

SITE PLAN ATTACHED

**07. LAND AT HAVERING GROVE FARM 552A RAYLEIGH ROAD HUTTON
ESSEX CM13 1SG**

**INSTALLATION AND OPERATION OF A SOLAR FARM AND ASSOCIATED
INFRASTRUCTURE, INCLUDING PV PANELS, MOUNTING FRAMES,
INVERTER, TRANSFORMER, POLE MOUNTED CCTV CAMERAS,
SUBSTATIONS, COMPOSTING TOILET AND FENCE.**

APPLICATION NO: 15/00161/FUL

WARD	Hutton East	8/13 WEEK DATE	04.05.2015
PARISH		POLICIES	NPPF NPPG CP1 T2 GB1 GB2 C5 C14 C16 IR3 IR6
CASE OFFICER	Mrs Charlotte White	01277 312536	
Drawing no(s) relevant to this decision:	TOPOGRAPHICAL SURVEY1; ARCHAEOLOGICAL DESK BASED ASSESS; DESIGN & ACCESS STATEMENT; ROAD_CROSS_SECTION; HISTORIC ENV. IMPACT ASSESSMENT; ALVE; AT_01 TRANSFORMER; CCTV_01 CCTV POLE DETAILS; CSR_01 SUBSTATION DETAILS; CB_01 COMMUNICATIONS BUILDING; TRAFFIC METHOD STATEMENT; DEER FENCE DETAILS; DNO_01 DNO BUILDING DETAILS; ECOLOGICAL APPRAISAL; XXX_01_A - GRP CABINET; HVG_01_REV E - LAYOUT; SITE PLAN HVG_01; SEQUENTIAL ANALYSIS STUDY; ARBORICULTURAL REPORT; FLOOD RISK ASSESSMENT; TD_01 TRANSFORMER ELEVATIONS; ID_01 INVERTER DETAILS; TOILET ELEVATION;		

TYP_P_E_3L PANELS ELEVATION;
STATEMENT COMMUNITY INVOLVEMENT;
SB_01 STORAGE BUILDING DETAILS;
TOPOGRAPHICAL SURVEY2;
BIODIVERSITY MANAGEMENT PLAN;
SWEPT PATH ANALYSIS;
ARCHAEOLOGICAL GEOPHYSICAL SURVEY;
CONSTRUCTION TRAFFIC MANAGEMENT;
PFA ROAD CONDITION SURVEY;

1. **Proposals**

Planning permission is sought to install a ground mounted photovoltaic (PV) solar energy farm on the site. The application site comprises 18.3ha, with the solar farm infrastructure being placed on 11ha within the site. The solar farm infrastructure will cover 19 percent of the area, for example with gaps provided between the rows of panels. The 5MW solar farm would be capable of generating enough electricity to power 1460 typical households per year. The energy generated will be fed directly into the local power grid network. The solar farm has an operational life of around 30-35 years and after this time all equipment will be removed and the land restored to its former condition. The solar panels each measure 2m x 1m x 0.05m. The mounted solar panels have a maximum height above ground level of 2.5m. The panels will be fixed to mounting frames at an angle of 25-30 degrees to optimise daylight capture and will be fixed in place rather than tracking the sun. It is proposed to have sheep grazing between the rows of solar panels.

Inverters will be required on the site, which are required to convert the Direct Current (DC) electricity generated by the panels to Alternating Current (AC) before being fed into the grid. The inverters will be located in three cabins (painted green) on the site which will be mounted on a concrete pad and measure 2.9m high, 4.4m long and 1.5m wide

Transformers are also required on the site to transform electrical energy from one circuit into another, allowing the electricity generated to be fed into the grid. The plans submitted indicate that two transformers will be installed on the site located in two cabinet (painted green) measuring 2.8m high, 6m long and 2.5m wide.

Two switchgear substations will be required. Switchgear is needed as a safety mechanism; one is needed to shut the grid off from the solar farm (the DNO substation) and one is needed to shut the solar farm off from the grid (the client side/customer substation) should there be a fault on either the grid or the substation. For health and safety reasons a motion sensor security light is required on the exterior of the DNO. The DNO building measures 5.5m x 5m with a maximum of 4.4m. The client side substation measures 6.1m x 2.4m with a maximum height of 2.9m.

A 2m high perimeter fence is needed around the perimeter of the solar farm for safety reasons. The fence will be constructed from timber and wire. The plan of the fence submitted indicates that the fence will include small mammal gates to enable free access to small animals whilst keeping larger animals such as deer out of the site. For security reasons security cameras are also required around the perimeter of the site. The security cameras will be mounted on 2.4m high poles and are motion sensor cameras that use infrared technology so that no lighting is required. The cameras will be directed into the solar farm.

A communications building (painted green) will be installed to enable 24 hour remote monitoring of the site to identify any faults and to relay the security camera footage. The communications building measures 3m x 3.7m and has a maximum height of 2.5m. A satellite dish and Wi-Fi antenna are required to provide the necessary reception.

A storage shed to store equipment for the general maintenance of the solar farm is required which measures 3m x 2.5m with a height of 2.5m. This structure will also be painted green.

Other structures proposal included, a composting toilet made from logged wood, a DNO meter and a GPR cabinet.

This application is presented straight to Committee given the nature and size of the development and the level of neighbour interest.

2. Policy Context

The National Planning Policy Framework (NPPF) came into effect on 27 March 2012 and is now a material consideration in planning decisions. The weight to be given to it will be a matter for the decision makers planning judgement in each particular case. This Framework replaces all the national planning guidance documents as stated in the NPPF, including Planning Policy Guidance Notes and Planning Policy Statements. Notwithstanding this, the NPPF granted a one year period of grace for existing adopted Local Plan policies which has now ended, but, the NPPF advises that following this 12 month period, due weight should be given to relevant policies in existing plans according to their degree of consistency with the Framework, (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given). The National Planning Practice Guidance (NPPG) is a material consideration in the determination of this application.

Key NPPF Chapters

- Chapter 3 - supporting a prosperous rural economy
- Chapter 9 - Protecting Green Belt land
- Chapter 10 - Meeting the challenge of climate change, flooding and coastal change

- Chapter 11 - Conserving and enhancing the historic environment
- Chapter 12 - Conserving and enhancing the historic environment

Local Plan Policies

- CP1 - General development criteria
- T2 - New development and highway considerations
- GB1 - New development
- GB2 - Development criteria
- C5 - Retention and provision of landscaping and natural features in development
- C14 - Development affecting Conservation Areas
- C16 - Development within the vicinity of a Listed Building
- IR3 - Protecting the best and most versatile agricultural land
- IR6 - Renewable energy schemes

3. Relevant History

- 14/01307/EIASO: EIA Screening Opinion for Photovoltaic Solar Farm -Not EIA Development

4. Neighbour Responses

78 neighbour letters were sent out, three site notices were displayed and the application was advertised in the press.

The following representations have been received to date:

Support

127 letters of support have been received which are copies of the same letter which state that support is given to the application because the proposal would power over 1400 homes with clean, local energy, reducing the need for fossil fuel imports and reducing the carbon footprint of the Borough. The site has been well selected and well screened, an agricultural use of the land will continue, wildlife enhancements are proposed and that ongoing operation of the solar farm would not cause disruption. This letter has a space for additional comments. These additional comments include;

- We are behind other countries with renewable energy.
- Great for the environment and a good source of energy.
- Reduces dependence on oil and reduces carbon emissions and carbon footprint of the area.
- Good for children's future and for the community
- Solar farms are needed for the Country's energy future.
- Good idea.
- Don't see why it shouldn't go ahead.
- Can't wait to see it.
- Need more solar farms in Brentwood.

- All measures being implemented to minimise disruption.

It is worth noting that these letters come from people from a range of areas including Brentwood, Hutton, Warley, Pilgrims Hatch, Billericay, Basildon, Wickford, Laindon, Langdon Hills, Canvey Island, Benfleet, Ongar, Stanford-le-hope, Chelmsford, Dagenham, Waltham Abbey, South Ockendon, Orsett, Halstead, Romford, Upminster, Hornchurch, Colchester, Shoeburyness and Gravesend

In addition to these standard letters that have been submitted, a further 2 letters of support have been received which comment:

- Fantastic idea.
- Will be good for everyone.
- Need this for the future of the country.
- As a Brentwood resident and local businessman support scheme for alternative energy.
- World's oil reserves are running out and alternative sources have to be found.

7 feedback forms have been submitted to the Council indicating support for the solar farm.

A letter has been received from Bairstow Eves Estate Agents which comments that in her opinion as an Estate Agent familiar with the local area that she does not see how this development would have an adverse impact on property prices in the area as there will be no additional traffic to and from the site once the panels are installed and as the panels would not be seen by neighbouring properties or cause overlooking of private gardens and no noise and will not therefore hinder any local properties.

Objection

26 neighbour letters of objection have been received which raise the following concerns:

- Construction will be disruptive and noisy. Increase traffic pollution
- Will cause congestion. Rayleigh Road is already busy.
- Heavy traffic and HGV's passing through small private road - concerned about risk to children, elderly and pets.
- Small lane has barely enough room for two cars to pass and there are blind spots at each end and no pavements. When traffic was diverted down this lane there was an accident. Concerned about impact on road surface.
- Harm to wildlife/habitats and impacts of fences.
- Reduce house prices and desirability to live in the area. Estate Agents have confirmed house prices will be reduced.
- Health risks of large solar farms are unproven. US studies suggest illnesses associated with proximity to large solar farms; cancer clusters, headaches, fatigue, epilepsy. Although unproven don't want to take this risk.
- More suited to an industrial estate away from residents and wildlife.

- Cottage is 300 years old and shakes when heavy vehicles pass.
- Inappropriate development in the Green Belt and would harm openness.
- Who will pay for the removal when the panels degrade? What if developer cannot afford to have them removed? If goes ahead this money should be provided now for the subsequent deconstruction.
- Against Government Policy and should not be built in residential areas.
- No benefit for people of Hutton/Brentwood
- More loss of land to developers.
- Once used for solar farm could be brownfield land and used for housing development; erode Green Belt and urbanise the buffer between Shenfield and Billericay.
- There are plans for a solar farm to the north of the railway line.
- Inverters and auxiliary equipment may be hazardous to health.
- Will not bring employment to the area.
- Loss of visual amenity and not in-keeping with surrounding land. Eyesore.
- Countryside should be protected for its intrinsic character and beauty.
- No hedge will be tall enough to screen the development.
- Views from bridleways and footpaths will be blighted
- Government views of solar farms are unproven - May 2014 Department of Energy & Climate Change proposed to reduce subsidies for large scale solar farms.
- Noise and disturbance
- Moved to area due to rural feel and Green Belt land nearby.
- The solar farm will be visible from Ellices Farmhouse and neighbouring houses.
- Horses will be in a field next to the panels.
- Access concerns and concerns about impact on right of way.
- It is an industrial power station and has no place in a residential area on Green Belt.
- No very special circumstances
- Solar panels are not very efficient
- No evidence developer has sought out previously developed/non-agricultural land across the UK.
- Proposal is not part of the local plan
- No fire emergency procedure
- Developer should pay at beginning to fix roads, driveways, etc damaged by the construction.
- Will need daily visits for livestock.
- Could undermine the railway.
- Need a detailed, independent historic survey, archaeological survey, tree, and pond surveys and independent biodiversity survey
- Would ruin the heritage of community
- How can the energy produced be used by locals when going into the national grid
- Money to Havering Grove residents association feels like a bribe
- Concerns about impact on water courses
- The land harvested crops last year
- Increase road flooding by resulting in mud on the road.

- Precedent
- Will not be temporary - will be replaced.
- Loss of valuable farmland
- If allowed safeguards/conditions needed
- Concern it won't power the number of houses suggested.
- Not been proved necessary to lose the best agricultural land and 3b land has not been sought
- There are views into the site from public rights of way
- Will be visible to people on trains
- The solar panels could be installed in the roofs of the commercial units in Basildon Industrial Estate.

A petition of 230 people has also been submitted against the proposal. The covering letter to this petition states that the objections include:

- Object to Green Belt land around their homes being used for an industrial site.
- Energy company should find an alternative brownfield site away from residential areas.
- Construction will cause disturbance and highway safety issues.
- Concerned about highway safety as lane approaching site is narrow with no pavements and there are families, children and pets in the area. There are nursery schools and a dance school close by.
- Reduce house prices - confirmed by local estate agents.
- Health Risks; are unproven but residents do not want to risk health concerns.
- Who would be liable to accidents caused by solar farm traffic
- Infrastructure of lane proven incapable of supporting heavy vehicles when Saxons 4 x 4 garage were parking vehicles in Havering Grove Farm - drainage system collapsed and road surface deteriorated and had to be resurfaced. Will the Council monitor and invest in the rebuilding of the lane infrastructure?
- Will the Council compensate residents who wish to move away and suffer devaluation.
- Will the Council be liable for health issues.

A letter of objection has been received from Cllr Hossack which makes the following comments:

- Disquiet in the community about this proposal
- The farm has hosted non-agricultural commercial activity previously causing disruption; this proposal gives rise to similar concerns.
- A lot of paraphernalia associated with the development, such as mast and toilet blocks.
- Witnessed solar farm construction at the M4 Berkshire and surprised how tall the panels are.
- Planners need to consider carefully the impact of this commercial activity in a Green Belt and agricultural setting, especially to maintain the village feel of Haverings Grove.

A letter of objection has been received from Cllr Sanders which makes the following comments:

- It changes the use of the field - it will become brownfield thus allowing potential development of houses.
- Integrity of the Green Belt at this location needs to be preserved.

5. Consultation Responses

- **Essex Badger Protection Group:**

Regarding planning application 15/00161/FUL. After reading the ecological report and checking my records where I have found no records of badger setts on the site, I have no objections

- **Highway Authority:**

From a highway and transportation perspective the impact of the proposal is acceptable to the Highway Authority subject to the following conditions:

1. Prior to commencement of the Solar Farm the Developer shall prepare a condition survey of the public highway site route. Details to be agreed with the Highway Authority.

Reason: To protect the safety and efficiency of the highway in the interest of highway safety in accordance with policy DM1 of the Development Management Policies as adopted as County Council Supplementary Guidance in February 2011.

2. Prior to commencement of the proposed Solar Farm details of a wheel and under chassis washing and facility within the site and adjacent to the egress onto the highway shall be submitted to and approved in writing by the Local Planning Authority. The wheel washing facility shall be provided at the commencement of the any works and maintained during the period of construction and decommissioning.

Reason: To ensure that loose materials and spoil are not brought out onto the highway, in the interests of highway safety to ensure accordance with Policy DM1.

Note:

The Developer shall operate the details contained within the submitted Construction, Decommissioning and Traffic Management Method Statement during the construction works and decommissioning works. Any details affecting the highway shall include where appropriate, signage and use of a banksman at the site access during the delivery schedule.

Upon completion of the proposed development any reinstatement or repair works to the existing site route carriageway/kerbing etc. shall be carried out at the developer's expense.

The developer should provide suitable measures to ensure mud/loose materials are not deposited on the highway.

Informative

All works affecting the highway to be carried out by prior arrangement with, and to the requirements and satisfaction of, the Highway Authority and application for the necessary works should be addressed for the attention of the Development Management Team at SMO3, Essex Highways, Unit 36, Childerditch Industrial Park, Childerditch Hall Drive, Brentwood CM13 3HD or emailed to development.management@essexhighways.org

- **Environmental Health & Enforcement Manager:**

With regard to the above Planning application I confirm the following.

Construction Noise

Construction work should not begin until a scheme for protecting the proposed noise sensitive development from noise from the existing industrial/commercial activities has been submitted to and approved by the local planning authority; all works which form part of the scheme should be completed before any part of the noise sensitive development is occupied.

The World Health Organisation has provided guidance that "general outdoor noise levels of less than 55dB LAeq are desirable to prevent any significant community annoyance" and that "a level of less than 35dB(A) is recommended to preserve the restorative process of sleep".

For a reasonable standard in bedrooms at night, individual noise events (measured with a Fast time weighting) should not normally exceed 45dB LAmax. These recommendations should be regarded as the maximum noise levels to be permitted within or around the noise sensitive development.

With regard to building activities in general under the Control of Pollution Act 1974 and the Environmental Protection Act 1990 such activities must be carried out within agreed time periods.

These are as follows:

Monday - Friday: - 08:00hrs to 18:00hrs

Saturday: - 08:00hrs to 13:00hrs

Sunday/Bank Holidays: - No noisy work at all

In addition to the above, contractors must take due care not to make any unnecessary noise during their work and in particular, time particular noisy activities such as angle grinding/pile driving/hammering etc. for periods after 09:00hrs and before 17:00hrs.

Noise requirements for the installation and operation of the Solar Farm

Environmental Health's main concern regarding this application relates to noise emissions and possible noise nuisance.

I am satisfied with the commitments given in Section 6.3 of the applicants Planning, Design and Access Statement and confirm that proposed conditions requiring a maximum noise level of 35dBA not to be exceeded at the site boundary be confirmed as a Planning condition.

Additionally, I would require that the Applicant submit an acoustic report/scheme detailing the intended acoustic work to the Transformers/Switch gear Sub Stations and Inverters. This report is to be submitted to and agreed by the Planning Authority.

The scheme shall assess the noise impact from the proposed mechanical systems and shall propose appropriate measures to ensure that the noise levels comply with the said 35dBA Planning Condition and not as a consequence, affect the amenity of the nearest noise sensitive premises.

Formulation and implementation of the acoustic scheme shall be undertaken by competent persons within the acoustics field. Such agreed measures shall be implemented with the prior consent and completed to the satisfaction of the Planning Authority.

Prior to the start of activities, the Applicant shall submit to the Planning Authority the results of an Acoustic Insulation Assessment/check confirming that the acoustic works carried out have been completed in accordance with the said scheme and complies with the aforementioned proposed 35dBA Planning condition.

- **Essex & Suffolk Water:**

We have no objection to the proposed solar array.

Our existing apparatus does not appear to be affected by the proposed construction of the solar farm. We therefore have no further comment to make.

- **Anglian Water Services Ltd:**

No response received to date.

- **Environment Agency:**

We do not wish to object but have the following comments to offer.

Flood Risk

Our maps show the site is located in Flood Zones 1 2 and 3, however section 3.12 of the submitted Flood Risk Assessment, produced by PFA Consulting, and dated January 2015, states that all development will be located within Flood Zone 1. This is in keeping with the sequential approach supported by the Planning Practice Guidance, Ref ID: 7-053-20140306, which states 'Layout should be designed so that the most vulnerable uses are restricted to higher ground at lower risk of flooding, with development which has a lower vulnerability (parking, open space, etc) in the highest risk areas, unless there are overriding reasons to prefer a different location.'

As we advised in our letter to your Head of Planning dated 15 December 2014, we are no longer providing planning advice for developments over 1 hectare in size. We are however working with Essex County Council, as your Lead Local Flood Authority, to ensure you continue to receive advice on the adequacy of surface water management proposals. We have notified Essex County Council of this consultation and they will be providing you a bespoke consultation response. We fully support the advice they provide. If you need to contact them please email suds@essex.gov.uk.

- **Arboriculturalist:**

15/00161/FUL The proposed arboricultural works have been well planned and considered, there is a worthwhile point that whilst the site remains unaffected the treeworks are not really needed other than where the trees affect agriculture. The work required for safe access will need to be properly planned with adequate supervision and recording of the provisions made visits by the arboriculture section should be considered to ensure monitoring is carried out . Otherwise the retention of material on site will help redress the changes in aerial habitat which will inevitably result. Choice of contractor for both landscape and arboricultural works will be an important factor in the success of the proposal.

- **County Archaeologist:**

Thank you for consulting the Historic Environment Advisor on the above application.

The archaeological desk-based assessment for this site provides a reasonable assessment of the limited known archaeology on this site, with little archaeological fieldwork undertaken to date in the vicinity, due to its largely rural nature.

It is accepted that the overall impact of the proposed development based on the current state of knowledge, despite its scale, could be interpreted as relatively low. However, when compared to other areas with a similar sub soil where development has occurred there is a high density of archaeological deposits present.

The archaeological deposits are both fragile and irreplaceable and any permitted development on site should therefore be preceded by a programme of archaeological investigation which can be secured by appropriate conditions attached to the planning consent

We would recommend in the first instance that a programme of geophysical survey which would be followed by targeted trenching in order to establish the nature of the archaeological deposits present, together with its significance and extent. Once that has been completed discussion with the applicants can take place to define mitigation strategies for preservation in situ or by record. The geophysics (and any follow-up fieldwork) can be undertaken post-determination, but it is strongly advised that the work is scheduled early into any proposed timetable in order to avoid unexpected delays.

To ensure that this work is undertaken it is recommended following the guidance given in the NPPF for a full archaeological condition is attached to any consent for this development. The condition should read:

Recommendations: Phased archaeological programme.

1. No development or preliminary groundworks can commence until a programme of archaeological geophysical survey has been secured and undertaken in accordance with a written scheme of investigation which has been submitted by the applicant, and approved by the planning authority.
2. A mitigation strategy detailing the excavation/preservation strategy shall be submitted to the local planning authority following the completion of the geophysics work and prior to any development commencing submission.
3. No development or preliminary groundworks can commence on those areas containing archaeological deposits until the satisfactory completion of fieldwork, or alterations in foundation design of panels and cabling, as detailed in the mitigation strategy, and which has been signed off by the local planning authority through its historic environment advisors.
4. The applicant will submit to the local planning authority a post-excavation assessment (to be submitted within six months of the completion of fieldwork, unless otherwise agreed in advance with the Planning Authority). This will result in the completion of post-excavation analysis, preparation of a full site archive.

A professional team of archaeologists should undertake the archaeological work. The District Council should inform the applicant of the archaeological recommendation and its financial implications. An archaeological brief outlining the level of investigation will be issued from this office on request.

If you have any questions please do not hesitate to contact me.

Received 09/04

Thank you for consulting the Historic Environment Advisor on the above application.

Following the recommendation that a geophysical survey be carried out on the site to identify possible archaeological deposits, a survey was undertaken in March 2015. The results from this survey show limited archaeological responses across the development area. This survey supports the archaeological desk-based assessment for the site which provided a reasonable assessment of the limited known archaeology and it is accepted that the overall impact of the proposed development is probably relatively low.

The results from the geophysics confirm that no further work will be required on this site prior to the development of the solar farm and therefore the previously suggested phased condition for archaeological mitigation can be released or removed from this application.

If you have any questions please do not hesitate to contact me.

- **Natural England:**

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The Wildlife and Countryside Act 1981 (as amended)

The Conservation of Habitats and Species Regulations 2010 (as amended)

Natural England's comments in relation to this application are provided in the following sections.

Statutory nature conservation sites - no objection

Based upon the information provided, Natural England advises the Council that the proposal is unlikely to affect any statutorily protected sites or landscapes.

Priority Habitat Creation

Solar farm developments offer excellent opportunities to create new habitats, and especially "priority habitats" listed under s41 of the NERC Act 2006. The planning application should include details of new habitats. In particular, solar farms are ideally suited to creating new grassland habitats, which can be created among the rows of solar panels. Details should be provided on the appropriate s41 target grassland habitat, along with a habitat creation plan (which should include measures to create suitable soil conditions / arable reversion techniques), suggested species mix for sowing, and details of how new habitats will be managed (e.g. grazing / mowing).

Other priority habitats that could be created or enhanced depending on site conditions, are hedgerows, ponds, and arable field margins. We suggest that a habitat creation plan also references any existing local sites recognised for their nature conservation interest, such as SSSIs and Local Wildlife Sites. The Ecological Appraisal lists nearby nature conservation sites which within ~2km of the proposed development site, and these sites may provide an indication of what might be achieved at this site, should the conditions be suitable.

Further guidance is available from Natural England's Technical Information Notes:- TIN101 - Solar parks: maximising environmental benefits. TIN066 - Arable reversion to species-rich grassland: site selection and choice of methods. TIN067 - Arable reversion to species-rich grassland: establishing a sown sward. TIN068 - Arable reversion to species-rich grassland: early management of the new sward.

The following additional notes may also be helpful:- TIN060 - The use of yellow rattle to facilitate grassland diversification. TIN061 - Sward enhancement: selection of suitable sites. TIN062 - Sward enhancement: choice of methods. TIN063 - Sward enhancement: diversifying grassland by spreading species-rich green hay. TIN064 - Sward enhancement: diversifying grassland by oversowing and slot seeding. TIN065 - Sward enhancement: diversifying grassland using pot-grown wildflowers or seedling plugs.

Additional guidance is available from the BRE National Solar Centre, and the RSPB.

Natural England's TIN110 "Assessing whether created or restored grassland is a BAP Priority Habitat" should be used as part of the monitoring programme.

The creation of priority habitats in this way contributes towards the Government's nature conservation vision, set out within "Biodiversity 2020", a strategy for England's wildlife and ecosystem services. The NPPF promotes net gains in biodiversity (paragraph 109), and s40 of the NERC Act requires public bodies to have regard to biodiversity in carrying out their functions.

Green Infrastructure

The proposed development is within an area that Natural England considers could benefit from enhanced green infrastructure (GI) provision. Multi-functional green infrastructure can perform a range of functions including improved flood risk management, provision of accessible green space, climate change adaptation and biodiversity enhancement. Natural England would encourage the incorporation of GI into this development.

Protected species

We have not assessed this application and associated documents for impacts on protected species.

Natural England has published Standing Advice on protected species. You should apply our Standing Advice to this application as it is a material consideration in the determination of applications in the same way as any individual response received from Natural England following consultation.

The Standing Advice should not be treated as giving any indication or providing any assurance in respect of European Protected Species (EPS) that the proposed development is unlikely to affect the EPS present on the site; nor should it be interpreted as meaning that Natural England has reached any views as to whether a licence is needed (which is the developer's responsibility) or may be granted.

If you have any specific questions on aspects that are not covered by our Standing Advice for European Protected Species or have difficulty in applying it to this application please contact us with details at consultations@naturalengland.org.uk.

Impacts to Invertebrates and their Habitats

Natural England does not provide bespoke advice to local planning authorities on habitats and species listed as being of principal importance for the purpose of conserving biodiversity, under section 41 of the Natural Environment and Rural Communities Act 2006. These are capable of being material considerations in the determination of planning applications, and this proposed development may affect s41 invertebrate species, and / or the s41 habitat "open mosaic habitat on previously developed land".

Further comments made but unable to copy as maximum amount of text reached.

- **Council For The Protection Of Rural Essex:**

No response received to date.

- **Essex Wildlife Trust:**

No response received to date.

- **Historic England:**

The application(s) should be determined in accordance with national and local policy guidance, and on the basis of your specialist conservation advice.

- **Essex County County Lead Local Flood Authority:**

Thank you for consulting us on the above application. The installation of solar panels leads to only a small increase in impermeable area and therefore should not have a significant effect on runoff volumes. As a result we have no further comments at this point.

- **Historic Buildings and Design Officer:**

The development site is located to the north of the A129 Raleigh Road. The site is undeveloped land; these proposals seek to implement a solar farm with associated infrastructure to include PV panels, mounting frames, inverter, transformer, pole mounted CCTV cameras, substations, composting toilets and fence.

Access to the site is via Havering Grove. Situated to the west of the site egress is Grade II listed building Ellices, 552 Rayleigh Road (List entry number 1297247). The building dates from early C19th, later rear extensions are not of special interest as noted in listing text from Historic England.

Having conducted a site visit and assessed the extensive supporting heritage impact assessment this listed building will not be subjected to harm in terms of any potential visibility of the proposals to its setting; the main concern is vehicular movement throughout construction and the maintenance of the site elements in terms of the frequency of vehicular access.

Such matters should be conditioned in the interests of preserving the historic environment. In terms of developing this land parcel for the proposed use please refer also to the County Archaeologists advice.

Recommendation:

Having reviewed the submitted information including the Historic Environment Settings Impact assessment I raise no objections on Conservation grounds.

- **Basildon Fire Station:**

No response received to date.

- **Highways Agency:**

Thank you for your e-mail to the Highways Agency Information Line regarding, Planning consultation for, Havering Grove Farm 552A Rayleigh Road Hutton Essex CM13 1SG.

The Highways Agency is responsible for the maintenance and stewardship of motorways and trunk roads in England. A trunk road is defined as a strategic link road between two centres of significant economic importance: such as cities, ports and airports. All other roads fall under the jurisdiction of the local authority.

A map showing the Agency's network of roads can be seen online here:
<http://www.highways.gov.uk/aboutus/139.aspx>

This location is not under the Jurisdiction of the Highways Agency.

- **Network Rail Property:**

Thank you for consulting Network Rail with regard to the above planning application.

After reviewing the information provided in relation to the above planning application, Network Rail has no objections or further observations to make.

- **Basildon Council:**

No response received to date.

- **Chelmsford City Council:**

This Authority objects to the proposal for the following reason:

The proposal would be inappropriate development within the Green Belt and would be harmful to the openness of the Green Belt. It may also be harmful to the character and appearance of the rural landscape. There are no very special circumstances which would outweigh this harm. The development is therefore contrary to the National Planning Policy Framework.

- **National Grid:**

No response received to date.

- **Open Space Strategy Coordinator:**

No response received to date.

- **Planning Policy:**

The land is clearly within Green Belt and so should be assessed in light of local and national Green Belt Policy. However, due to the lack of local policy relevant to renewable energy provision it is advisable to refer to national guidance, and to a lesser extent emerging planning policy. The issue should be whether any harm to the Green Belt can be outweighed by the amount of renewable energy to be produced from potential development, and whether the impact of development can be mitigated against.

Planning Practice Guidance sets out specific guidance for planning applications related to large scale ground-mounted solar photovoltaic Farms, Paragraph: 013, Reference ID: 5-013-20150327. This sets out the mitigating factors that can be applied, such as screening with native hedges/trees, allowing for land to be continued to be used for agricultural purposes, and ensuring structures used are temporary.

Although the Council is in the process of preparing a new Local Development Plan to replace its existing Local Plan (2005), previous consultation set out draft policies relating to renewable energy. The Council's Preferred Options consultation (2013) set out draft Policy CP14 - Sustainable Construction and Energy:

"Proposals for renewable, low carbon or decentralised energy schemes will be supported provided they can demonstrate that they will not result in unacceptable harm to the local environment, including cumulative and visual impacts which cannot be satisfactorily addressed. Renewable and low carbon energy development proposals located within the Green Belt will need to demonstrate very special circumstances and that harm to the Green Belt is outweighed by the added environmental benefits of development."

Although this is not very specific, it does show a willingness to allow for renewable energy solutions where harm to the environment and impacts can be satisfactorily mitigated, including the need to demonstrate very special circumstances in the Green Belt. The location of the site in Green Belt therefore requires an extra test to show whether very special circumstances exist for allowing development can be proved.

The assessment for this application should weigh the potential benefits of development against the harm caused to the Green Belt.

6. Summary of Issues

Site Description

The application site is located to the north of Rayleigh Road and to the south of the railway line. The application site comprises 18.3ha, with the solar farm infrastructure being placed on 11ha within the site. The site constitutes three fields or parcels of land. Access to the site would be via a track accessed from Rayleigh Road. The site is bounded by vegetation in main, with some wire fencing. There are also areas of vegetation within the site, between the three fields. The site is currently agricultural in nature with the information submitted indicating it is currently under arable cultivation. Land levels vary across the site with the fields having a gentle undulating character.

The site is located within the Green Belt. As such the main considerations in the determination of this proposal are Green Belt considerations, impact on agricultural land, design and character of the area, ecology and landscaping, highway considerations, impacts on heritage assets, residential amenity considerations, flood risk and the impact on health and safety.

Green Belt

Paragraph 79 of the NPPF states that the Government attaches great importance to Green Belts. The fundamental aim of Green Belt Policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.

Paragraph 88 of the NPPF states that when considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt.

Is the proposal inappropriate development in the Green Belt:

Paragraph 89 of the NPPF states that a local planning authority should regard the construction of new buildings as inappropriate development in the Green Belt. There are some exceptions to this, however, none of the exceptions includes the construction of a solar farm. As such the proposed development constitutes inappropriate development in the Green Belt. This conclusion is supported by paragraph 91 of the NPPF; the first sentence of which states that when located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development.

Openness and purposes of including land in the Green Belt:

The proposal to install 2.5m high solar panels on the previously undeveloped Green Belt land, with associated structures; fencing, CCTV poles, a toilet, communication building, substations, etc will reduce the openness of this part of the site. It is noted that the applicant indicates that the solar farm will be significantly screened by vegetation, however, regardless of any screening, the openness will still be harmed. Openness is about the lack of built form on the site, rather than whether the built form is visible or not. The proposed solar farm would also conflict with the purposes of including land in the Green Belt as it would result in encroachment into the countryside with built form.

As such the proposal constitutes inappropriate development in the Green Belt and as such very special circumstances that outweigh the harm to the Green Belt need to be demonstrated. Paragraph 88 of the NPPF states that very special circumstances will not exist unless the harm to the Green Belt by reason of inappropriateness and any other harm, is clearly outweighed by other considerations.

Impact on agricultural land

The proposal seeks to use the three arable fields as a solar farm. However, the ecology report submitted indicates that an element of agriculture would be maintained on this site and it is indicated that following the initial 6 months of establishment, grassland will be managed by sheep grazing, with fields subject to light intermittent grazing by sheep between mid-August and late February with sheep removed from the site between March and early August to allow summer flowering plants to flower and set seed. A maximum grazing density of six sheep per hectare should be used.

As such, the proposal does seek to retain an element of agricultural use on the site, although this use would not be year round and would be an ancillary use of the land rather than its main use.

The Written Ministerial Statement on solar energy: protecting the local and global environment, made on the 25th March 2015 which refers to the Coalition Government's solar photovoltaic strategy, underlined the importance of focusing such growth on domestic and commercial roof space and previously developed land. The statement comments that meeting our energy goals should not be used to justify the wrong development in the wrong location and this includes the unnecessary use of high quality agricultural land. Where a proposal involves agricultural land that poorer quality land is used in preference to higher quality agricultural land. This is supported by Paragraph 112 of the NPPF which states that where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality. Annex 2 of the NPPF defines the best and most versatile agricultural land as land in Grades 1, 2 and 3a of the Agricultural Land Classification. Local Plan Policy IR3 similarly states that development of the best and most versatile agricultural land will only be permitted where it can be demonstrated that no alternative site exists.

In this regard, this application has been submitted with a sequential analysis study which concludes that the use of the agricultural/Greenfield land is necessary in the absence of previously developed land and barriers to the development of large-scale commercial roof-space for photovoltaic developments. There are no potential sites of any poorer agricultural quality land and subject to less environmental constraints than the application site within the study area. The study area comprises the Brentwood Borough with a 10km buffer and therefore also includes parts of Basildon, Chelmsford, and a small part of Thurrock, Havering and Epping.

The report comments that within Brentwood there are no areas of vacant or unused previously developed land that are capable of providing comparable MW output and a lack of vacant or unused previously developed land in the neighbouring districts. However, the report recognises at Paragraph 3.9 that Thurrock has substantially more vacant or unused previously developed land. The report comments, however, that the dataset which identifies this land within Thurrock refers to the entire administrative area, that this vacant or unused land is not necessarily within the study area, nor within the feasible 2km grid connection.

However, Officers consider that there is no reason why the developer should not look further afield than 10km surrounding the application site to determine whether there are any more suitable sites within the wider surrounding area that would adhere to Government Policy; that the large scale solar farms should be focused on previously developed, non-agricultural land. There is no Policy indication that the location of a development should be influenced by artificial administrative boundaries. The details of the sequential analysis study submitted indicate that there could be appropriate brownfield land within the neighbouring authority of Thurrock and as such this opportunity should be considered in the first instance.

The information submitted also indicates that the majority of the site constitutes Grade 3a agricultural land (85%), with only a small amount of Grade 3b land (15%) to the peripheries of the site. Therefore the majority of the site constitutes the best and most versatile agricultural land. Whilst it is recognised that the sequential analysis report identified that around 72 percent of the study area is Grade 3 agricultural land, it does not distinguish whether this land is Grade 3a or Grade 3b; an important distinction in determining whether there are sites that are of poorer quality agricultural land (i.e. Grade 3b) which could be developed, rather than this, mainly Grade 3a land.

The Written Ministerial Statement on solar energy: protecting the local and global environment, made on the 25th March 2015 states that proposals for solar farms which involve the best and most versatile agricultural land (85% of the application is classified as the best and most versatile agricultural land) would need to be justified by the most compelling evidence. As outlined above, such evidence has not been submitted here.

It is noted that Chapter 3 of the NPPF seeks to support a prosperous rural economy and states that planning policies should promote the development and diversification of agricultural and other land-based rural businesses. However, whilst this proposal would result in farm diversification, this does not outweigh the harm identified above.

Design and Character of the area

The application site constitutes fields used for arable farming which are located in a rural, countryside location. One of the core planning principles of the NPPF, as set out in Paragraph 17 is that the intrinsic character and beauty of the countryside should be recognised. The NPPG (paragraph 013) states that the deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the NPPG goes on to recognise that the visual impact of a well-planned and well-screened solar farm can be zero if properly addressed within the landscape and if planned sensitively.

The application has been submitted with an appraisal of landscape and visual effects (ALVE) which concludes that the landscape character of the site and surrounding area has a high sensitivity to change and that there would be a high magnitude of change to the site itself. However, the ALVE states that the effects on the wider landscape would be negligible. Visibility would be restricted by a combination of the landform; the gently undulation topography, the hedgerows, landscaping and occasional woodland block. Which in combination with the low profile of the development, would result in very few views of the development.

The ALVE recognises that there are some locations where some views of the development would be possible, including from the public rights of way (PRoW) to the east and west, and the development would be visible to passengers on trains travelling on the railway line to the north. However, visibility from the PRoW would be limited due to the dense vegetation, which will be supplemented where necessary to further obscure views of the solar farm.

The ALVE also concludes that some residences will have partial views of the solar farm; from some dwellings to the south of Bushwood Farm, some dwellings in Billericay and in Havering Grove, however these views would be likely to be at first floor and restricted by intervening vegetation and/or the solar farm will only be a small element within the landscape panorama.

The report therefore concludes that there would be very few views of the development from further than 600m from the site and there would be only a negligible effect on visual amenity and the proposal would not result in any unacceptable landscape or visual impacts.

A topographical survey has been submitted and a site visit undertaken, which confirms that the site is screened by dense vegetation to the boundaries; much of which is above 4m in height. There are some gaps within this boundary treatment and some views out of and into the site. It is also apparent that the solar farm would be visible to train passengers given the level of vegetation on this boundary and the changes in levels and elevated position of the train line in some parts. As confirmed in the ALVE, it is apparent that the solar farm would be visible to at least some of the surrounding dwellings.

In 2006, a Landscape Character Assessment (LCA) prepared by Chris Blandford Associates for a number of local authorities in Essex, including Brentwood was produced. The LCA has not been formally adopted by Brentwood Borough Council but it provides a helpful starting point for the consideration of the effects of a proposal on the landscape. This document provides strategic level information on the character and appearance of landscape areas and their sensitivities to change. Within the Landscape Character Assessment the application site is located within the Heybridge Wooded Farmland Area (shared with Chelmsford City). The Key characteristics of this area include undulating wooded farmland, a mixture of medium - large arable fields with mature treed field boundaries and vegetation lined ditches.

The Landscape Character Assessment identifies the sensitivities to change within the site as being mature treed field boundaries and single mature trees and vegetation-lined ditches which are sensitive to changes in land management. The overall sense of tranquillity within parts of the character area (away from main road corridors) and the network of narrow tree-lined lanes is also sensitive to change and potential new development or increases in traffic flow associated with such development. Open views to wooded horizons are sensitive to new development which may interrupt or block such views. The conclusion is that this character area has a relatively high sensitivity to change.

The suggested landscape planning guidelines within the landscape character assessment include; to conserve the mostly rural character of the area, ensure that development responds to historic settlement patterns and is well integrated with the surrounding landscape. Suggested land management guidelines are to conserve and enhance mature hedgerow trees and conserve and manage areas of woodland.

This proposal does seek to adhere to some of these recommendations; it seeks to retain the historic field size and shape patterns, and it seeks to conserve and enhance the mature hedgerows surrounding the site.

The ALVE submitted includes the Author's assessment of landscape character of the area; up to 2km from the site which comments the area is gently undulating. The dense hedgerows with trees and woodland blocks around the field boundaries create a strong sense of enclosure. However, the PRoW within the area occasionally have medium to long views to distant low ridges, especially from relatively higher locations. It is stated that if the proposed development is at all visible, only small parts of the proposed development would be seen at any one time. It is also stated that the site is currently influenced by Man's activities and with the development in place this would continue and the influence of Man's activities associated with landscape would not materially change. The low-lying nature of the proposal would result in the development not forming a feature of the skyline. The proposal would have little impact on the existing perception of tranquillity. It concludes that the development results in a high magnitude of change to the site, however, for the wider landscape area the proposed development would give rise to a negligible magnitude of change.

However, in response to the Author's assessment, it is clear that the site will be visible from the PRoW, at least in part. The solar farm would also be visible to the train passengers. In terms of the comment that the site is already influenced by Man's activity, there is a railway track to the north of the site and there are other man-made structures such as fences and buildings that are visible in the area. However, the scale of this proposal is in stark contrast to these existing man-made structures on, and surrounding the site.

The ALVE includes a section on visual amenity which identifies potential locations from which the development may be visible from. It is concluded that the low lying landform, adjacent woodland and hedgerows restrict views from the majority of the surrounding locations. However, the viewpoints considered, do indicate that there will be moderate visual effects from the nearest ProW to the east and west, although the development would not be visible from the entire length of these PRoW and the entire development would not be visible from these viewpoints. It is also commented that after 5-10 years, once the boundary gaps have been in-filled by vegetation, the impact would decrease to minor.

The proposed development; the solar farm and its ancillary features, would fundamentally change the open, rural character of the application site by covering a large proportion of it in man-made infrastructure. However, given that the countryside here is not located as a Special Landscape Area and given the findings of the ALVE and the fact that the solar farm would not be particularly visible in the area, it is not considered that the proposal would result in significant and demonstrable harm to the rural character and appearance of the area.

Given the location of the site, and the distance from the site to the nearest other solar farm located 4.9km away in the Borough of Basildon at Outwood Farm, it is not considered that there will be any cumulative impacts as a result of separation of these two sites.

No objection is therefore raised on this basis in terms of Chapter 7 of the NPPF or Policies CP1 or IR6(ii) of the Local Plan.

Ecology and Landscaping

In terms of ecology, a Biodiversity Management Plan and ecological assessment have been submitted. The application site is located approximately 840m from the nearest statutorily designated site; Hutton Country Park, and lies within an area containing 12 non-statutorily designated sites, the closest of which is Round Wood, approximately 340m to the east of the site.

The information submitted indicates that whilst badger activity was found during the ecological appraisal survey, no setts were found. The ecological appraisal comments that the site and adjacent land is potentially suitable for a range of protected species and the wider area offers foraging and roosting opportunities for bats and birds. There are no records of birds of conservation concern within 2km of the application site, the area is likely to support a suite of breeding birds typical of the region. There are no records of bats on the site, although the hedgerows offer foraging and the commuting potential and the pond offers foraging potential. Trees within and surrounding the site offer the potential for bat roosting. Evidence of badger activity was recorded on the site, no setts were found. The presence of hazel dormouse within the site cannot be discounted. No evidence of otter or water voles was found. There is potential for common reptile species to occur on the site. Habitat suitability for Great Crested Newts is considered to be good. The site is likely to support a range of invertebrates common to the area.

The information submitted indicates that mitigation/enhancement will occur as a result of the development, including, tree protection and any vegetation clearance would occur outside the bird breeding season. Additional native planting will occur which will diversify the mix of species around the site and will provide additional shelter and foraging for a range of species and will strengthen habitat connectivity. Species such as hazel and blackthorn will be managed to increase food resources for a range of species, such as birds, small mammals and invertebrates. 15 bird nest boxes and 15 bat boxes will be positioned on the site. The fencing will include gates to allow the dispersal of wildlife (such as badgers and small mammals). An ecological monitoring programme will be established with an experienced ecologist monitoring the site. The results of these monitoring programmes will inform any remedial measures to ensure the proposed biodiversity gains are realised.

Natural England have comments that the proposal is unlikely to affect any statutorily protected sites or landscapes. Solar farms offer excellent opportunities to create new habitats, such as grassland habitats between the panels. Details in this regard should be submitted and can be secured via condition. Subject to such a condition, it is considered that the proposal would not have any harm ecology and no objection is therefore raised on this basis.

In terms of landscaping, the information submitted indicates that boundary hedgerows and trees within and adjacent to the site will be protected with fencing during construction. Shrubs, hedgerow in-fills and trees will be planted within the sections of poor hedgerows will be strengthened and planted with native species. Grassland under and around the solar panels will be managed to encourage species. The field margins will be managed with cutting for the first three years to reduce nutrient levels, before being sown with a meadow wildflower mixture to ensure improved conditions for the establishment of the wildflower seed.

Highway Considerations

A construction, decommissioning and traffic management method statement has been submitted with this application. A 'swept pass' analysis has been undertaken which indicates that only the eastern side of the lane is suitable for the access and egress of construction traffic. The access path will have to be improved to provide a suitable surface for vehicles. Delivery times will be restricted to 9am-5pm Monday to Friday and 8am - 1pm Saturday during construction and decommissioning phases and deliveries will avoid rush hours and school pick up/drop off times. The expected number of deliveries during construction is 150 HGVs and 160 HGVs during decommissioning. Construction will take 8-10 weeks and typically 2-5 deliveries will occur per day throughout the construction process. It is expected that a maximum of around 10 staff will be on site at any one time during construction or decommissioning, and will park in a construction compound area within the site. Noise generating construction/decommissioning times will be limited to 9am - 5pm Monday to Friday and 8am - 1pm Saturdays.

The Highway Authority has commented that from a highway and transportation perspective the impact of the proposal is acceptable subject to conditions requiring a condition survey of the public highway and details of wheel washing and under chassis washing facilities. The Highway Authority note that it is necessary for the developer to comply with the details contained within the submitted Construction, Decommissioning and Traffic Management Method Statement during the construction works and decommissioning works.

It is noted that there are a lot of neighbour concerns raised with regard to highway issues, however, given the advice received from the Highway Authority, it is considered that the proposal would not harm the highway safety of the area. Neighbour concerns also include damage to the highway, however, the construction, decommissioning and traffic management method statement submitted indicates that on completion the developer will 'make good' any damage caused by the construction movement. As and when necessary vehicle wheels will be manually cleaned to prevent mud being brought onto the surrounding roads.

Following the local planning authority receiving the Highway Authority comments, the Agent has subsequently provided a construction traffic management plan (dated May 2015) which includes wheel washing details. The Highway Authority has confirmed that the wheel washing facilities are sufficient. As such this condition, previously recommended by the Highway Authority is no longer required.

Since the Highway Authority consultation response was initially received, a Road Condition Survey has also been submitted which the Highway Authority has confirmed is acceptable.

Impact on Heritage Assets

S66(1) of the Planning and Listed Building and Conservation Areas Act 1990 makes it clear that a Local Planning Authority (LPA) should have special regard to the desirability of preserving the Listed Building and its setting or any features of special architectural or historic interest which it possesses. S72(1) of this act states that special attention should be paid to the desirability of preserving or enhancing the character or appearance of the Conservation Area.

Chapter 12 of the NPPF aims to conserve and enhance the historic environment, with paragraph 132 stating that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation...Significance can be harmed or lost through alterations or destruction of the heritage asset or development within its setting.

A detailed Historic Environment Settings Impact Assessment has been submitted with the application which concludes that the proposed development would not result in any significant adverse effects to the significance of any designated heritage assets in the surrounding area.

Historic England have provided the Council with 'no comments' on this proposal, and recommend that the application is determined in accordance with the national and local policy guidance and on the basis of the Council's own specialist conservation advice. In this regard, the Council's Historic Buildings Consultant (HBC) has commented that the access to the site is situated close to the Grade II Listed Building Ellices, 552 Rayleigh Road, however, having assessed the extensive supporting heritage impact assessment submitted, the Listed Building will not be subjected to harm in terms of any potential visibility of the proposal to its setting. The HBC comments that the main concern is vehicular movements throughout the construction and the maintenance of the site in terms of frequency of vehicular access and recommends that these matters are conditioned in the interest of preserving the historic environment. The HBC raises no objection to the proposal on Conservation Grounds. A condition is therefore necessary requiring the proposal to be developed in accordance with the submitted document.

In terms of archaeology, a desk based assessment was submitted, followed by an archaeological geophysical survey. The geophysical survey concludes that no identifiable archaeological features appear to be present on the site. The Historic Environment Officer at Essex County Council has provided the Council with specialist archaeological advice on this application and comments that it is accepted that the overall impact of the proposed development is probably relatively low. The results from the survey confirm that no further work will be required prior to the development and no conditions need to be attached to this application.

Residential Amenity Considerations

Given the separation distance between the proposed solar farm and the nearest residential dwelling which is approximately 140m away, the proposal would not result in any harm to the residential amenity of the adjoining residents in terms of dominance or an overbearing impact. Given the location and the nature of the development and the single storey nature of the ancillary buildings, the proposal would not result in any undue loss of privacy or overlooking to surrounding residents.

In terms of noise, the information submitted with the application indicates that the maximum noise level of 35dBA will not be exceeded at the site boundary. The Council's Environmental Health Officer has commented that Environmental Health's main concern regarding this application relates to noise. However, the Environmental Health Officer comments that the EH department is satisfied with the developers commitment as outlined in the Planning, Design and Access Statement that maximum noise levels will not exceed 35dBA at the site boundary. Subject to a condition requiring this and subject to conditions requiring acoustic reports, the Environmental Health Officer raised no objection to the proposal. Subject to such conditions no objection is therefore raised on this basis.

The Environmental Health Officer also seeks to have a condition imposed restricting the construction activities. However, this would be covered by the Environmental Health department and is covered by separate legislation rather than planning legislation and does not therefore require repeating here, in accordance with Paragraph 005 of the NPPG which states that conditions requiring compliance with other regulatory regimes will not meet the test of necessity and may not be relevant to planning,

It is not proposed to install flood lights. The CCTV cameras will use infrared technology so that no lighting is required. A motion sensor security light on the DNO substation is the only light proposed. As such it is not considered that the proposal would adversely affect the residential amenity of the area in this regard.

The information submitted indicate that there is often a misconception with PV panels that they cause glint and glare or safety concerns to planes. Rather the glass used for the panels is designed to absorb as much daylight as possible to convert to electricity and therefore has a low level of reflectivity compared to surfaces such as windows and water. The information submitted confirms that the potential for glint and glare is lower than that from man-made structures such as poly tunnels and glass houses. The report confirms that because most reflections from the panels will be skyward, the solar farm will not create a traffic hazard or nuisance to residential properties. It is also confirmed that this skyward reflection does not cause aircraft safety issues which is supported by the fact that in Germany and the USA PV systems are commonly installed on airport terminal buildings/within the grounds of airports. There are solar panels on the terminal buildings of Gatwick.

Flood Risk and Drainage Considerations

A Flood Risk Assessment (FRA) has been submitted with the application. The FRA comments that whilst the majority of the site is located within Flood Zone 1; which has the lowest probability of flooding, part of the site is also located in Flood Zones 2 and 3 which have a higher probability of flooding, however, in accordance with the sequential approach as outlined in the NPPF, the proposal has located the entire development within Flood Zone 1.

In terms of flood risk, the Environment Agency (EA) confirm that the proposal is in-keeping with the sequential approach to flood risk, by directing the development to the area of lowest probability of flood risk. The EA therefore raise no objection to the proposed development.

In terms of drainage, the FRA indicates that the extent of the impermeable cover as a result of this development amounts to 0.09 percent of the total site area and the effect of the proposal solar farm on the runoff rate will be minimal. A sustainable drainage strategy is proposed; swales are proposed to manage the disposal of surface water runoff from the development. The swales will be at the low points of the site and will provide 46 m³ of storage which would be greater than the additional runoff generated as a result of an extreme 1 in 100 year storm event, including allowance for climate change; 18 m³.

Essex County Council as Lead Local Flood Authority have commented that the installation of solar panels would result in only a small increase in the impermeable area and therefore should not have a significant effect on runoff volumes.

Given the advice of the EA and the Lead Local Flood Authority, and given the conclusion of the FRA submitted and the proposal to provide swales to improve the drainage of the area, it is considered that the proposal would not result in any undue harm in terms of flood risk and the proposal would not increase the risk of flooding elsewhere in accordance with Chapter 10 of the NPPF.

Impacts of health and safety

A number of the local residents have raised particular concerns about the impact of the solar farm on their health, commenting that the health risks of large solar farms are unknown. However, the information submitted with the application indicates that solar farms pose no risk to the health of people; the panels are strong enough to withstand strong wind events, the panels are based on silicon technology and any physical damage to the panels would not result in leakage as the panels do not include any water soluble components. Electric Magnetic Fields produced by solar farms are many times below the internationally recognised safety guidelines. No objection is therefore raised on this basis.

Energy production

Paragraph 98 of the NPPF states that when determining planning applications, local planning authorities should not require the applicants for energy development to demonstrate the overall need for renewable or low carbon energy and should approve such applications unless material considerations indicate otherwise or if its impacts are (or can be) made acceptable. One of the core planning principles, as outlined in paragraph 17 of the NPPF is to support the transition to a low carbon future in a changing climate by amongst other factors, encouraging the use of renewable resources.

However, it has been indicated by the applicant that the proposal would result in environmental benefits to offset the effects of climate change, with the 5MW solar farm offsetting some 2,502,280Kg of carbon dioxide emissions per year. The solar farm would generate enough electricity to power 1,460 typical households and would be equivalent to removing 556 cars from the road each year.

Neighbour comments

In a speech to the Large Scale Solar Conference, delivered in 25th April 2013 by Gregory Barker, the Minister for Energy and Climate change commented:- it is recognised that solar energy is popular, however it is also recognised that solar energy needs to be given careful consideration, he indicated that if we aren't careful, or if the sector expands inappropriately than invaluable popular public support will slip through our fingers. We don't want solar to become a bone of public contention like onshore wind...solar energy is a genuinely exciting energy...and we want to see a lot, lot more but not at any cost...not in any place...not if it rides roughshod over the views of local communities. As we take solar to the next level, we must be thoughtful, sensitive to public opinion and mindful of the wider environmental visual impacts.

In this regard, there have been many letters of support for this proposal, although a number of these representations come from a much wider area than the local community. Nevertheless, it is apparent that there is significant disquiet in the local community, with the neighbouring occupiers extremely concerned about the impact of this proposal, which in accordance with the above guidance needs to be very carefully considered.

The Green Belt balance and whether other considerations clearly outweigh the harm caused:

Paragraph 88 of the NPPF states that when considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. Very Special Circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

As discussed the proposed development would constitute inappropriate development in the Green Belt and if approved would result in significant and demonstrable harm to the openness of the Green Belt and would conflict with the purposes of including land in the Green Belt.

The proposed development would result in the significant loss of the best and most versatile agricultural land; with 85% of the application site constituting the best and most versatile agricultural land. Whilst the proposal will enable sheep to be grazed between the solar panels, this is considered to very much be an ancillary function, with the main purposes of the site to provide a solar farm. The applicant has failed to suitably consider whether there are genuine alternatives to using this best and most versatile land for such a development, contrary to National and Local Planning Policy.

The proposal would therefore result in significant harm. However, it is necessary to determine whether this significant harm is clearly outweighed by other considerations. In this instance, the proposal would provide some ecology benefits and would provide environmental benefits by providing renewable energy and by helping to move towards a low carbon future. It would provide enough energy to power 1,460 typical households and would be equivalent to removing 556 cars from the road each year, which is positive and a key benefit of the proposal.

However, Paragraph 79 of the NPPF states that the Government attaches great importance to the Green Belt. Government Policy is discouraging the use of the best and most versatile agricultural land for solar farms and encouraging the use of brownfield sites and sites of lower agricultural quality. The application also generated a large amount of concern from the local community. These material planning considerations indicate that the application site is the wrong place for a development of the size and nature proposed. It is therefore concluded that the benefits of the proposal in terms of environmental and biodiversity benefits would not clearly outweigh the harm by reason of inappropriateness and, other harm, to constitute the very special circumstances required to outweigh the harm identified. As such the proposal is recommended for refusal.

7. Recommendation

The Application be REFUSED for the following reasons:-

R1 U09973

The proposed solar farm constitutes inappropriate development within the Green Belt and would significantly and demonstrably decrease the openness of this part of the Green Belt and would conflict with the purposes of including land in the Green Belt contrary to Chapter 9 of the National Planning Policy Framework (NPPF) and Policies GB1 and GB2 of the Brentwood Replacement Local Plan 2005.

R2 U09974

It has not been demonstrated that any previously developed land is available for the development within the wider area; outside the Borough of Brentwood and beyond 10km from the application site and it has not been demonstrated that there is no suitable sites of a lower agricultural quality within the Borough of Brentwood, or the surrounding area that would be more suitable for a solar farm, contrary to the National Planning Policy Framework, particularly Paragraph 112, the Written Ministerial Statement of the 25th March 2015 and Policy IR3 of the Brentwood Replacement Local Plan 2005.

R3 U09976

The benefits of the proposal in terms of environmental and biodiversity benefits would not clearly outweigh the harm by reason of inappropriateness and the other harm identified, to constitute the very special circumstances required to justify this development, contrary to Chapter 9 of the National Planning Policy Framework (NPPF) and Policy GB1 of the Brentwood Replacement Local Plan 2005.

Informative(s)

1 INF05

The following development plan policies contained in the Brentwood Replacement Local Plan 2005 are relevant to this decision: CP1, T2, GB1, GB2, C5, C14, C15, IR3, IR6 the National Planning Policy Framework 2012 and NPPG 2014.

2 INF20

The drawing numbers listed above are relevant to this decision

3 INF25

The Local Planning Authority has acted positively and proactively in determining this application by identifying matters of concern with the proposal and determining the application within a timely manner, clearly setting out the reason(s) for refusal, allowing the Applicant the opportunity to consider the harm caused and whether or not it can be remedied by a revision to the proposal. The Local Planning Authority is willing to meet with the Applicant to discuss the best course of action and is also willing to provide pre-application advice in respect of any future application for a revised development.

BACKGROUND DOCUMENTS

DECIDED: