a suggestion that the cables running within the application site be kept above ground has been made.

- 7.58 The Historic Environment Advisor has advised, subject to a condition controlling the details of installation, that this would be acceptable and the visual impact of this is not considered likely to be significant. Further details will however be required by condition to ensure that any impact is acceptable.
- 7.59 The cabling connecting the proposed solar farm to the national grid would not be affected by this as it is necessary for this cabling to be run underground.

Impact on setting of listed buildings

- 7.60 The nearest listed buildings lie to the south in Nasty, around 400 metres to the south, and at Barley House and Madeleys around 600 metres to the west.
- 7.61 Officers consider that the development would not be perceived from within the setting of these listed buildings given the separation distance and lack of points from which both the proposed solar farm and any of the buildings could be viewed in any detail at the same time.

Other matters

Community benefit

7.62 Officers are aware that the applicant has proposed entering into an agreement with the Parish Council where funding for community works would be provided for a period of 5 years from the commissioning of the solar farm at a rate of £500 per Megawatt. This is considered by Officers to fall outside of the powers of the Council as local planning authority to monitor and is not considered to be necessary to make the development acceptable, although Officers recognise that it could be of benefit to the local community. It is not therefore proposed to make this a requirement of any permission granted.

<u>Noise</u>

7.63 Solar farms are not significant generators of noise. Given the distance to the nearest residences, Officers consider that there would be no significant noise disturbance arising from the proposed development.

Biodiversity

7.64 The proposed use of the site would have a limited ecological impact, given its relatively small area within the Mill Farm holding. The site

- would not be used for crops for the duration of the solar farm's operation.
- 7.65 The main biodiversity improvements as a result of the proposed development would be:
 - Wild flower planting beneath and between the panels
 - The provision of bat and bird boxes
 - New hedgerows and field margins
 - Orchard planting
- 7.66 A condition is recommended to ensure that a Biodiversity Management Plan, detailing these proposals, and their future maintenance, is agreed by the Authority prior to the commencement of the development.

Flooding

7.67 The eastern edge of the site falls within Flood Zones 3 and 2 of the Dane End Tributary. The angle of the panels would direct accumulated rainwater back to the ground. Officers are satisfied that the development would not result in an increased risk of flooding given that the racks by which the panels would be attached to the ground would have a limited profile and would not result in a material loss of permeable surfacing.

8.0 Conclusion

- 8.1 The proposed solar farm would occupy a site of 17 hectares of greenfield agricultural land within the Rural Area Beyond the Green Belt. There is clear need for, and government support for, the provision of renewable energy projects and national and local planning policy both recognise that greenfield agricultural land can be suitable for energy generation in the absence of suitable brownfield sites, provided that their impact on the surrounding area is, or can be made, acceptable. It is projected that the development, comprising almost 39,000 panels, would generate 9.6 megawatts of electricity, sufficient to power more than 2,000 homes and all these factors weigh significantly in favour of the proposal in accordance with the presumption in favour of sustainable development in the NPPF.
- 8.2 Following the application of a sequential test to site selection, Officers are satisfied that the use of this site is justified, given the lack of suitable and available brownfield land and the inherent difficulties in the provision of commercial roof space installations.

- 8.3 The site has been classified as comprising Grade 3a agricultural land and is the lowest quality agricultural land within the Mill Farm holding, representing only a limited percentage of the overall land holding. Furthermore, the site would continue to be used for some limited agricultural use between the panels in the form of sheep grazing. It is also important to consider that there is not likely to be land within Hertfordshire which has a lower agricultural land classification (as Natural England's Agricultural Land Classification map currently show the whole County within Class 2 or 3).
- 8.4 Given its scale, the proposal will inevitably have some impact on the character of the surrounding rural area and this weighs against the proposals of course. However, the site is well screened, being set back from public footpaths and with limited visibility restricted mainly to long-distance views with mature vegetation providing additional screening when in leaf. Public views of the site are limited in the wider area beyond the immediate site and while the panels and other infrastructure would be visible in glimpses from the surrounding roads and rights of way, these would be long views in which the development would form only a part of the wider view. The gentle slope of the site would reduce the visibility of the proposal and, even allowing for the reduction in screening in the autumn and winter months, Officers are satisfied that the visual impact would be acceptably limited in the wider landscape.
- 8.5 The proposed solar panels would not reflect sunlight from these views and would appear as a darker feature within the field boundaries, reducing their prominence. The proposed landscaping scheme will ensure that the visual impact of the proposed development is acceptable and Officers are satisfied that this can be adequately controlled by condition. There would be infill planting to the hedge to the east boundary of the field, and a new hedgerow planted to the west of the field. In addition there would be an orchard planted to the southeast of the site facing towards the vehicle access. Officers consider that this orchard planting would result in a modest enhancement of biodiversity at the site.
- 8.6 Paragraph 8 of the NPPF advises that the economic, social and environmental roles of the planning system should not be taken in isolation. Rather, they are dependent on one another and therefore it is necessary to balance the benefits of the proposed renewable energy development against the inappropriateness of the use in principle, the loss of the site for arable use, the visual impact of the development and any other material considerations.
- 8.7 Officers have considered the proposals in light of the relevant national

and local policies and guidance, and due regard has been given to the representations and objections received from third parties to the development.

- 8.8 Having regard to all of these considerations, Officers are satisfied that the benefits of the development from the creation of a significant renewable energy resource would outweigh any harm that would result from the development.
- 8.9 It is therefore recommended, subject to compliance with the conditions outlined at the head of this report, that planning permission be granted for the proposed development.

Essential Reference Paper 'A' - Viewpoints referred to in report

