

APPLICATION NO.	23/00407/FUL	
ADDRESS	Land East Of All Saints Church And North Of Arundel Road (Parcel 1) and Land West Of Pudsey Hall Lane and North of Lark Hill Road (Parcel 2), Ashingdon.	
APPLICATION DETAILS	The construction of a solar photovoltaic farm and associated ancillary infrastructure including; the installation of ground level equipment, emergency lighting, and single storey building to house a transformer all within a substation compound; additional single storey building (control and metering room); the installation of customer substation and transformer equipment units including the formation of earth bunds around some; installation of fencing including mounted security cameras, the formation of new access tracks, altered vehicular access and landscaping.	
APPLICANT	Low Carbon Solar Park 25 Ltd.	
ZONING	Metropolitan Green Belt	
PARISH	Ashingdon Parish Council	
WARD	Hockley and Ashingdon	

REPORT SUMMARY

This report sets out the material considerations that apply in the determination of this planning application, identifying where the proposal would be compliant with planning policy and where harm would occur. The report sets out where mitigation would reduce harm. The report concludes by applying the planning balance; weighing the benefits of the scheme against the harm that would arise.

RECOMMENDATIONS

It is proposed that the Committee RESOLVES

That planning permission be approved subject to the following conditions:

(1) The development hereby permitted shall be begun before the expiration of three years from the date of this permission.

REASON: Required to be imposed pursuant to Section 91 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

(2) The development hereby permitted shall be carried out in accordance with the approved plans unless otherwise agreed in writing by the local planning authority: DZ-01 REV 13; PLE-01 REV 22; SP-01 REV 13; PL-03 REV 02; SD-30 REV 01; SD-07 REV 02; SD-06 REV 01; SD-05 REV 01; SD-04 REV 02; SD-02 REV 04; SD-01 REV 02; PL-02 REV 01; PL-01 REV 02; PL-04 Rev 01; PH-01 REV 07.

REASON: In the interests of clarity.

(3) Prior to their installation, full details of the final location, design, and materials to be used for the: (a) panel arrays, (b) CCTV cameras and (c) fencing and gates, shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall be carried out in accordance with the approved details and thereafter permanently maintained in the agreed form unless otherwise agreed in writing with the Local Planning Authority.

REASON: To allow compliance with the approved plans and allow mechanism for formal amendment if it is required.

(4) Prior to their installation, full details of the final design and materials to be used for the: (a) transformers, (b) inverters, (c) substation, (d) control room and (e) any other auxiliary buildings, shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall be carried out in accordance with the approved details and thereafter permanently maintained in the agreed form unless otherwise agreed in writing with the Local Planning Authority.

REASON: To allow compliance with the approved plans and allow mechanism for formal amendment if it is required.

(5) Within 1 month of the date of first export of electricity to the National Grid, confirmation shall be given in writing to the local planning authority of the date of first export. The planning permission hereby granted shall be limited to a period of 40 years commencing from the date electricity generated by the solar panels is first exported to the National Grid. At the end of this 40-year period, the development shall be removed, and the land restored to its previous agricultural use in accordance with details that shall have been previously submitted to and approved in writing by the Local Planning Authority.

REASON: To ensure that the site is properly restored in the interests of protecting visual amenity including the protection of heritage assets; protecting ecology and biodiversity; and to ensure the effects of site decommissioning on the highway network are adequately mitigated.

(6) No later than six months prior to the expiry of the planning permission, or within twelve months of the cessation of electricity generation by this solar PV park, whichever is the sooner, a detailed scheme of works for the removal of the development (excluding the approved landscaping and biodiversity works) shall be submitted to and approved in writing by the Local Planning Authority (LPA). The scheme of works shall include the following: (a) a programme of works: (b) a method statement for the decommissioning and dismantling of all equipment and surfacing on site; (c) details of any items to be retained on site; (d) a method statement for restoring the land to agriculture; (e) timescale for the decommissioning, removal and reinstatement of the land; (f) a method statement for the disposal/recycling of redundant equipment/structures; (g) a construction environmental management plan. The scheme of works shall be undertaken and completed in accordance with the approved details and timescales. The operator shall notify the Local Planning Authority in writing within five working days following the cessation of electricity generation.

REASON: To ensure that the site is properly restored in the interests of protecting visual amenity including the protection of heritage assets; protecting ecology and biodiversity; and to ensure the effects of site decommissioning on the highway network are adequately mitigated.

- (7) Prior to the commencement of each phase of development (Construction and Decommissioning), a Soil Management Plan shall be submitted to and approved in writing by the local planning authority. The plan shall include, but not be limited to details pertaining to careful soil management during each phase, including consideration of the appropriate time of year for soil handling, planting beneath the panels and return to the former land quality (at a minimum) as indicated in the Agricultural Quality of Land South of Fambridge survey dated 22nd August 2023. The Management Plan shall adhere to the guidance set out in the following documents (or any subsequent replacement versions):
 - Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (September 2009); and;
 - The British Society of Soil Science Working with Soil Guidance Note on Benefiting from Soil Management in Development and Construction.

The Soil Management Plan as so approved shall be implemented, and adhered to, for each phase of the development.

REASON: To ensure the agricultural quality of the land is not diminished by the construction or operation of the development.

- (8) No development or preliminary groundworks of any kind shall take place until a programme of archaeological investigation has been secured in accordance with a written scheme of investigation (WSI) which has been submitted to and approved in writing by the local planning authority.
 - REASON: To ensure the appropriate investigation of archaeological remains in accordance with Policy ENV1 of the Core Strategy and the NPPF.
- (9) No development or preliminary groundworks of any kind shall take place until the completion of the programme of archaeological investigation as detailed in the approved WSI (in respect of condition 8 above).

REASON: To ensure the appropriate investigation of archaeological remains in accordance with Policy ENV1 of the Core Strategy and the NPPF.

(10) Prior to the commencement of development, a landscaping scheme containing details of both hard and soft landscape works shall be submitted to and approved in writing by the Local Planning Authority. Subsequently the works shall be carried out in full and as approved prior to the first exportation to the National Grid, or in the first available planting season following such exportation and permanently retained and maintained in accordance with the agreed management scheme for the lifetime of the development.

The details to be submitted shall include:

- (a) Hard surfacing (excluding to access tracks covered by condition 25),
- (b) Existing trees and hedges to be retained and removed;
- (c) Planting plans including specifications of species, sizes, planting centres, number and percentage mix;
- (d) Details of the proposed re-planting of hedgerows (where removal is proposed to facilitate safe vehicular access to the site) once the use of these accesses have ceased for use by construction traffic;
- (e) Management scheme;

Any tree, shrub or hedge plant (including replacement plants) removed, uprooted, destroyed, or be caused to die, or become seriously damaged or defective, within five years of planting, shall be replaced by the developer(s) or their successors in title, with species of the same type, size and in the same location as those removed, in the first available planting season following removal.

REASON: To enable the Local Planning Authority to retain adequate control over the landscaping of the site, in the interests of visual amenity, residential amenity and flood risk.

- (11) Prior to commencement of the development hereby permitted, a Landscape and Ecological Management Plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority. The content of the LEMP shall include the following:
 - a) Description and evaluation of features to be managed.
 - b) Ecological trends and constraints on site that might influence management.
 - c) Aims and objectives of management.
 - d) Appropriate management options for achieving aims and objectives.
 - e) Prescriptions for management actions.
 - f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over the lifetime of the solar farm).
 - g) Details of the body or organisation responsible for implementation of the plan.
 - h) Ongoing monitoring and remedial measures.
 - i) Timetable for implementation.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details to the timetable as agreed.

REASON: To allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species)

- (12) No development shall commence at the site hereby approved until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following.
 - a) Risk assessment of potentially damaging construction activities;
 - b) Identification of "biodiversity protection zones";
 - c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts (visual/noise and pollution) during construction (may be provided as a set of method statements) including a development buffer zone;
 - d) The location and timing of sensitive works to avoid harm to biodiversity features;
 - e) The times during construction when specialist ecologists need to be present on site to oversee works;
 - f) Responsible persons and lines of communication;
 - g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person; and
 - h) Use and details of protective fences, exclusion barriers and warning signs including security fencing which would retain a gap from the ground rather than being installed tight to the ground.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

REASON: To conserve protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species) to ensure impacts on nearby designated sites are appropriately mitigated. Specifically point (h) to ensure badgers retain the ability to dig beneath fencing.

- (13) Six weeks prior to the commencement of the development, a pre-construction badger survey completed by a competent ecologist shall be submitted to the local planning authority. No development shall commence until the survey and its findings have been agreed in writing by the local planning authority. Any recommendations and mitigation measures identified by the survey shall be strictly adhered to/undertaken prior to/during the construction of the development as agreed.
 - REASON: To conserve protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species).
- (14) Prior to the installation of any of the boundary treatments, details of the location and number of mammal gates to be installed within the fencing shall be submitted to and agreed by the local planning authority. The mammal gates as agreed shall be implemented alongside the installation of the boundary treatments and maintained for the lifetime of the development.
 - REASON: To allow for mammals to continue to commute and forage through the application site, in accordance with Policy ENV1 of the Core Strategy and Policy DM27 of the Development Management Plan and the NPPF.
- (15) No development shall commence of the development hereby approved until a Farmland Bird Mitigation Strategy is submitted to and approved in writing by the local planning authority. If the Approved Farmland Bird Mitigation Strategy concludes that farmland bird mitigation is to be provided on land outside of the application site (including within land edge in blue on drawing no. LCS082-SP-01 REV 13) then no development shall commence unless and until a legal agreement has been completed and approved in writing by the local planning authority securing that mitigation. The content of the mitigation strategy shall include:
 - a) Purpose and conservation objectives for the proposed compensation measure;
 - b) Detailed methodology for the compensation measures;
 - Locations of the compensation measures by appropriate maps and/or plans:
 - d) Persons responsible for implementing the compensation measure.

The Approved Farmland Bird Mitigation Strategy shall be implemented in accordance with that agreed in writing with the local planning authority (unless agreed otherwise in writing) and maintained for the lifetime of the development.

REASON: To conserve protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species).

(16) No development shall take place until an Arboricultural Method Statement and Tree and Hedge Protection Plan has been submitted to and approved in writing by the local planning authority. Thereafter, the development shall only be carried out in accordance with the submitted Arboricultural Method

Statement and Tree and Hedge Protection Plan, unless otherwise agreed in writing by the local planning authority. The details to be submitted shall include: (a) Details of trees and hedges to be retained and removed; (b) Details of tree surgery work to retained trees; (c) Specification for tree protection including layout and type of tree protection for construction including changes that may occur during development; (d) Location and installation of services, utilities and drainage; (e) Details of construction within the root protection area of retained trees; (f) Details of site access, temporary parking, welfare facilities, loading and unloading, storage of equipment, materials, fuels and waste; (g) Boundary treatments within the root protection areas; (h) Arboricultural supervision and inspection, including timings, reporting of inspections and supervision; (i) Protection measures to internal hedgerows; (j) Arboricultural supervision and inspection, including timings, reporting of inspections and supervision and (k) Areas where directional cabling will be used where cables are to be laid beneath existing hedgerows.

REASON: In the interests of preserving and retaining the existing trees within and adjacent to the application site during the construction process, in accordance with Policy DM25 of the Development Management Plan and the NPPF.

(17) The development hereby permitted shall be carried out in accordance with the flood risk mitigation measures as set out on pages 21 to 25 of the document "Flood Risk Assessment" prepared by PFA consulting and dated March 2023, save for the mitigation relating to the solar panels which shall be constructed in accordance with drawing nos. PL-02 REV 01 and PH-01 REV 07 and not protected by the construction of bunds.

REASON: To ensure the development does not increase flood risk elsewhere, does not contribute to water pollution and is able to operate during flood events, in accordance with Policy ENV3 of the Core Strategy and the NPPF.

(18) No development shall commence until further drainage details have been submitted to and agreed in writing by the local planning authority. These drainage details shall include: • The provision of detailed engineering drawings of each component of the drainage scheme; • The provision of a final drainage plan which details exceedance and conveyance routes, FFL and ground levels, and location and sizing of any drainage features; • A written report summarising the final strategy and highlighting any minor changes to the approved strategy.

The scheme shall subsequently be implemented prior to operation in accordance with the agreed details and maintained as such for the lifetime of the development.

REASON: •To prevent flooding by ensuring the satisfactory storage of/disposal of surface water from the site. To ensure the effective operation of SuDS features over the lifetime of the development. To provide mitigation of any environmental harm which may be caused to the local water environment Failure to provide the above required information before commencement of works may result in a system being installed that is not sufficient to deal with

surface water occurring during rainfall events and may lead to increased flood risk and pollution hazard from the site.

(19) No development shall commence until a scheme to minimise the risk of offsite flooding caused by surface water run-off and groundwater during construction works and prevent pollution has been submitted to, and approved in writing by the local planning authority. The scheme shall subsequently be implemented as approved.

REASON: The National Planning Policy Framework paragraph 167 and paragraph 174 state that local planning authorities should ensure development does not increase flood risk elsewhere and does not contribute to water pollution. Construction may lead to excess water being discharged from the site. If dewatering takes place to allow for construction to take place below groundwater level, this will cause additional water to be discharged. Furthermore the removal of topsoils during construction may limit the ability of the site to intercept rainfall and may lead to increased runoff rates. To mitigate increased flood risk to the surrounding area during construction there needs to be satisfactory storage of/disposal of surface water and groundwater which needs to be agreed before commencement of the development. Construction may also lead to polluted water being allowed to leave the site. Methods for preventing or mitigating this should be proposed.

(20) Prior to occupation a maintenance plan detailing the maintenance arrangements including who is responsible for different elements of the surface water drainage system and the maintenance activities/frequencies, shall be submitted to and agreed in writing by the Local Planning Authority. Should any part be maintainable by a maintenance company, details of long term funding arrangements should be provided. The maintenance of the surface water drainage system shall be carried out in accordance with the maintenance plan agreed, unless otherwise agreed in writing by the local planning authority. The applicant or any successor in title must maintain yearly logs of maintenance which should be carried out in accordance with any approved Maintenance Plan. These must be available for inspection upon a request by the Local Planning Authority.

REASON: To ensure appropriate maintenance arrangements are put in place to enable the surface water drainage system to function as intended to ensure mitigation against flood risk. Failure to provide the above required information prior to occupation may result in the installation of a system that is not properly maintained and may increase flood risk or pollution hazard from the site. To ensure the SuDS are maintained for the lifetime of the development as outlined in any approved Maintenance Plan so that they continue to function as intended to ensure mitigation against flood risk.

(21) No development shall commence until an emergency plan for flood events during the construction period has been submitted and agreed in writing by the local planning authority. The construction of the development shall be carried out in accordance with the agreed emergency plan.

REASON: To ensure that all site workers would be safe during a flood event, in accordance with the requirements of paragraph 167 of the NPPF.

- (22) No development shall commence until a Construction Traffic Management Plan has been submitted to and agreed in writing by the local planning authority. The Construction Traffic Management Plan shall provide for:
 - i. the parking of vehicles of site operatives and visitors
 - ii. loading and unloading of plant and materials
 - iii. storage of plant and materials used in constructing the development
 - iv. Wheel and underbody washing facilities
 - v. Routeing of vehicles (restricting HGV movement through Ashingdon Road between hours of 8.20am to 9am and 3pm to 3.45pm Monday to Friday)
 - vi. Construction hours
 - vii. Delivery hours (restricting these between 8.20am to 9am and 3pm to 3.45pm Monday to Friday)
 - viii. Details for the control and management of dust during the construction phase

REASON: To ensure that on-street parking of these vehicles in the adjoining streets does not occur. To ensure that loose materials and spoil are not brought out onto the highway in the interests of highway safety. To reduce the impacts of HGVs movements to and from the site in the interests of highway safety. To mitigate impacts of dust arising from the development on residential amenity and ecological interests.

- (23) No development shall commence until the areas within the site identified for the purpose of loading/unloading/reception and storage of materials and manoeuvring associated with the proposal have been provided clear of the highway and retained at all times during the construction process for that sole purpose.
 - REASON: To ensure that appropriate loading / unloading facilities are available in the interest of highway safety in accordance.
- (24) Notwithstanding the details shown in drawing no. SD-06 REV 01, no unbound material shall be used in the surface treatment of the vehicular access / egress within 20 metres of the highway boundary. Otherwise, all access tracks shall be constructed in accordance with the details in drawing no. SD-06 REV 01 unless otherwise agreed by the Local Planning Authority.
 - REASON: To avoid displacement of loose material onto the highway in the interests of highway safety and to avoid increased flood risk.
- (25) Prior to commencement of the development details showing the means to prevent the discharge of surface water from the development onto the highway shall be submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be carried out in its entirety prior to the access becoming operational and shall be always retained.

REASON: To prevent hazards caused by water flowing onto the highway and to avoid the formation of ice on the highway in the interest of highway safety.

- (26) Prior to commencement of the proposed development, the construction access junctions from Fambridge Road shall be provided as shown in principle on drawing no. 410558-MMD-XX-BA13-DR-C-0002 prepared by Mott Macdonald with associated clear to ground visibility. (E1) from Canewdon Road shall be modified as shown in principle on Mott Macdonald drawing no. 410558-MMD-XX-BA13-DR-C-0005 to provide access only to the development proposal with associated clear to ground visibility and (E2) from Lark Hill Road shall be provided as shown in principle on Mott Macdonald drawing no. 410558-MMD-XX-BA13-DR-C-0006 with exit only from the development proposal with associated clear to ground visibility always retained free of any obstruction thereafter.
 - REASON: To ensure the site is provided with safe access and egress from the vehicular accesses, in the interest of highway safety.
- (27) Any gates provided at the vehicular access shall be inward opening only and shall be set back a minimum of 20 metres from the back edge of the carriageway.
 - REASON: To enable vehicles using the access to stand clear of the carriageway whilst gates are being opened and closed and to allow parking off street and clear from obstructing the adjacent footway/cycleway/carriageway in the interest of highway safety.
- (28) No external lighting, including lighting required for construction and decommissioning, shall be installed at the site until such time as a lighting strategy for biodiversity has been submitted to and approved in writing by the local planning authority. All external lighting shall be installed in accordance with the details agreed in the strategy and shall be maintained thereafter in accordance with the agreed details, subject to any such variation that may be agreed with the Local Planning Authority. No additional external lighting shall be installed without prior written consent from the local planning authority. The emergency lighting hereby approved shall not be switched on at any time except in emergency situations at the site.
 - REASON: In the interests of preserving ecological habitats and to limit light pollution relating to Policy DM5.
- (29) Prior to first connection to the National Grid the acoustic louvers to transformer units and acoustic attenuation to the DNO substation shall have been provided in accordance with details on drawing no. PL-03 Rev 02 and shall be retained for the lifetime of the development.
 - REASON: In the interests of mitigating noise impacts from the development in relation to nearby residential properties and All Saints Church.
- (30) Within 3 months of first connection to the National Grid, a postimplementation acoustic survey report to demonstrate the acoustic
 performance for each relevant location (as contained in the Noise Impact
 Assessment submitted with the application) shall have been submitted to and
 agreed in writing by the Local Planning Authority. The report shall include
 details of further mitigation in the event that results demonstrate failure to
 meet noise levels as set out in the Noise Impact Assessment submitted with

the application. Any mitigation shall be carried out in accordance with a timetable as agreed.

REASON: In the interests of mitigating noise impacts from the development in relation to nearby residential properties and All Saints Church.

REASONS FOR RECOMMENDATION

It has been considered that the harm identified to the green belt, landscape and nondesignated heritage asset would be outweighed by the benefits of the scheme in delivering renewable energy that would go towards meeting national and local targets of addressing climate change.

SUPPORT ING INFORMATION

1.0 PLANNING APPLICATION DETAILS

DRAWING NOS. For determination: DZ-01 REV 13 PLE-01 REV 22 SP-01 REV 01 PL-03 REV 02 SD-03 REV 01 SD-07 REV 02 SD-06 REV 01 SD-05 REV 01 SD-04 REV 02 SD-06 REV 01 SD-01 REV 02 PL-02 REV 04 SD-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment Soils and Agricultural Report (January 2023)	PLANNING APPLICATION DETAILS		
PLE-01 REV 22 SP-01 REV 13 PL-04 REV 01 PL-03 REV 02 SD-30 REV 01 SD-07 REV 02 SD-06 REV 01 SD-05 REV 01 SD-04 REV 02 SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment	DRAWING NOS.		
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PL-04 REV 01 PL-03 REV 02 SD-30 REV 01 SD-07 REV 02 SD-06 REV 01 SD-05 REV 01 SD-04 REV 02 SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		PLE-01 REV 22	
PL-03 REV 02 SD-30 REV 01 SD-07 REV 02 SD-06 REV 01 SD-05 REV 01 SD-04 REV 02 SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		SP-01 REV 13	
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SD-07 REV 02 SD-06 REV 01 SD-05 REV 01 SD-04 REV 02 SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		PL-03 REV 02	
SD-06 REV 01 SD-05 REV 01 SD-04 REV 02 SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		SD-30 REV 01	
SD-05 REV 01 SD-04 REV 02 SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		SD-07 REV 02	
SD-04 REV 02 SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		SD-06 REV 01	
SD-02 REV 04 SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		SD-05 REV 01	
SD-01 REV 02 PL-02 REV 01 PL-01 REV 02 PH-01 REV 07 SUBMITTED DOCUMENTS Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		SD-04 REV 02	
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PH-01 REV 07 SUBMITTED Agricultural Considerations and Outline Soil Management Plan Air Quality Assessment Alternative Site Assessment Arboricultural Impact assessment BNG Metric Consultation Report Construction Traffic Management Plan Cover Letter Glint and Glare assessment and appendices Modelled Tidal Flood Depths Noise Assessment and Technical Note Addendum Planning Design and Access Statement Rochdale Envelope Parameters Note Shadow Habitat Regulations Assessment		PL-02 REV 01	
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Soils and Agricultural Report (August 2023)			
Transport Report and Addendum		· ·	
Tree Removal and Retention Plans		Tree Removal and Retention Plans	

Environmental Statement covering EIA Assessment, Heritage, LVIA, Ecology, Flood Risk and the following documents:

Ecological Impact Assessment including overwintering wetland bird survey, winter bird survey, breeding bird survey and water vole survey

Flood Risk Assessment

Landscape Visual Impact Assessment, Cumulative Harm Assessment Addendum and updated Landscaping and Biodiversity Plan edp7237_d009k (dated 11th October 2023)

- 1.1 Planning permission is sought for a proposed solar photovoltaic ('PV') farm that would generate up to 49.9 megawatts ('MW') output capacity. The proposed development would also comprise infrastructure associated with this use. The total site area covered by infrastructure would be approximately 87.13ha (89% of the total area of the site) and would comprise the following elements:
 - Rows of solar PV panels (minimum height of 0.9m and maximum height of 4m, demonstrated by drawing no. PL-02 REV 01);
 - Transformers (10no. transformers, 8no. bunded transformers) (measuring 6.6m long, 2.2m wide and 2.9m in height);
 - Fenced substation compound (covering an area of some 25m x 48m with a perimeter fence height of 2.4m) with transformer housed in an acoustic enclosure (8m in height);
 - Erection of 1no. Distribution Network Operation (DNO) substation building (measuring 8m in length, 6m in width and 4.1m in height) – immediately to the east of the fenced substation compound:
 - Erection of 1no. customer substation/switchgear DNO and meter room building ('L' shaped measuring 3m in height, a maximum length of 6.9m and maximum depth of 5.6m) adjoining to the north of the fenced compound;
 - Internal access tracks;
 - Internal buried cabling;
 - An underground electrical cable connecting the two land parcels;
 - Perimeter deer fencing (2m height); and
 - CCTV cameras spaced at approximately 50m intervals (mounted on poles 2.3m in height).
- 1.2 The proposed development would be operational for a period of 40 years. The Planning Design and Access Statement ('PDAS') states that during that time the solar panels would generate enough electricity to power approximately 16,581 homes annually¹.
- 1.3 The point of connection for the proposed development into the electricity grid is via a connection into the overhead line which runs above the western parcel of the site.

¹ Department for Business, Energy and Industrial Strategy (2020)

- 1.4 The proposed development falls within Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations 2018 when taking into account Schedule 3 of these Regulations, as the proposed development would likely have significant effects on the environment and character of the area, as well as potential significant effects on adjacent designated sites when the cumulative impact of the proposed development alongside the existing solar farm approved in 2021 (ref: 21/00605/FUL, not yet constructed) is considered. As such, an Environmental Impact Assessment (EIA) has been undertaken and the findings are presented within the Environmental Statement (ES) which has been prepared by Aecom and accompanies this application.
- In order to ensure a robust assessment of the likely significant environmental effects of the proposed development, the EIA has been undertaken adopting the principles of the 'Rochdale Envelope' (paragraph 4.3.4 of Chapter 1 of the ES). The 'Rochdale Envelope' approach is employed where the nature of the proposed development means that some details of the whole project have not been confirmed (for instance the precise dimensions of structures) when the application is submitted, and flexibility is sought to address uncertainty. The need for flexibility is identified in a number of National Policy Statements (NPS) (covering National Infrastructure Planning) which suggest the Rochdale Envelope as an approach to address uncertainties inherent to the proposed development e.g., changing market conditions. However, Energy (EN-1), the NPS for Renewable Energy Infrastructure (EN-3) and the NPS for National Networks all stress the need to ensure that the significant effects of a proposed development have been properly assessed.
- 1.6 During the course of the application, amendments were made to the red line application site boundary due to revisions to the vehicular accesses on Canewdon Road. The red line boundary was amended to include additional areas of the highway that required further works as detailed in the highway section of this report. In addition, the substation compound located within the western parcel was moved approximately 20m south of its location as originally proposed to provide further separation from the nearby non-designated heritage asset, All Saints Church. A reconsultation was carried out.

2.0 MATERIAL PLANNING CONSIDERATIONS

Site and Context

- 2.1 The application site is located across two parcels of land of approximately 98.35 hectares ('ha'). The site sits to the south of the River Crouch and at their closest point, the parcels are approximately 30m north of the village of Ashingdon, 1km from the village of South Fambridge and 1.7km west of the village of Canewdon. The two parcels are agricultural land which are separated by an existing solar farm (ref: 14/00649/FUL) which measures an area of some 22.7ha.
- 2.2 Parcel 1 measures approximately 26.75ha and is located to the west of the existing solar farm, to the east of the settlement of South Fambridge and to the north of Ashingdon. Part of the western boundary runs adjacent to Fambridge Road. Parcel 2 measures approximately 70.1ha and is located to the east of the existing solar farm and to the west of the settlement of Canewdon. This parcel lies north of the largely residential properties along Canewdon Road. The two parcels would be linked by a cable connection route that would run underneath the existing road network between

the two parcels, following sections of Fambridge Road, Ashingdon Road and Canewdon Road. The cable connection route would cover an area of some 1.5ha.

- 2.3 The application site and its respective parcels have been broken up into five development zones which are depicted by drawing no. DZ-01 REV 13. These development zones will be referred to throughout the report. Development zone 1, 2 and 3 each adjoin and sit within the western parcel of the application site. Development zone 1 is the made up of the most north-westerly field and is to the south-east of South Fambridge Hall. Development Zone 2 lies to the east of All Saints Church, to the east of Fambridge Road and to the north of the dwellings which are located on Ulverston Road and Arundel Road. Development Zone 3 adjoins to the existing solar farm and is to the east of development zones 1 and 2. It is also to the north of Ulverston Road, however, there is a field that separates development zone 3 from the residential dwellings on Ulverston Road. Development Zone 4 is the most northerly parcel which is located to the north of a wet ditch that divides development zones 4 and 5. It is to the north-west of Pudsey Hall Farm and runs parallel to public footpath 282/5. Development Zone 5 sits to the south of the wet ditch and envelops Camp Farm; this zone is located to the north of the dwellings on Canewdon Road and to the west of Scaldhurst Farm and the dwellings on Pudsey Hall Lane.
- 2.4 The application site is allocated as Metropolitan Green Belt ('MGB') and Costal Protection Belt. The site falls within Flood Zones 1 and 3. It is made up of Grade 3b agricultural land and a public right of way runs adjacent to the eastern boundary. The site is also within close proximity (2km) of sites of international and national designation (Ramsar, Special Protection Area (SPA), Sites of Special Scientific Interest (SSSI) and Special Areas of Conversation (SAC)) and a number of Grade II* and Grade II listed buildings.

Planning History (adjacent sites)

- 2.5 Application No. 14/00649/FUL Construct solar farm with ancillary development Permitted
- 2.6 Application No. 21/00605/FUL Construct solar farm with ancillary development to include battery storage Permitted
- 2.7 Pre-application advice was sought in relation to solar development at this application site and including addition parcels up to the River Crouch. Place Services Landscaping Consultants were consulted and raised a number of concerns with regard to potential impacts of the proposed development. Subsequently, the scheme was amended to remove the northern-most parcels adjacent to the River Crouch amongst other amendments to address these concerns.

Principle of Development

- 2.8 The National Planning Policy Framework ('NPPF') is committed to achieving sustainable development. One of the overarching objectives is the environmental aspect which seeks to use natural resources, minimise waste and pollution, mitigate and adapt to climate change and move to a low carbon economy (Paragraph 8).
- 2.9 Paragraph 158 of the Framework outlines that when determining planning applications for renewable and low carbon development, local planning authorities

should not require applicants to demonstrate the overall need for renewable or low carbon energy and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions. Additionally, Paragraph 158 states that local planning authorities should approve the application if its impacts are acceptable.

- 2.10 Additionally, Paragraph 013 of the Planning Practice Guidance details that the deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively. As such, the following should be considered by local planning authorities:
 - Encouraging the effective use of land by focussing large scale solar farms on previously developed and non-agricultural 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 encouraged biodiversity
 improvements around arrays.
 - That solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use.
 - The proposal's visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety.
 - The extent to which there may be additional impacts if solar arrays follow the daily movement of the sun.
 - The need for and impact of security measures such as lights and fencing.
 - Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large-scale solar farms on such assets. Depending on their scale, design and prominence, a large-scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset.
 - The potential to mitigate landscape and visual impacts through, for example, screening with native hedges.
 - The energy generating potential, which can vary for a number of reasons including, latitude and aspect.

Impact on the Green Belt

2.11 The site is located within the Green Belt, as identified by the Council's adopted Allocations Plan (2014), therefore the proposal needs to be assessed against local Green Belt policies and in relation to relevant green belt policy within the NPPF. Policy GB1 of the Core Strategy outlines that the Council will direct development away from the Green Belt as far as practicable and will prioritise the protection of Green Belt land based on how well the land helps achieve the purposes of the Green Belt. Rural diversification will be encouraged, as appropriate, so long as such activities do not significantly undermine the objectives or character of the Green Belt.

- 2.12 Section 13 of the National Planning Policy Framework (NPPF) states that great importance is attached 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 permanence. When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt.
- 2.13 The applicant's Planning Statement discusses that they consider the proposal to maintain the sites contribution to the purposes of including land within it. Paragraph 138 of the NPPF sets out the five intended purposes of the Green Belt and Section 8 of the applicant's Planning Statement discusses how the proposal would maintain these purposes. Whilst the proposal would be considered to maintain some of those purposes, it is considered that the proposal would negatively impact on some; the proposal would result in encroachment in the countryside. In terms of encroachment, the proposed scheme would place a large number of solar arrays across at least parts of eight fields. Their operation would be supported by a compound and ancillary infrastructure including a substation, transformers and a DNO some of which would be substantial in scale. Although maintaining some space between them, the arrays and associated equipment would fundamentally alter the appearance of the fields. The existing sequence of open green fields changed to accommodating solar equipment that would be interspersed with retained field boundaries. Such an effect would result in encroachment into the countryside contrary to this Green Belt purpose.
- 2.14 The fundamental aim of the Green Belt is to prevent urban sprawl and keep land permanently open, as stipulated by paragraph 137 of the NPPF. Openness has both visual and spatial qualities. The site consists of some eight fields (some fields are not included within the site in their entirety). These are mostly enclosed by tree and hedge boundaries. Where they are not enclosed at present, tree and hedge boundaries are proposed. In terms of topography, the site is within gently sloping land with higher land to the north towards the River Crouch. The land also undulates with a steep increase further to the east, leading to the settlement of Canewdon which is at a significantly greater height than the application site. The extent of field boundary screening would reduce the overall visual effect of the proposal from views from the immediate adjoining boundaries. However, given the topographical rise towards the north and east, and the public footpath which runs immediately parallel to the eastern parcel, there would be a visual effect of the proposal from some immediate surroundings and from wider viewpoints.
- 2.15 The site is currently farmland. From a spatial perspective, the proposed solar arrays would introduce substantial development into the area in terms of ground cover due to the quantity of arrays within the scheme. Furthermore, the associated access tracks, transformers, substation compound, DNO substation, customer substation, fencing and CCTV facilities would result in additional built form that would further diminish the openness of the Green Belt spatially.
- 2.16 Nevertheless, the scheme would be in place for a temporary 40-year period. It would then be fully removed, and land returned to its former condition at the end of its use. As such, whilst 40 years is a long period of time, it is not permanent. Therefore, the impact on the openness of the Green Belt would be reduced with the site ultimately reinstated to its former open character. Consequently, both visually and spatially, it is considered that the proposed development would result in significant harm to the openness of the Green Belt, but this would be mitigated given that the development

is not intended to be permanent and would result in moderate harm to the openness of the Green Belt.

- 2.17 Paragraph 149 of the NPPF states that the local planning authority should regard the construction of a new building as inappropriate in the green belt but there are exceptions to this as identified by paragraphs 149 and 150. The proposal however would not fall within any of the exceptions listed. Paragraph 148 of the framework 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.
- 2.18 The presumption in favour of sustainable development is at the heart of the NPPF. Whilst on the one hand planning policy places great emphasis on the need to protect Green Belt land from development which would impact the openness of the countryside, planning policy also identifies the part to be played by the planning system in helping to meet the challenge of climate change by supporting the transition to a low carbon future by encouraging development for renewable energy.
- 2.19 Paragraph 151 of the NPPF stipulates that when located in the green belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.
- 2.20 The proposal would amount to inappropriate development in the Green Belt which be harmful by definition and in addition, further harm to the Green Belt would result from the significant impact that would result to openness. The proposed development would also result in encroachment into the countryside. Accordingly, the proposed development would conflict with Policy GB1 of the Council's Core Strategy and the aims of Section 13 of the NPPF. These seek to resist inappropriate development. All harm to the Green Belt carries substantial weight and in accordance with paragraph 148, this green belt harm and any other harm that would result from other considerations, would need to be clearly outweighed by very special circumstances in order for the proposed application to be recommended favourably. Whether very special circumstances exist in this case is discussed later in this report.

Agricultural Land and Alternative Sites Assessment

- 2.21 Natural England's Guide to Assessing Development Proposals on Agricultural Land² sets out the policies and legislation that require consideration when development proposals affect agricultural land and soils. This includes the requirement that planning authorities consult Natural England on all non-agricultural applications that would result in the loss of more than 20ha of BMV land.
- 2.22 A Green Future: Our 25 Year Plan to Improve the Environment sets out the government's 25 year plan to improve the health of the environment by using natural resources more sustainably and efficiently.

 $^{^{2} \, \}underline{\text{https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land}$

- 2.23 National planning policy (para. 174) requires that planning decisions should contribute to and enhance the natural and local environment in a number of ways, including by protecting and enhancing soils and by recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land.
- 2.24 Policy aims to protect the Best and Most Versatile (BMV) agricultural land from significant, inappropriate or unsustainable development proposals and all soils by managing them in a sustainable way. Paragraphs 001 and 002 of the National Planning Practice Guidance (NPPG) for the Natural Environment explain why planning decisions should take account of the value of soils and agricultural land classification to enable informed choices on the future use of agricultural land within the planning system.
- 2.25 Best and Most Versatile (BMV) agricultural land is defined as (Grades 1, 2 and 3a in the Agricultural Land Classification). The applicant has submitted an agricultural land assessment which includes the results of soil testing which has been carried out at the site by a suitably qualified person. This report concludes that the application site is made up entirely of subgrade 3b which is not BMV agricultural land.
- 2.26 Only where land is identified as BMV land would advise contained in the Written Ministerial Statement (WMS) dated 25 March 2015 be relevant. This requires that development proposals involving BMV land be justified by the most compelling evidence. In such cases applications would have to be supported by an alternative sites assessment where agricultural land of lower quality (i.e., not BMV land) were shown not to be available. The WMS is linked to updated National Planning Policy Guidance (NPPG), which explains that where a proposal involves greenfield land, consideration should be given as to whether the proposed use of any agricultural land has shown to be necessary, whether poorer quality land has been used in preference to higher quality land and to whether the proposed development would allow for continued agricultural use where applicable and/or where biodiversity improvements around arrays would be provided. This is reflected in the NPPF where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of higher quality. In this case however, the proposed development would not be on BMV land, and an alternative site assessment would not therefore be required.
- 2.27 The applicant has nevertheless chosen to carry out and submit an alternative site assessment to show that the site has been chosen with proper consideration of all relevant factors. This assessment highlights the search area that was covered to establish the appropriate location for the proposal. The report discusses how the search area was identified and that this was largely based on a requirement to connect the proposed development to the grid and the parameters associated with this. The proposal would connect into the overhead line that crosses the site as this was identified as having the necessary capacity and infrastructure to accommodate the connection of a 49.9MW solar farm. The search area was then expanded over an area over 500m on either side of this section of overhead line as this was the maximum distance between the overhead line and a solar farm of this size to allow for a potentially viable connection.
- 2.28 The search area was significantly constrained due to significant agricultural land within the district being a mixture of Grade 1 and Grade 2, both of which are Best and

Most Versatile (BMV). The applicant's assessment does indicate that there are areas of poorer soil quality (Grade 4 and 5) within the district, but these were all outside of the search area. As a result, no alternative agricultural sites were identified on lower grade agricultural land than the proposed site. It is noted that there is some Grade 4 soil to north-east of the application site immediately adjacent to the River Crouch. However, to gain access to this land, there would still need to be development over the Grade 3b soil. It is acknowledged that this land of poorer quality could also pose a greater impact upon the habitats and landscape character associated with the River Crouch as a result of being located in closer proximity to the river and areas subject to habitat designations. The assessment also considered brownfield sites and those allocated for development, but no such sites were identified of appropriate size. The alternative site assessment concludes that there are no suitable alternative sites available on lower grade agricultural land or previously developed land.

- 2.29 The application site has been identified as an area of poor agricultural grade which can connect to the national grid and therefore the sequential approach taken is not disputed and officers accept that no alternative site outside of the Green Belt could have been appropriate.
- 2.30 It is considered that planning conditions can be imposed which would seek to minimise impact on soils at the site to enable agricultural use of the land following decommissioning of the development.

Built Heritage

- 2.31 Paragraph 199 of the framework is clear 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 (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance. Paragraph 8 of the NPPF sets out the aims of development to protect and enhance our built and historic environment.
- 2.32 Policy ENV1 of the Council's Core Strategy sets out that the Council will protect landscapes of historical and archaeological interest.
- 2.33 There are no designated heritage assets within the site. There are however a number of heritage assets outside the site which the proposed development has the potential to impact the setting of; Church of All Saint's (non-designated heritage asset), Church of St Andrew (Grade II*), The Old Ferry House and Range to Right (Grade II) and Leon Cottage (Grade II). The setting of these heritage assets contributes towards their significance. The application site, as open agricultural land positively contributes to their rural character setting and other attributes including its verdant nature also contributes to the appreciation of the heritage assets and the understanding of their historical context. Views from, towards and across the rural landscape also contribute to the assets setting and our ability to appreciate and understand the significance of the heritage assets.
- 2.34 Given the distance between the application site and the listed buildings, including the Church of St Andrew, the proposed development is not considered to result in a significant impact to the setting or significance of this heritage asset.

- 2.35 The proposed development would however be located adjacent (some 60m) to Church of All Saint's which is a locally listed building, thereby being a non-designated heritage asset.
- 2.36 The Council's Built Heritage consultant has identified that the proposed development would fundamentally alter the land use character of the site and attributes which positively contribute to the setting and significance of this heritage asset. As such, there would be harm to the setting and significance of this non-designated heritage asset. The proposed development would result in an industrialising effect and the harm to the setting and significance of the non-designated heritage asset. Whilst the proposal was initially identified as resulting in medium level harm, the substation compound has been moved further south of the non-designated heritage asset within the course of the application and the degree of harm has reduced as a consequence of this increased separation. The Council's Built Heritage advisor is now of the view that the proposal would still cause harm to the non-designated heritage asset but that this would now be considered to be at the low end of the spectrum.
- 2.37 Paragraph 203 stipulates that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining an application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
- 2.38 Some harm would be mitigated by existing and proposed landscaping screening as well as the increased distance now proposed between the substation and the heritage asset. It is also noted that as a non-designated heritage asset, the building is of lower importance than a designated asset. Whilst these factors would not off-set the harm completely, they would go some way to reducing it. Accordingly, the proposal would be considered to result in low-level harm which must be justified following a balanced judgement. As is set out later in this report, this harm must be weighed against the benefits of the proposed development as part of the consideration of planning balance.
- 2.39 The submitted Environmental Statement (Chapter 6 Heritage) recognises there is a potential for archaeological features and deposits to survive in this area. The Environmental Statement indicates that the known archaeological areas will be within no-dig zones. A further desk-based assessment has been completed and appended to the Environmental Statement. The findings of this assessment establish that the potential archaeological resource within the site would not be likely to require preservation in situ and that potential impacts could be mitigated through measures to be agreed with the local planning authority. Therefore, it is still necessary for archaeological evaluation at the site to be carried out, but it is considered that it would be appropriate for planning conditions to be imposed to require that this takes place. The Council's Archaeological Consultant (Place Services at Essex County Council) have been consulted on the submitted information and raise no objection subject to the imposition of conditions requiring the additional archaeological investigation be completed.

Landscape Character and Visual Impact

2.40 Large-scale solar array development can have significant impacts on both landscape character and visual amenity. There is a distinction to be made between impact on landscape character, which should be treated as a resource, and impact on visual

amenity, which is the effect on people observing the development in places where the development can be viewed, such as villages, roads, public rights of way and individual dwellings.

- 2.41 Paragraph 130 of the NPPF requires that planning decisions ensure that developments are visually attractive as a result of appropriate and effective landscaping, and they are sympathetic to local character and history including the landscape setting (while not preventing or discouraging appropriate innovation of change). Further, paragraph 174 states that planning decisions should contribute to and enhance the natural and local environment by: (a) protecting and enhancing valued landscapes; (b) recognising the intrinsic character and beauty of the countryside and (c) maintaining the character of the undeveloped coast.
- 2.42 Similarly, Policy ENV2 of the Council's Core Strategy states that the Council will protect and enhance the landscape of the coastline, recognising the implications of climate change and sea level rise and the need for necessary adaptation. Policy ENV2 also requires that development which is exceptionally permitted does not adversely affect the open and rural character, historic features, or wildlife and that it would be within the already developed areas of the coast. Policy ENV6 of the Core Strategy also outlines that planning permission for large-scale renewable energy projects will be granted if there are no significant adverse visual impacts.
- 2.43 Policy DM1 of the Council's Development Management Plan (DMP) discusses that the design of new developments should ensure that the development positively contributes to the surrounding natural and built environment. Policy DM12 of the DMP supports rural diversification where the development would have regard to the sensitivity of the landscape character area.
- 2.44 The National Planning Practice Guidance (NPPG) advises on some of the particular planning considerations that relate to large scale ground-mounted solar farms. It states that the development of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively.
- 2.45 The approach to assessing cumulative landscape and visual impact of large-scale solar farms is likely to be the same as assessing the impact on wind turbines. However, 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.

Landscape Character

- 2.46 The application site consists of eight fields (or part thereof). The site and surrounding fields are used for arable farming, save for an existing solar farm which lies between the two parcels of the application site.
- 2.47 The western parcel lies adjacent to Fambridge Road and is separated from the road by a narrow parcel of grassland. The southern boundaries are defined by a farm access track which connects to an existing solar farm located to the east of this parcel. The most southerly point of this parcel extends close to residential gardens of properties on Arundel Road and Ulverston Road, albeit the access track and ditches/field boundaries intervene between. The irregular boundaries of this parcel

are largely defined by existing ditches and field boundaries. Whilst this parcel is relatively enclosed from the west given the dense vegetation along Fambridge Road, the treatment of the most eastern and northern boundaries of this parcel are sparser and create a more open character.

- 2.48 The eastern parcel of the site is located to the west of Pudsey Hall Lane. This parcel is largely defined by existing ditches and field boundaries; however, it is also defined to the east/south by the boundaries of Camp Farm and the boundaries of the properties/small holdings along Canewdon Road. To the west of this parcel is the existing solar farm which would be located between the two parcels which form the application site. The fields which sit between the existing solar farm and Camp Farm are lined by relatively dense landscaping. The wider landscape to the north comprises agricultural fields which are largely open due to the lack of surrounding intermediary vegetation, and which are undeveloped. This parcel is also adjacent to a Public Right of Way (footpath 5) which runs along the eastern boundary.
- 2.49 The site falls within the Coastal Protection Belt as defined by the Council's Allocations Plan which describes the area as open and undeveloped. The site is also within the Crouch and Roach Farmland (F2) character area as described in the Essex Landscape Character Assessment³. This area is described as comprising rolling or gently undulating farmland between the estuaries with regular fields of variable size and thick or intermittent hedgerow boundaries. There are also frequent long views across the farmland to the estuaries from higher ground.
- 2.50 As part of the evidence base for the New Local Plan, a Landscape Assessment has been prepared on behalf of the Council⁴ which identifies the application site as falling within character area C3 Canewdon. The character area predominantly comprises of large-scale arable farmland with some smaller pastoral fields predominantly found adjacent to farmsteads or other settlements. The field boundaries of C3 vary and include ditches on the lower lying ground and close to the river and hedgerows. There are settlements within this character area, all of which are adjacent to the road that forms the southern boundary of the area (Canewdon Road). The landscape within C3 is noted as offering opportunities for views both outwards across the river and southwards towards the wooded farmland and hills (towards Ashingdon).
- 2.51 Both parcels of the application site currently contribute positively towards the landscape character identified by the landscape assessments undertaken by Essex County and Rochford District Councils. There is only one incongruous feature, namely the pylon, which is sited in the eastern parcel. Otherwise, the parcels maintain open and undeveloped characteristics whilst being enveloped by Fambridge Road and Canewdon Road and the various settlements mentioned by C3. As a result, there are buildings and roads that can be seen within the landscape. In addition, there are a series of pylons which stretch through the landscape including through the application site.
- 2.52 The proposed development would locate solar arrays within the existing field patterns. It would retain and enhance field boundaries, thereby retaining the structure of the field patterns. As such, the proposal would have a largely non-invasive impact on the landscape features of field boundaries and ditches defined as important to the character areas.

³ https://www.essexdesignguide.co.uk/media/2277/lca essex 2002.pdf

⁴ https://www.rochford.gov.uk/media/2796

2.53 The application site, whilst relatively extensive, represents only a relatively small portion of the Coastal Protection Belt, Crouch and Roach Farmland Character Area (F2) and the C3 – Canewdon Character Area as a whole. Although there would be some impact on the landscape character, as the existing natural field boundary features of the site would be largely retained and enhanced, the overall landscape harm would be limited. Furthermore, the solar arrays would be for the most part relatively low-lying, open sides features that would be temporary in nature, limiting the overall effect on the wider landscape. However, the proposed development would alter the landscape with the introduction of industrial development and equipment across a relatively extensive area. Some of the proposed development would be of significant height, with the transformer in the compound proposed at some 6 metres in height with the acoustic enclosure extending to 8 metres. The proposed development would not protect and enhance the landscape character of the coastal protection belt, nor would it protect and enhance a valued landscape, contrary to Policy ENV2 and para. 174 of the NPPF. It would instead result in moderate harm to the landscape character. As is set out later in this report, this harm must be weighed against the benefits of the proposed development as part of the consideration of planning balance.

Visual Impact

- 2.54 Visual amenity relates to the direct visual impacts on receptors (people) and the magnitude of those changes rather than on the landscape. In the submitted Landscape Visual Impact Assessment (LVIA) the applicant has assessed 27 locations from which the proposed development would be visible to varying degrees (close and distant views). The Council's Landscape Consultant (ECC Place Services) have not disagreed with the selected viewpoints, and it is accepted that the visual receptors identified comprehensively assess likely visual impacts of the proposal.
- 2.55 The general topography of the application site and surrounding land is such that the development would be screened from some wider viewpoints. Views of the proposed development from the public right of way footpath which runs along the seawall (public footpath 280/12) of the River Crouch would be obscured by an existing bund.
- 2.56 Views of the proposed development from St Nicholas' Church, Canewdon and the public footpaths to the west of the church (282/01 and 282/02) would be from a distant and elevated position. As public footpath 282/01 declines towards the River Crouch, views of the application site would be possible.
- 2.57 Views of the proposed development from St Andrew's Church, Ashingdon and public footpaths 280/5 and 280/19 (along the Roach Way public footpaths adjacent to St Andrews Church) would also result. The Council's Landscape Consultant has also identified that from these locations, the proposed development would be viewed in the middle-distance and from an elevated position where the development would be viewed in the context of open views across the River Crouch, with the application site within the intervening ground of the largely undeveloped coastal protection belt.
- 2.58 The submitted LVIA highlights that owing to the direct views and medium distance, the proposed development would have long term effects of a medium magnitude of change, resulting in a moderate adverse and significant scale of effect. Given the substantial distance between the site and the elevated visual receptors at St Andrews Church and footpaths 280/5 and 280/19 and given the retention of the field patterns

and margins, it is considered that the harm from the introduction of the industrial equipment would be of moderate adverse impact. This would likely be greater during the construction period. The Council's Landscape Consultant has raised concern that the proposed landscaping would not mitigate the impacts of the development from these visual receptors by year 15 (15 years from completion of development) due to the elevated topography. Nevertheless, it is considered that given the separation distance and retention of existing field patterns, the visual impact of the development from these locations would amount to moderate harm after the construction period.

- 2.59 Some views of the proposed development, particularly of the substation would be possible from Fambridge Road and there would also be views of the site for the users of All Saints Church on Fambridge Road. These visual receptors would be impacted by the largest of the industrial equipment, namely the substation which includes a transformer and acoustic enclosure measuring 8m in height. However, this would be read adjacent to the existing pylon which is approximately 36m in height. Additional landscaping is proposed along the western boundaries shared with All Saints Church and Fambridge Road which will provide additional screening in time, as time for new planting to establish has occurred. There is dense vegetation which exists along these boundaries which would help to mitigate some harm to the visual receptors however it is noted that in winter months the development would likely be more visible and the height of hedgerows outside the application site cannot be controlled and may be reduced in height, reducing the extent to which the development would be obscured from view.
- 2.60 Some visibility of the proposed development from residential properties adjacent to the site would also be likely, particularly to the residents of South Fambridge Hall and Scaldhurst Farm. Views of the site for the users of Canewdon Road and Lark Hill Road would be minimal and limited to views through gateways/vehicle accesses or less dense sections of roadside vegetation. It is however noted that a section of the existing hedgerow along the northern side of a section of Canewdon Road would be required to be removed/reduced in height to achieve appropriate forward visibility to one of the proposed vehicular accesses to the site and this would likely increase the visibility of the proposed development.
- 2.61 The most prominent visual impacts would be to users of the public footpath 282/5 which runs along the eastern boundary of the application site and parallel to development zone 4.
- 2.62 The submitted LVIA has identified that the proposed development would cause minor or moderate harm to visual amenity at a number of locations. However, the visual harm from public footpath 282/5 which runs along the eastern boundary of the application site is identified as more significant. The visual harm here would result not just from the solar arrays being visible and in very close proximity to the footpath but also as a result of the additional proposed enclosure of the eastern boundary with fencing which would change the currently open nature of the landscape in this location. It is difficult to envisage that users of this footpath will have the same sense of enjoyment of the wider landscape for its length along the boundary with the proposed eastern boundary of the solar farm as they do now. The change from the existing views of a wide expanse of relatively flat and undeveloped landscape to that of high hedgerow screening with fence and solar array immediately beyond would result in harm to visual amenity. It is noted that the boundary would also be planted to form a new hedgerow over time and the in the submitted LVIA the applicant identifies their view that the visual harm here would decrease to a moderate impact by year 15.

The Council's Landscape Consultant agrees with the sensitivity of the visual impact here, considering that the proposed development would result in a dramatic change to the views experienced by users of this public footpath; the visibility of the development here would significantly alter the perceived sense of place and character as the open panoramic views would be urbanised, enclosed, and constrained.

- 2.63 The applicant identifies that the proposed development would have a moderate, minor or negligible impact upon all other visual receptors in the submitted LVIA. The only receptors considered to have a negligible impact relates to users of footpaths 282/7 (Pudsey Hall Lane), 282/24 (Canewdon 24 between Bolt Hall and Pudsey Hall Lane), 256/14, 257/50, 250/18, 256/10 and 256/13 (all of which are on the northern side of the River Crouch) as well as the users of Pudsey Hall Lane, Larkhill Avenue, Ashingdon Road, Greensward Lane, Hyde Wood Lane and B1010 Lower Burnham Road. During the construction phase, the submitted LVIA expects there to be minor harm on 5 of the visual receptors, moderate harm to 11 of the visual receptors and major harm to 2 of the visual receptors. Within 1 year of the operation of the site, the LVIA identifies that there would be minor harm to 5 of the visual receptors, moderate harm to 11 of the visual receptors and major harm to 2 of the visual receptors. Upon year 15 of the development, the LVIA expects there to be minor harm to 8 of the visual receptors, moderate harm to 7 of the visual receptors and 3 additional visual receptors are expected to have a negligible impact. Bringing the total to 8 visual receptors with an expected negligible impact by year 15.
- 2.64 Taking the above visual impacts into account together with planting which would take place to mitigate harm, it is considered that most of the visual harm resulting from the proposed development would be 'minor' or 'negligible' by year 15. However, it is considered that more significant 'major' visual harm would still result from the proposal from the public footpath 282/5; this effect would reduce to 'moderate' harm once the landscape screening was established. Due to the topography of the site and area surrounding, the most adverse visual impacts would be largely confined to localised effects only. Accordingly, taking all of the above impacts into consideration the visual impact of the proposal would be considered to result in moderate harm. Again, as is set out later in this report, this harm must be weighed against the benefits of the proposed development as part of the consideration of planning balance.

Impact on Valued Landscape

- 2.65 Paragraph 174 of the NPPF places emphasis on protecting 'valued landscapes' although these are not defined. Although all landscapes could be valued by an individual or group of people it is considered that in order to be considered a 'valued landscape' for the purposes of the NPPF the landscape must exhibit and be valued for its demonstrable physical attributes, which elevate it above just open countryside but perhaps below those areas that are formally designated, such as National Parks, Areas of Outstanding Natural Beauty (AONB) etc. A landscape does not have to be nationally or locally designated to be a valued landscape for the purposes of the NPPF. It is a matter of planning judgement and depends on whether the area is more than mere countryside, having physical attributes which take it out of the ordinary.
- 2.66 The application site covers a wide area and case law is clear that the entire application site does not need to be within a 'valued landscape' for it to be valued. The parts of the application site which sit either side of the existing solar farm are

more closely associated with the built environment of Fambridge Road, Canewdon Road and other local residential roads. These parcels are largely enclosed by hedgerows and can be seen in association with other built development such as pylons and farm buildings (such as Camp Farm, Scaldhurst Farm, Rectory Farm and South Fambridge Farm).

- 2.67 However, the area referred to as Development Zone 4 on drawing no. DZ-01 REV 13 is seen within a far more open landscape. This is not only due to the lack of field margins across the vast and open fields but also due to the absence of built form which exists in this landscape. This remains the case as the landscape gently undulates up to the seawall and the River Crouch. It is considered that the Development Zone 4 parcel (and its adjoining fields to the north, east and west) provides a particularly high-quality contribution to the character associated with the Crouch farmland and the Essex estuaries which is appreciated at a local level along public footpath 282/5 that runs along the eastern boundary of this parcel. Panoramic views of the application site as part of the wider landscape from elevated viewpoints would include the context of the existing built development and therefore it is considered that it is from the public footpath closest to the eastern boundary of the site where the valued nature of the landscape of which the application site is a part is most strong. There are relatively few detractors in this landscape when viewed from the public footpath and the topography allows for long views over the relatively remote, tranquil landscape up to the River Crouch and onto the marsh land to the north of the River Crouch. Officers have therefore considered part of the site to be within a valued landscape.
- 2.68 As the development would have an adverse impact on character and appearance, it would not be considered to protect or enhance the valued landscape. While major harm has been considered to result to the public footpath 282/5 which runs along the eastern boundary of the application site, the topography of the surrounding area means this would be relatively localised harm. Accordingly, taking all of the above impacts into consideration the visual impact of the proposal would be considered to result in moderate harm.

Cumulative Visual and Landscape Character Impacts

- 2.69 The proposed development would be adjacent to an existing solar farm and a recently approved solar farm at South Fambridge Hall. Table EDP 7.1 of appendix 7a of the submitted LVIA considers cumulative visual impacts. The assessment finds the following cumulative visual impacts:
 - Public footpath users moderate adverse to major/moderate which would be reduced to moderate by year 15.
 - Minor road users minor adverse, reducing to minor adverse/negligible by year 15.
 - Other receptors (namely the churches) moderate/minor to moderate adverse reducing to moderate/minor adverse.
- 2.70 The LVIA identifies that significant cumulative effects on landscape character would be limited to the immediate environs to the application site due to the approved solar farm and the proposed development being situated immediately adjacent to each other. The LVIA finds that significant cumulative effects on visual amenity would extend to sections of a number of local public footpaths where both sites would be visible. This has been assessed as major/moderate adverse to moderate adverse harm by year 15. However, the Council's Landscape Consultants have raised

concern that the public footpaths have not been assessed individually and therefore the collective assessment has taken a generalised assessment of the cumulative impacts. The applicant's consultant provided a response to the comments received by the Council's Landscape Consultant in which they have explained that notwithstanding the data not being presented as the Council's Landscape Consultant would prefer, the assessment acknowledges that cumulative effects would be significant even by year 15.

- 2.71 Due to the proximity of the proposed development to the existing solar farm which would sit between and directly border the two parcels which are part of the proposed scheme, they would be experienced in the context of one another from surrounding public viewpoints in the middle and far distance (particularly from the public footpaths north of St Andrews Church). The proposed development would therefore result in additional cumulative visual impact. However, this harm would still be limited by the distance and retention of field patterns.
- 2.72 The LVIA sets out that the proposed, existing, and consented solar array development would not be considered to give rise to cumulative visual impacts from public rights of way (PROW) where visual impacts would be in close proximity. This is because of the flat topography which would result in only the newly proposed solar array development being visible to users of the PROW, in particular the PROW to the eastern boundary of the site.
- 2.73 Consideration has also been given to whether the solar farm which has recently been submitted at Land North of Lark Hill Road (application no. 23/00733/FUL) should be included within the assessment of the cumulative impacts. The NPPG (ref ID: 5-023-20140306) advises that to inform a LVIA, a base plan of all existing windfarms (in this case solar farms), consented developments and applications received should be considered. Subsequently, the applicant's consultant has provided an addendum to the LVIA which sets out a cumulative assessment of the proposed Lark Hill solar farm. The total area of land covered by solar arrays by the proposed developments would amount to approximately 153.9ha and together with the consented South Fambridge Hall solar farm site and the existing solar farm site this would amount to approximately 240.9ha. While this is a relatively small proportion of the overall landscape character area (this being the Crouch and Roach Farmland, the Coastal Protection Belt and Canewdon C3), the schemes would still result in a discernible cumulative change to local landscape character which would be considered as having a major/moderate impact. This harm would be reduced moderate with increasing distance from the sites. Whilst the applicant considers that harm to the landscape character would be reduced by year 15 to moderate/minor, officers consider that this harm would remain as major to the local character.
- 2.74 Further to the initial assessment, it has been identified that a major/moderate adverse impact would result to public footpath users. Most notably there would be an increase of harm to footpath 282/5 to the east of the application site as this footpath continues to approach the River Crouch bringing the Lark Hill site into view and to footpath 282/1 which runs through the Lark Hill site and climbs Beacon Hill, bringing all solar farm sites into view.
- 2.75 Consequently, cumulatively with the existing, consented and proposed solar developments in proximity to the application site, the proposal would result in major harm to the landscape character at a local scale. It has also been identified that moderate to major visual harm would occur to some of the public footpaths and visual

receptors. In identifying harm, the proposal would conflict with Policies DM1 and DM12 of the Development Management Plan, Policy ENV2 of the Core Strategy and the NPPF. These seek, among other matters, for development to not result in an unacceptable visual impact which would be harmful to the landscape character and to protect valued landscapes. Significant weight is attached to this in the planning balance.

2.76 Maldon District council have provided a consultation response to the application in which they draw officers attention to a solar farm scheme that was permitted in Hazeleigh, Maldon (ref: 22/00261/FUL). However, upon review of the location of this development and the topography changes between the application site and this permitted solar farm, it is not considered that there would be a cumulative impact.

Residential Amenity

2.77 The application site is within close proximity of a number of residential properties. It is noted that some of these properties are only within close proximity of that part of the red lined application site which runs along existing roads and under which cables would be laid to facilitate the development.

On Fambridge Road; Rectory Farm House, Onosra, Helmat, The Cottage, Nell Gwynne, Greenaways, Morena, Lowlands, Plemont, Royston, Elizabeth Cottage.

On Ashingdon Road; No. 1, 2 and 3,

On Canewdon Road; Santoy, Ashendene, Alma, Clovelly, Casa Noroc, St Just, Luss House, Hawthorns, Halstead, Stepping Stone, Lombard, Cecil Cottage, Homelea, Cynara, Holmfield, Shenley, Kenneth, Victor, Canute Lodge, Kathdene, Pennymead, Rosemary, Moons Farm, Moons Bungalow, Moon's Cottage, Three Bays Farm, Hydewood Cottage.

On Lark Hill Road; Greenmeads, Scaldhurst Farm.

- 2.78 In addition, the residential properties along Ulverston Road, Radnor Road, Arundel Road, Pudsey Hall Lane, and Lark Hill Road are nearby to the application site.
- 2.79 There would be an impact from construction activity associated with development, however, this would be temporary. Impacts associated with construction would seek to be mitigated by the construction traffic management plan which has been submitted. Amongst other considerations, the management plan limits construction hours and subject to compliance with this which can be enforced by condition, it is considered that the construction impact would be limited. The applicant's noise consultant has confirmed that the amount of noise generated from HGVs using the vehicular access points would be less than the background noise of the roads (Fambridge Road and Canewdon Road) that the existing residential dwellings front onto. The Council's Environmental Health officer has concurred with this view subject to the construction traffic management plan being conditioned. Therefore, the construction traffic entering the site would not be considered to have a significant impact upon residential amenity.
- 2.80 Apart from the temporary construction activity, the solar farm would otherwise operate without resulting in unacceptable noise impacts on nearby properties.

- 2.81 The development would be visible from some nearby dwellings however the planning process does not seek to protect private views; the impact of the proposed development on public vantage points has already been considered above. Ground floor rooms to homes near to the proposed site would for the most part be screened by hedgerows and planting. In other respects, the proposed development as a result of the scale and proximity to nearby residential dwellings would not result in unreasonable harm to residential amenity by way of being unduly dominating or otherwise unacceptably impacting living conditions. It is considered that the development would not dominate or overshadow nearby dwellings to the detriment of residential amenity.
- 2.82 A Glint and Glare Assessment has been prepared by Neo Environment dated 17th January 2023. The assessment has considered the potential impact of reflection upon nearby residential properties. The assessment identifies that there were a possibly of 80 residential dwellings that could face reflections from the solar arrays. As such, mitigation in the form of native hedgerow planting and infilling that would be maintained to a height of at least 3-4m along the western boundary of Development Zone 2, the southern boundary of Development Zone 3, the western boundary of Zone 4 and the eastern, western and southern boundaries of Development Zone 5 would be required. Subject to a condition being imposed requiring the planting and maintenance of these hedgerows, it is considered that the effects of glint and glare on residential dwellings would not be significant.
- 2.83 The proposed solar farm would therefore not be considered to have any impacts that would be detrimental to the residential amenity of the nearby residential properties.

Ecology

- 2.84 Paragraph 174 of the NPPF states that planning decisions should contribute to and enhance the natural and local environment. Paragraph 180 goes on to state that when determining planning applications, local planning authorities should ensure that development on land within or outside a Site of Special Scientific Interest (SSSI) and which is likely to have an adverse effect on it, should not normally be permitted. In addition, development that would result in the loss or deterioration of irreplaceable habitats should be refused unless a suitable compensation strategy exists. Paragraph 181 also outlines that Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar Sites should be given the same protection as habitat sites. Paragraph 182 is clear that the presumption in favour of sustainable development does not apply where the development is likely to have a significant effect on a habitats site (either alone or in combination) unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.
- 2.85 Policy ENV1 of the Core Strategy advocates for the maintenance, restoration, and enhancement of international, national and local nature conservation importance. This would include SACs, SPAs, Ramsar Sites and SSSIs. Policy ENV2 states that the Council will protect and enhance the wildlife of the coastline.
- 2.86 Policy DM27 of the Development Management Plan outlines that proposals should not cause harm to priority species and habitats. Development will only be permitted where it can be demonstrated that the justification for the proposal clearly outweighs the need to safeguard the nature conservation value of the priority habitat and/or priority species or its habitats.

Designated Sites

- 2.87 The application is within close proximity to the River Crouch SSSI, Crouch and Roach Estuaries SPA and Ramsar sites and the Essex Estuaries SAC. Considering its proximity to the Crouch and Essex Estuaries designated site, a Habitat Regulations Assessment (HRA) was requested by Natural England and the Council's Ecological Consultant (ECC Place Services). As such, the Local Planning Authority as the competent authority in combination with a Shadow HRA prepared by the applicant, have prepared a HRA in accordance with the Conservation of Habitats and Species Regulations 2017. The Appropriate Assessment forming part of the HRA found that having consideration to the proposed avoidance and mitigation measures, the proposed development would not have an adverse effect on the integrity of the European sites. Natural England and the Council's Ecological Consultant have been consulted on the findings of the HRA and have concurred with the results.
- 2.88 The conclusions of the HRA were based on the findings of the applicant's Environmental Statement which was supported by an Ecological Impact Assessment prepared by Clarkson and Woods dated March 2023, a Winter Bird Survey Report prepared by Dalton Warner David LLP dated April 2023 and an Over-Wintering Wetland Bird Survey Report prepared by LSC Ltd dated March 2021.
- 2.89 The SPA and Ramsar sites are designated on the basis of the internationally important wintering population of dark-bellied brent geese and large assemblage of waterbirds. Such species were not identified breeding or foraging within the application site during the wild bird assessment or wetland bird assessment, meaning the site is not functionally linked to the SPA, Ramsar or SAC sites. The assessments have also found that neither habitat loss nor displacement as a result of the proposed development would occur directly or indirectly on this designatory feature of the SPA and Ramsar sites. However, due to the proximity to the designated sites, a development buffer zone and measures to avoid visual and noise disturbance and pollution during the construction phase must also be secured within the design and the Construction Environmental Management Plan. Subject to these mitigation measures being secured by condition, the proposal would not be considered to have a detrimental impact on the designated sites.

Habitats

2.90 The submitted Ecological Impact Assessment (EIA) has identified two habitats on site, ditches and hedgerows. The EIA has set out the potential impacts, the mitigation, compensation, enhancement and monitoring where required and any residual effects. The ecological impacts and mitigation identified by the EIA has been set out in a table and is appended to this report to provide further detail on the assessment set out below.

Ditches

2.91 The EIA states that during the construction phase, two areas of the ditch system that stretch through the application site would be impacted. It is stated that there are two sections of 4-5m that would be required to be culverted to create access points onto and through the application site. Both of the ditches stated to be required to be culverted would be located on the far eastern boundaries; one is the first vehicular access point onto the site from the Camp Farm/Scaldhurst Farm access road within

development zone 5 (as depicted on drawing no. Z-01 REV 13) and the second is located adjacent to the public footpath on the eastern boundary within development zone 4. However, upon further discussions it has become apparent that the ditch within development zone 4 is already culverted and due to its width within the application site (some 9m) it would not require any additional culverting.

2.92 The EIA identifies that there would also be risk of damages to ditches during the construction phase. The EIA does not identify any direct or indirect impacts to ditches during the operation phase.

Hedgerows

- 2.93 To facilitate improved access during the construction phase, some hedgerows would be required to be removed:
 - 12m section of Hawthorn, Elm and Ash to be removed from the hedgerow ditch along the far eastern access road (G3 in the Arboricultural Impact Assessment (AIA))
 - A 5m section of Hawthorn and Elm removed from the hedgerow with the dry ditch opposite Scaldhurst Farm (H4 in AIA)
 - A 5m section of hedgerow would be removed from the turning circle of the vehicular access adjacent to Hydewood Cottages
 - Up to 9m of Elm and Hawthorn hedge along part of the boundary of the
 western development parcel parallel to Fambridge Road would be removed to
 open up an overgrown entrance to provide the site access. Up to 26m of
 hedgerow adjacent to part of the boundary of the western development parcel
 shared with All Saints Church may also need to be removed to facilitate the
 same vehicular access to the site. The extent of hedgerow removal would
 likely be less with precise details to be agreed by condition.
- 2.94 Following receipt of the consultation response from Essex County Council Highways Authority it was apparent that the original access points proposed from Canewdon Road would not be adequate. As such, amendments were made to these accesses which involve the cutting back of 89m of the hedge (62m on the west side and 27m on the east side of the access) serving the access adjacent to Hydewood Cottage and some 160m of hedge to the west of the Camp Farm/Scaldhurst Farm access. The hedges would be cut back to a height of 0.6m.
- 2.95 In addition, the EIA identifies that there is a risk of physical damage to retained hedgerows by plant machinery, run-off and dust deposition during the construction phase.

Protected and Priority Species

2.96 The submitted EIA has identified a number of protected species and species of conservation concern that could be impacted by the proposal. Again, further details of the impacts and mitigation as outlined within the EIA can be found within the appended ecological impact and mitigation template.

Badgers

2.97 The EIA has identified that during construction there would be no direct impacts to badgers and their setts. While a badger sett was identified between the eastern parcel and Pudsey Hall Lane this is outside of the red-lined application site boundary.

The scheme would not therefore result in any direct impacts on this sett. However, during construction the availability and quality of foraging habitat would be adversely affected by the works. The EIA considers that the temporary loss of habitats would be similar in effect to the regular agricultural activities that take place on site and cannot reasonably be avoided.

2.98 The EIA has also identified that due to the removal of arable land in favour of grassland fields around the solar arrays, the cessation of intensive farming practices, the lack of disturbance from agricultural activities and the provision of all year-round grassland foraging opportunities, the site would present a better-quality habitat for badgers than currently exists within the fields.

Bats

- 2.99 The EIA finds that there are no known roosts on site and no potential roost sites would be impacted by the proposal but does find that the site is likely used for bat foraging and dispersal. The EIA identifies that during construction there may be some temporary loss of foraging habitat where grassland is damaged or removed. However, as this would be temporary in nature the EIA concludes that this would not be significant.
- 2.100 The EIA also identifies that when operating, the grassland habitat would be enhanced for bats due to the reduction intensive agriculture, cessation of ploughing and spraying and the creation of species-rich grassland.
- 2.101 The only lighting proposed is referred to as 'emergency lighting' in the proposal description. An elevation plan has been provided which shows proposed lighting columns that would be some 4.5 metres high with flood lights mounted atop. Three of these lighting columns are proposed and these would be sited within the sub-station compound. Given that these lights are referenced as 'emergency' it is anticipated that these would not be switched on often.
- 2.102 Whilst lights may be used during construction the EIA advises that impacts on bats would be minimal given that such lights would only be required in winter months when bats hibernate.
- 2.103 It is therefore considered that the impact of light pollution on bats would be minimal, and this matter was scoped out of the EIA.

Water Vole

- 2.104 The EIA identified that the standard avoidance measures that would be used in the scheme and described below would ensure that any risk of physical harm to water voles or damage to their burrows would be reduced to a negligible level and not reasonably likely to occur. The EIA also identified that when operational, the conditions for water voles (if present) would be comparable to baseline levels.
- 2.105 However, through discussions with the Council's Ecological Consultant it was established that they were not satisfied with these findings, requiring instead that a water vole survey be carried out to the culverted ditch (adjacent to the boundary with Camp Farm and Scaldhurst Farm) and any area within 5m of the banks of any ditch that would be developed. Subsequently, the applicant's ecological consultants Clarkson and Woods have conducted a water vole survey. The ditch which runs

through development zone 4 was found to have 'low density' of water voles and no evidence of water vole were recorded at any of the other ditches surveyed. Of particular note, is that the survey found that the ditch to be culverted was unsuitable for water vole. The Council's Ecological Consultant has reviewed the further survey and confirmed that they are satisfied that there would not be impacts upon water vole.

Reptiles

2.106 The EIA concludes that the standard avoidance measures described below would ensure that any risk of physical harm to reptiles would be reduced to a negligible level and not reasonably likely to occur. When operational, the EIA finds that the onsite habitat would be enhanced for reptiles via an improved management regime around the field margins.

Skylark

- 2.107 The EIA and the Breeding Bird Survey Report (prepared by Dominic Mitchell dated September 2022) outline that there are 19 Skylark territories recorded over the application site, 13 of which could potentially be displaced.
- 2.108 It is also identified by the EIA that the standard avoidance measures described below would ensure that any risk to Skylark and other ground nesting birds is reduced to a negligible level and not likely to occur.

Other Farmland Birds

- 2.109 The aforementioned Breeding Bird Survey recorded 3no. Corn Bunting territories and 5no. Yellowhammer territories. A significant number of Corn Buntings (84) were also recorded by one of the July surveys gathering to forage amongst the cereal crop.
- 2.110 These farmland birds nest on the ground in cereal fields, grassfield margins, hedgerows or ditches. However, the landscape design measures described below for new habitat creation would ensure that foraging availability is not compromised during operation.

Mitigation

- 2.111 To summarise, the EIA identifies that the following impacts would need to be mitigated:
 - Two areas of culverted ditches
 - Potential damage to ditches during the construction phase
 - Removal of hedgerows
 - Reduction in height of hedgerows
 - Potential damage to hedgerows during construction phase
- 2.112 The scheme has been designed to integrate hedgerows, ditches and field boundaries to minimise direct impacts to these features where possible as outlined by the EIA. An undeveloped buffer zone of at least 3m (but typically over 10m) has been integrated into the proposed development between the ditches and security fences. In addition, the EIA has identified that the proposal would include good-practice management control mitigation to address construction phase effects on such features.

- 2.113 To prevent harm to these habitats, priority species and the environment during the construction phase the EIA proposes the implementation of a Construction Environmental Management Plan (CEMP), a Biodiversity Protection Plan (BPP) and a Landscape and Environmental Management Plan (LEMP).
- 2.114 The CEMP would describe measures to avoid, minimise or mitigate any construction phase impacts on the environment. The CEMP would particularly identify risks to the aquatic environment associated with the ditches, identify potential pollution pathways and describe mitigation measures to be employed. The mitigation should include the 'tool box talks' recommended by the EIA, this involves the on-site ecologist providing advice and information on best practice to construction workers on site. The CEMP would be used to mitigate against the impacts to the ditches, hedgerows and water voles.
- 2.115 The BPP would have a similar aim to the CEMP but would seek to minimise the impacts on important ecological features which are typically outside the scope of the CEMP. The BPP would include additional measures, including 'biodiversity protection zones' and any timing constraints for safeguarding badgers, reptiles, water voles and wild birds. The BPP would be used to mitigate the impacts to ditches, hedgerows, badgers, water voles, reptiles, skylarks and ground nesting birds. The BPP would be secured as part of the CEMP.
- 2.116 The LEMP would be prepared for the operational site to cover how retained and newly created habitats are managed to maximise their biodiversity value. The LEMP would also set out any measures necessary to ensure protected species are accommodated. The LEMP would include employing good horticultural practices within the landscape planting areas and would set out a post-construction monitoring scheme and biodiversity audit to assess the long-term efficiency of mitigation and enhancement measures. The LEMP would be used to mitigate the impacts to the habitats of badgers, bats and farmland birds.
- 2.117 The CEMP and LEMP would be secured through planning condition. A condition should also secure the requirement of a CEMP to be prepared prior to decommissioning the site.
- 2.118 The EIA also sets out mitigation measures specifically to mitigate the impact of the development on habitats and the protected and priority species.
- 2.119 To compensate for the loss of sections of hedgerow, the EIA proposes that replacement planting is planted elsewhere on site. The landscaping strategy proposes a total of 5.84km of additional hedgerow planting and the EIA considers this to mitigate the removal of some sections of existing hedgerows. The Arboricultural Impact Assessment (prepared by Barton Hyett Associates dated 2022) proposes a buffer that would protect the root protection areas of hedgerows from construction activities. This would be delineated by the security fencing proposed if installed prior to construction activities and would mitigate the need to install temporary fencing. The submitted Arboricultural Impact Assessment has indicated that the security fencing would be installed to act as the protective fencing however a detailed Tree (and hedge) Protection Plan would be required by condition. The EIA outlines that temporary protective fencing for internal hedgerows would be required, although the AIA does not recommend this and should therefore be secured by condition. The EIA

- is clear that where cabling needs to pass through hedgerows, this will be done via directional drilling in order to avoid impacts on the vegetation and roots.
- 2.120 The EIA identifies that to prevent disturbance to badgers and damage to their underground tunnels, the badger sett would be safeguarded by a 30m exclusion zone during construction and that this would be delineated by temporary and robust fencing with warning signs attached and no construction activity within that protected zone would be permitted without the consent of the Ecological Clerk of Works (hereby referred to as the on-site ecologist). However, the application site now does not include the land to the east where the badger sett is located. The EIA also recommends that within 6 weeks of construction beginning, a badger survey should be completed to confirm that no badger setts would be disturbed by site activities. The EIA also sets out the parameters in the case that additional setts are discovered on site. The recommendations of the EIA can be secured by condition, requiring their findings to be submitted to the LPA.
- 2.121 In addition, the EIA sets out that the security fencing installed would not sit tight to the ground to allow for small gaps under the fencing which badgers could dig under to expand if necessary. While the EIA does not propose it as a mitigation strategy, the applicant has suggested that a condition could be imposed requiring mammal gates be installed also. Together, both the mitigation strategies would allow for badgers to continue to access the solar areas for foraging.
- 2.122 With regards to reptiles, it has been identified within the EIA that as most areas of coarse grassland at field boundaries would be retained and protected as part of hedgerow and ditch protection measures there would be an unlikely impact. However, any areas within the development footprint that would be impacted must be subject to a two-stage strim during warm (>9 degrees) and dry weather conditions between mid-March to mid-October as recommended by the EIA. The requirement of this can be secured by the CEMP.
- 2.123 It has been predicted that up to 13 Skylark territories may be displayed by the proposed development and it is therefore recommended by the EIA to enhance farmland habitats by adjusting management practices. Set-aside land and spring sown cereals are capable of supporting increased territory densities; however, it is understood that the surrounding farmland is currently being managed on rotation as winter-sown cereal. As winter-sown cereal is not optimal for Skylark, the EIA recommends that more optimal crops are planted via an ongoing commitment with a landowner until the solar farm is decommissioned. The EIA explains that areas for Skylark enhancement would not need to be fixed and could change each year if necessary but should be located within 2.5km of the site. The EIA recommends that the precise approach, management plan and area of hectarage managed for Skylarks would be agreed as part of a Skylark mitigation strategy and secured by condition. The Council's Ecological Consultant has agreed with this approach.
- 2.124 With regard to farmland birds, the EIA sets out that the hedgerow buffers (described above) would be implemented to protect this habitat during construction and such measures would also safeguard nesting birds in hedgerows. The EIA also recommends that if the sections required to be removed during the nesting bird breeding season, a nesting bird inspection by the on-site ecologist shall be carried out. If nests are found, these would be monitored until fledging is complete, and the works delayed until this time. These recommendations can be secured by the CEMP.

2.125 Taking the above into account and subject to conditions requiring the implementation of the recommended mitigation, it is not considered that the proposed development would result in unacceptable harm to designated sites, habitats or protected and priority species. As such, the proposal would be compliant with national and local policy in this regard.

Residual Risk

2.126 With the prevention measures in place and secured by condition, the EIA concludes that the residual effect to the habitats and protected species on-site would be negligible to not significant. While there are some minor benefits to the mitigation proposed the EIA has identified that as these are minor benefits, they would not be significant, with the exception of the additional hedgerow planting that is considered to significantly increase the extent and quality of this habitat. The Council's Ecological Consultant has not disagreed with this view and therefore it is considered that the overall ecological impact would not be significant.

Biodiversity

- 2.127 Paragraph 174 of the NPPF is clear that planning decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Paragraph 180 of the NPPF goes onto state that if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated or as a last resort, compensated for, then planning permission should be refused. To the contrary, development whose primary objective is to conserve or enhance biodiversity should be supported. Opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity.
- 2.128 Policy DM26 of the Development Management Plan requires that the Council protect certain landscape features when considering proposals, where they are of importance for fauna and flora, from loss or damage and this includes hedgerows.
- 2.129 As discussed above, the main loss of biodiversity on site would be from impacts to existing hedgerows, although the scheme has largely been designed to maintain field margins and grassland where this is available at present. Given the agricultural use of the fields at present, they offer limited biodiversity benefits. The Ecological Impact Assessment (EIA) which has been prepared by Clarkson and Woods Ecological Consultants Ltd identifies that a Biodiversity Protection Plan would be prepared to further avoid, minimise or mitigate construction-phase impacts on important ecological features and the Landscape Environmental Management Plan would be prepared to ensure that during the operation of the site, the newly created habitats would be managed to maximise their biodiversity value. This would appropriately protect the existing biodiversity and landscape features on site.
- 2.130 However, further enhancements to the biodiversity network have been proposed. A Biodiversity Net Gain (BNG) Assessment has been prepared by Clarkson and Woods Ecological Consultants Ltd dated April 2023 and submitted with the application. This assessment calculates that a net gain of 50.99% of habitat units and 213.22% of hedgerow units would result. The metric calculations have been submitted to the Local Planning Authority for consideration and the Council's Ecological Consultant

has confirmed that there are no errors or issues with the metrics and the calculations are therefore correct.

- 2.131 However, the Council's Ecological Consultant queried whether enhancements for the ditches should be secured as these were not considered by the metric or BNG assessment. The applicant's ecological consultant has explained that the requirement for enhancing watercourses within the application site clearly presents huge challenges due to the extensive ditch networks (this site has approximately 5.13km of ditch network that will not be impacted). In this instance, achieving 10% net gain would either entail creating at least 0.5km of new wet ditch or plug-planting at least 1.5km of existing ditch. Due to the site's proximity to a hydrologically sensitive Ramsar site, the applicant's ecological consultant has taken the view that enhancing or creating new watercourses / ditches may do more harm than good. The applicant's ecological consultant has argued that engineering new ditch systems (for no functional purpose other than to achieve net gain) would present an unnecessary risk to the surrounding wetland ecosystem. Likewise, planting-up such a large extent of ditch would be an expensive and time-consuming prospect that is unlikely to achieve stated biodiversity goals without a significant change to the landowner's current ditch management regime. It has also been highlighted that the cessation of arable farming practices (i.e. the reduction in spraying and application of fertiliser) is highly likely to have a non-quantifiable benefit to the entire ditch network, even if this isn't necessarily reflected in the BNG metric. Given the large net gain on site overall, the Council's Ecological Consultant is satisfied with a 'no net loss' approach for the watercourse units in this instance.
- 2.132 The Council's Ecological Consultant has recommended that planting specifications/schedules should be secured by condition. The implementation of the Landscape Ecological Management Plan would also be fundamental to ensuring the biodiversity enhancements are provided and should include a monitoring strategy to assess whether the planting is on track to reach the proposed habitat creation/enhancement objectives during the lifetime of the solar farm. A condition is recommended to secure this. Taking into account the above and subject to the implementation of the conditions mentioned, the proposed development would not be considered to harm biodiversity and would instead result in a net gain to the biodiversity of habitat units and hedgerow units.

Impact on Existing Trees

- 2.133 Policy DM25 of the Development Management Plan seeks to conserve and enhance existing trees. Policy DM25 outlines that development which would adversely affect, directly or indirectly, existing trees will only be permitted if it can be proven that the reasons for the development outweigh the need to retain the feature and that mitigating measures can be provided for.
- 2.134 The Arboricultural Impact Assessment submitted with the application and prepared by Barton Hyett Arboricultural Consultants and dated August 2022 surveyed 34no. trees, 10no. groups, 49no. hedgerows and one area of woodland within and adjacent to the application site. Of these arboricultural features, 6 were considered to be high quality, 80 moderate quality and 8 low quality.
- 2.135 To facilitate the development the removal of the following existing trees/hedges would be required:

- A section of hedge approximately 7m in length would need to be removed to facilitate the access track from the Camp Farm/Scaldhurst Farm access track into development zone 5.
- There is a proposed entranceway through a section of hedge which is just south of All Saints Church on Fambridge Road. Although there is an existing entrance at this point, it is heavily overgrown. To reinstate and improve this entrance would require the removal of smaller overhanging branches, selfseeded young growth and dead Elm stems.
- Removal of approximately 10-12m of hedge to facilitate the visibility splays and access onto Canewdon Road.
- 2.136 The Council's Arboricultural Officer has confirmed that the tree/hedge loss would be minimal and would be mitigated with replacement planting. The hedgerow removal would be less than 1% of the total area covered by existing hedgerows. Nevertheless, the applicant has suggested that a landscaping plan could be conditioned to require the replanting of the hedgerow adjacent to the vehicle accesses onto Canewdon Road. Once the construction phase has been completed, the visibility splays would not be required to be as significant and therefore additional replanting could occur and still provide adequate visibility to the access. The landscaping plan for the accesses on Canewdon Road can be secured by condition.
- 2.137 As there are a number of trees and hedges within and around the perimeter of the application site, tree protection measures have been proposed. The proposed security fencing would be erected outside of the root protection areas of the existing arboricultural features. If erected prior to construction, this fence would act as an effective tree protection barrier and would mitigate the need to install temporary fencing. As mentioned above, this does not account for some of the hedgerows which run internally. However, the protection of these arboricultural features has already been considered for ecological purposes and therefore would mitigate this impact.
- 2.138 The Council's Arboricultural Officer is content with the arboricultural method statement and tree protection plan subject to a condition requiring a finalised method statement and protection plan be submitted prior to commencement.
- 2.139 The Council's Arboricultural Officer has also noted that as a female black Poplar has been identified on site, it may be prudent to look into the feasibility of whether this could be propagated, and new trees introduced within the area as part of the planting scheme as this tree species is particularly rare. Whilst it would not be appropriate to require this by condition, this suggestion has been put to the developer for their consideration.
- 2.140 Taking into account the above, the minor loss in hedgerow would be compensated for by mitigation planting which would be secured by condition. The submitted documents demonstrate that approximately 99% of the existing hedgerow and trees would be retained and where removal would occur, mitigation has been considered. Therefore, it is considered that the proposal would be compliant with Policy DM25 of the Development Management Plan.

Lighting

2.141 Only emergency lighting is proposed consisting of three columns to be sited in the substation compound. Policy DM5 requires consideration of light pollution but given

that the lights would only be used in an emergency it is not anticipated that unacceptable light pollution would arise.

Flood Risk

2.142 Paragraph 152 of the NPPF outlines that the planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to support renewable and low carbon energy and associated infrastructure.

Sequential and Exception Tests

- 2.143 Paragraph 159 of the NPPF states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere. Paragraph 162 advocates for the sequential test to steer new development to areas with the lowest risk of flooding from any source. Development should not be permitted if there are any reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. Paragraph 163 of the NPPF states that if it is not possible for development to be located in areas with a lower risk of flooding (and the sequential test passed), the exception test may have to be applied depending on the nature of the development proposed.
- 2.144 The Flood Risk Vulnerability Classification set out within Annex 3 of the NPPF identifies that solar farm development is classified as Essential Infrastructure. Table 2 of the NPPG identifies that Essential Infrastructure within Flood Zone 3a is required to pass the exception test. It also states that in Flood Zone 3a, Essential Infrastructure should be designed and constructed to remain operational and safe in times of flood. As such, if it is demonstrated the sequential test is passed, the proposal would also be required to pass the exception test.
- 2.145 Policy ENV3 of the Council's Core Strategy supports national policy by determining that the Council will direct development away from areas at risk of flooding by applying the sequential test and exception test where necessary.
- 2.146 The application site falls within Flood Zones 1, 2 and 3a where because of the scale and nature of the development proposed the sequential test and exception test would be required to be passed.
- 2.147 In applying the Sequential Test, the aim is to steer new development to Flood Zone 1, these being areas with a low probability of flooding. Only where there are no reasonably available sites in Flood Zone 1 should reasonably available sites in Flood Zone 2 be considered. If the Sequential Test demonstrates that it is not possible for development to be located in zones with a lower risk of flooding the Exception Test would then be applied. National policy on flood risk is concerned with ensuring the location of development is appropriate in principle before considering flood resilience and flood mitigation measures.
- 2.148 The submitted Environmental Statement (Chapter 9 Flood Risk), Planning Design and Access Statement (Section 7), Alternative Site Assessment and Flood Risk Assessment (appendix 9A of the Environmental Statement) advocate for the developments sequential approach. These reports and assessments consider that a

solar farm of the proposed magnitude requires appropriate connection to the National Electricity Grid where there is available capacity. The reports detail the areas of lower risk of flooding are limited when other material planning considerations (landscape, agricultural land quality etc.) and design considerations (slope of site and aspect) have been taken into account. These factors also have implications for the suitability of sites for renewable energy schemes.

- 2.149 The Alternative Sites Assessment prepared by DWD provides the supporting evidence for alternative sites with a lower grade of agricultural land, or alternative brownfield or greenfield sites of comparable or greater size within the 'search area'. The 'search area' takes into account the requirement for a viable point of connection to the electricity distribution network which has the necessary capacity and infrastructure to accommodate the connection of a solar PV farm of the size proposed. The search area covered approximately 500m on either side of the identified connection point, as this was considered to be the maximum distance between a connection point and a solar farm of this size to allow for a potentially viable connection. The Alternative Sites Assessment concludes that there are no alternative sites available on lower grade agricultural land or previously developed land with a lower risk of flooding.
- 2.150 It is considered that the supporting information provided demonstrates that the sequential test is passed and there are no other reasonably available sites wholly outside of Flood Zone 3 that could accommodate the proposal.
- 2.151 As discussed above, the development would also be required to pass the exception test. In accordance with paragraph 164, to pass the exception test it should be demonstrated that:
 - a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and
 - b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.
- 2.152 Paragraph 165 of the NPPF goes on to state that both elements of the exception test should be satisfied for development to be permitted.
- 2.153 The submitted Planning Design and Access Statement (Section 7) and the Flood Risk Assessment (appendix 9a of the Environmental Statement) discuss that with respect to part (a), renewable energy has wider sustainability benefits by reducing reliance on carbon-based fuels and meeting UK carbon emission and 2050 net zero targets. With respect of part (b), the Flood Risk Assessment demonstrates that the proposed development is appropriately safe without increasing flood risk elsewhere. During times of tidal flood risk, no personnel would be onsite or have access to the site, accordingly the development and its users would be safe. Design flood mitigation measures have been proposed to either raise sensitive equipment above the modelled flood level (including an allowance for a climate change flood event) or to protect the sensitive equipment from this flood level. These measures are stated to protect the equipment during the tidal 'design flood' with an appropriate climate change allowance and the appropriate design of support structures to withstand flood waters would ensure that the development can remain operational and safe in times of flood. Furthermore, on-site drainage would be managed to ensure there would be no increase in flood risk from increase surface water runoff from the site.

2.154 It is considered that the proposal would satisfy the requirements of part (a) and (b) of the exception test and the development would be compatible with its location partly in Flood Zone 3a.

Flood Risk Mitigation

- 2.155 As discussed above, the site covers an area within Flood Zones 1, 2 and 3 in respect of fluvial flood risk and benefits from the presence of defences. However, the site is also at very low, low, medium, and high risk of surface water flooding. In line with paragraph 167 of the NPPF, a site-specific Flood Risk Assessment is required to be submitted.
- 2.156 Accordingly, a Flood Risk Assessment (FRA) (appendix 9a of the Environmental Statement) has been prepared by PFA Consulting (dated March 2023) and submitted with the application.
- 2.157 In terms of the fluvial flood risk, the site level is a minimum of 0.9m AOD and therefore the 'design flood' depths on site are 0m in the 0.5% (1 in 200) annual probability flood event, including climate change. During a worst-case scenario ('breach event') the site could experience undefended flood depths of up to 4.32m during the 0.5% (1 in 200) annual probability including climate and change and up to 4.7m during the 0.1% (1 in 1000) annual probability including climate change breach flood event.
- 2.158 Paragraph 167 of the NPPF outlines that development should only be allowed in areas of flood risk where:
 - a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;
 - b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment:
 - c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;
 - d) any residual risk can be safely managed; and
 - e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.
- 2.159 With regard to part (a), no part of the development would be more or less vulnerable and therefore the layout of the proposal is compliant with the requirements of part (a). The site layout has been devised to locate sensitive equipment in areas of lowest flood risk as far as practicable. For example, the substation and customer switch gear are located in an area unaffected by tidal flooding. Where possible, transformers have been located on areas of marginally higher elevation and subject to lower tidal flood depths.
- 2.160 With regard to part (b), the submitted FRA sets out the flood mitigation measures required to ensure the development is designed and constructed to remain operational and safe in times of flooding without increasing flood risk elsewhere.
- 2.161 With regard to tidal flooding, the FRA proposes that either the sensitive equipment be raised above the tidal design flood event flood level, or this be protected using bunds

to ensure the proposed development is appropriately flood resilient and resistant and that residual flood risk is appropriately managed. As details of bunds to protect the solar arrays have not been submitted, a condition is recommended to require the panels to be raised and no bunds installed. The details submitted demonstrate that the lower edge of the solar panels would be raised by 0.3m above the modelled tidal design flood level across the site. The height of the solar panels would vary with the lower edge of the panels typically varying between 0.9m to 1.9m above ground level. The solar panel supports in flood risk areas would be securely piled into the ground and designed to allow for the effect of flowing water pressures and to be resistant to inundation during a flood event. It is also proposed that the mesh size of the security fencing within flood risk areas be increased to a minimum width of 150mm to minimise the risk of it collecting debris and allow flood waters to flow around the structure.

- 2.162 Where control equipment (inverters and transformers) has to be located in areas of flood risk for operational reasons the equipment has been designed to be resistant to a tidal design flood event. String inverters are proposed which would be located on the back of the frames of the panels and a minimum of 0.3m above the flood level. Earth bunds are proposed around transformers located in flood risk areas. The bunds would be 2m high which is at least 0.3m above the modelled design flood level (the appearance and location of the bunds are detailed on drawing no. PL-01 REV 02 and PL-02 REV 01).
- 2.163 Raising equipment above the tidal design flood ensures that equipment would be raised at least 0.3m above the low-risk surface water flood event. As such, the solar arrays would not be vulnerable to the shallow depths and flow of the surface water and would be above the highest risk and level of surface water accumulation.
- 2.164 Transformers protected by 2m high earth bunds are proposed within areas of elevated surface water flood risk. The presence of the earth bund would protect the equipment from surface water flood risk. Drawing no. PL-01 REV 01 indicates that the transformer units would be raised 0.3m above ground which would provide additional protection from the ingress of surface water within the bund area.
- 2.165 Although solar arrays, security fencing, access tracks and transformers extend into areas of elevated surface water flood risk, the depth of surface water flooding is less than the tidal design flood and therefore the mitigation measures put in place to deal with the tidal design flood would appropriately mitigate surface water flood risk also.
- 2.166 The proposed flood mitigation measures would ensure the proposed development would remain operational and safe in times of the tidal 'design flood' and surface water flood event, meaning the proposal would be compliant with part (b) of paragraph 167.
- 2.167 With regard to part (c), it is understood from the FRA that the effect of solar farm developments on surface water runoff is considered to be negligible and the site would remain a predominantly grassed field⁵. It follows that as the majority of the site would remain undeveloped with a grassed surface around and underneath the solar arrays, this in itself would minimise runoff from the site. The arrays would be spaced to avoid a shadowing effect and between each row would be a buffer strip which

⁵ <u>BRE Biodiversity Guidance for Solar Developments (2014)</u> and <u>Natural England's Technical Information Note</u> TIN101: Solar Parks: Maximising Environmental Benefits (2011)

would contribute to slowing the flow of runoff across the development site. The excavation of cable trenches would be backfilled with a granular surround to the cables and then backfilled with excavated material, the FRA states that this would potentially increase the infiltration capacity of the site as the cable trenches act as land drains.

- 2.168 Rainwater falling onto each panel and string inverter would drain freely onto the ground beneath the panel and FRA states that it would infiltrate into the ground at the same rate as it does in the site's existing greenfield state. The FRA also assumes that any rainwater falling onto the semi-permeable access tracks would soak into the ground beneath or adjacent to the tracks at the same rate that it presently does.
- 2.169 The total impermeable area that would be covered on the site would measure some 613.51m² which can be understood as 0.07% of the total site area. The mean annual peak rate of runoff for the pre-development greenfield site is 203.3l/s, whereas post development this has been calculated as 203.7l/s. The FRA concludes that the effect of the solar farm on the greenfield runoff rates would be negligible. Nevertheless, the FRA identifies that a Sustainable Drainage System (SuDS) would be provided, by way of interception swales in the lower areas of the site to intercept extreme flows which may already run offsite. The FRA emphasises that this would be provided as a form of 'betterment' intercepting existing overland flows.
- 2.170 National policy requires development to take account of the impacts of climate change. The volume of runoff generated by a 24 hour, 100 year plus climate change rainfall event would be 70.55m³. Thus, runoff management techniques would be employed by way of interception swales (shown at appendix 16 of the FRA). Interception swales would be constructed along the boundaries of the site as a series of 'stepped' units parallel to the site's contours and perpendicular to the slope to ensure flows are not concentrated or conveyed downhill. Interception swales would be formed by creating shallow depressions 0.3m deep with a base width of 0.5m along the lower boundaries of the site. The material excavated from the swale would be placed along the lower edge to create a small bund. The interception swales would provide a total storage volume of approximately 406m³ which is greater than the volume of additional runoff generated as a result of the 24 hour, 100 year plus climate change rainfall event (70.55mm³). It is therefore considered that the interception swales would adequately mitigate any increase in runoff volume generated as a result of the minor increase in impermeable area and be beneficial in reducing the potential run off for the site during a climate change event.
- 2.171 The Lead Local Flood Authority have been consulted on the proposed SuDS scheme and have raised no objection subject to conditions being imposed. The proposal would therefore be capable of incorporating a SuDS scheme, in accordance with part (c) of paragraph 167.
- 2.172 In regard to part (d), the FRA identifies that there is a residual risk of defence failure which could result in flood depths of up to 3.5m across the site. It is not practical to raise or protect equipment from the residual flood risk level and the EA have confirmed that this would not be necessary. The residual risk is above the standard of protection required for new development and the FRA outlines that this would therefore be a commercial risk for the applicant. The FRA states that the residual risk to construction and operational staff would be managed through the EA's flood warning system. It is considered that the FRA has adequately considered the residual risks of the development.

- 2.173 In relation to part (e), the FRA sets out that as the development would not be occupied there would be no risk to users of the development post-construction. While construction or occasional maintenance activities would be scheduled, these would avoid periods of elevated flood risk. In addition, the FRA outlines that sensitive plant would be able to be shut down and restarted remotely in response to a flood alert. Safe access and egress would be achieved through the surrounding highway network. Although these details are considered sufficient to address the emergency plan post-construction, the FRA has not discussed the protocols during construction where there would be the greatest number of employees on site. As such, it is recommended that a condition be imposed requiring an emergency plan for the construction period be agreed. Subject to this condition being imposed, the proposal would be compliant with part (e).
- 2.174 In summary, it is considered that the submitted FRA has demonstrated that the proposed development would not increase flood risk elsewhere and would be safe for its lifetime. The proposal would therefore comply with the requirements of national flood risk policy as set out in paragraph 167 and chapter 14 of the NPPF.

Water Quality

- 2.175 Paragraph 174(e) of the NPPF discusses that planning decisions should contribute to and enhance the natural and local environment by preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution. Development should, wherever possible, help to improve local environmental conditions such as water quality.
- 2.176 During the construction phase, there is a risk of accidental water pollution. This could impact the ditch network and indirectly impact the wider river network and the integrity of the Special Areas of Conservation (SAC) which have been designated on the basis of their wetland/estuarian habitats.
- 2.177 Any adverse impact from water pollution would be mitigated through the implementation of the Construction Environmental Management Plan and the Biodiversity Protection Plan, both of which would be secured by condition. The buffer zone that has been created between the development and the ditch and river networks would further help to mitigate against water pollution.
- 2.178 Subject to conditions requiring those mitigation measures being implemented, the development would not result in water pollution, compliant with the requirements of paragraph 174(e) of the NPPF.

Highways

2.179 Paragraph 111 of the NPPF is clear that development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or where the residual cumulative impacts on the road network would be severe. Policy DM31 of the Development Management Plan requires that all new major developments are included with appropriate traffic management measures to facilitate the safe and efficient movement of people and goods.

- 2.180 The application site is divided into two parcels; the western parcel is accessed from Fambridge Road and the eastern parcel would be accessed by a vehicular access point to the west of Hyde Wood Cottages (E1) and a vehicular access that currently serves Scaldhurst Farm and Camp Farm (E2). All of the vehicular accesses are existing; however, some works are required such as hedge trimming to ensure that the vehicular accesses would be safe for use for construction traffic. The extent of these works has been detailed in the sections above.
- 2.181 A Transport Report dated March 2023 and Construction Traffic Management Plan dated March 2023 have been prepared by Mott MacDonald and submitted with the application to provide detail on the adequacy of these access points. The vehicular accesses would be primarily used during the construction phase and only occasionally during the operational phase.
- 2.182 The Transport Report advises that the temporary construction phase is expected to occur over a period of some 18-20 weeks. To the western parcel, the anticipated trip generation per day is 7 cars (staff/contractors), 5 LGVs (staff/contractor) and 3 HGVs (tipper/small arctic). To the eastern parcel, it is anticipated that there would be 16 cars (staff/contractor), 11 LGVs (staff/contractor) and 5 HGV (tipper/small arctic) trips per day. Over the whole construction period, it is anticipated there would only be 6 larger HGV (large arctic) trips to the western parcel and 14 larger HGV (large arctic) trips to the eastern parcel. The cars and LGVs would typically arrive to the site in the morning and leave in the evening, whereas the HGV movements would be spread throughout the day.
- 2.183 The local highway authority (ECC) initially raised objection to the proposed use of the vehicular accesses that would serve the eastern parcel. ECC were concerned that there would be insufficient visibility splays when exiting the site and insufficient turning circles when entering the site.
- 2.184 In response to ECC's objections, an amended access strategy has been proposed. This includes utilising access E1 as an 'in' only access for construction vehicles to enter the site and access E2 as an 'out' only access for construction vehicles to exit the site.
- 2.185 The addendum to the Transport Report sets out that widening of access E1 would be required to accommodate large vehicles turning into the access and vegetation trimming would be undertaken to maximise the available visibility of the access within the highway boundary. The addendum also clarifies that vegetation trimming would be undertaken to maximise the available visibility from the access within the highway boundary of access E2. While there are utility poles and bus shelters present either side of the visibility splays serving E2, ECC have confirmed that these obstructions within the visibility splay are acceptable. Vehicle swept path tracking of all the proposed accesses has taken place. ECC have confirmed that subject to the vegetation trimming and the widening of access E1, that the use of the vehicular accesses for construction traffic would not give rise to highway safety issues.
- 2.186 The Construction Traffic Management Plan (CTMP) submitted details the operations of the construction site, the proposed routing strategy, construction traffic management and mitigation.

- 2.187 With regard to the operations of the construction site, the CTMP sets out the contact details of the main contractor and the proposed hours of operation during the construction period (Mon Friday 8am 6pm and Saturday 8am 1pm).
- 2.188 The routing strategy set out within the CTMP details that all construction related HGVs would approach the site from the west via Lower Road with deliveries of equipment and/or plant then transported internally within the site via the respective site accesses. The CTMP anticipates that vehicles would approach the site using the A130, the A1245, Rawreth Lane and then Lower Road. The addendum to the Transport Report confirms that vehicles visiting the eastern parcel would turn left into the site at E1 and right out of the site at E2 as per the construction routing arrangements outlined in the CTMP. Ashingdon Parish Council have raised concern that the construction vehicles would cause traffic and delays to school pick up/drop off times. In response, the applicant has suggested that the delivery times be limited to outside of the school pick up/drop off times. It is recommended that a condition be imposed to secure the limited delivery times.
- 2.189 The applicant proposes that the new access tracks would be excavated and laid with crushed stone. ECC highways have recommended a condition which restricts the use of loose bound material within 30m of the highway, as such an alternative bound material would need to be used for these sections of the proposed access tracks. This would be agreed as part of the hard-landscaping plan.
- 2.190 With regard to construction traffic management, the CTMP details the number of construction vehicle and staff vehicle trips that are expected. The CTMP states that all vehicles associated with the proposed development would be parked on site. It also details that to prevent mud on the roads, wheel washing facilities would be provided on-site. The CTMP also commits to their construction management team arranging for a sweeping vehicle to visit the site/local highway should debris need to be cleaned during the construction process.
- 2.191 The mitigation set out within the CTMP details that the measures implemented would include management of traffic movements, staff parking to be provided on site, the use of preferred construction routes, public right of way management, temporary traffic management procedures agreed in consultation with ECC as required and the limitation of maximum vehicle sizes. The CTMP also sets out that signage alerting users of the highway (including of the public rights of way) of the construction activities taking place. The CTMP commits to informing local residents of the construction works and the duration of the project.
- 2.192 ECC highways have reviewed the submitted CTMP and raise no concerns with the information provided. A condition is recommended to require the final CTMP to be submitted and agreed prior to commencement and compliance achieved throughout construction.
- 2.193 The Glint and Glare Assessment that has been submitted identifies that there would be no impact of reflections upon road users. ECC highways have concurred with the findings of this assessment.
- 2.194 It is therefore considered that the proposed development would not give rise to any impact upon highway safety, in accordance with the requirements of Policy DM31 and the NPPF.

Air Quality and Noise

- 2.195 Policy DM29 of the Development Management requires that an air quality assessment is submitted in respect of major development proposals, to determine the potential cumulative impact of additional transport movements.
- 2.196 An Air Quality Assessment (AQA) dated August 2023 has been prepared by TetraTech and submitted with the application. The AQA identifies that prior to the implementation of mitigation measures, there is a potential impact of dust emissions associated with the construction phase. However, the AQA has identified appropriate site-specific mitigation measures, namely the implementation of a dust management scheme, which when in place would reduce the risk to 'not significant'. The implementation of this shall be secured by the CEMP which is subject to condition. A condition should also be imposed requiring these mitigation measures (or alternative measures) are employed during decommissioning. Subject to these conditions being imposed, the AQA has concluded that the development would not be considered to impact upon Air Quality. The Council's Environmental Health Officer has reviewed the submitted AQA and concurs with its findings.
- 2.197 Paragraph 174 (e) of the NPPF outlines that planning decisions should prevent new and existing development from contributing to, being put at unacceptable risk from or being adversely affected by unacceptable levels of noise pollution. Paragraph 185(a) similarly states that planning decisions should ensure that new development mitigates and reduces noise from new development to a minimum potential adverse impact. Paragraph 185(a) requires that new development avoids noise that would give rise to significant adverse impacts on health and the quality of life. In addition, paragraph 185(b) requires planning decisions to identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.
- 2.198 A Noise Assessment dated March 2023 has been prepared by TetraTech and submitted with the application. The report details the potential noise generation from the plant associated with the proposed development with respect to existing noise levels in the area. The assessment identifies that the rating levels from the proposed operations are predicted to exceed the background noise levels at the closest sensitive receptors. The nearest sensitive receptors are the residential dwellings of Streamside, Rectory Farm House, Hall Cottages, South Fambridge Hall, Pudsey Hall Farm, Mayfield, Scaldhurst Farm House, Alexandra Farm House, Hydewood House, Hydewood Cottages, Three Bays Farm, Eversleigh and the church of All Saints Church. The report finds that the proposal would have a potential significant adverse impact upon these receptors.
- 2.199 The submitted Noise Assessment recommends that mitigation be provided in the form of acoustic louvers to transformer units and acoustic attenuation for the DNO substation. The acoustic louvers to the transformer units are depicted within figures 6.1 and 6.2 of the noise assessment and would result in a noise reduction of at least 15dB. The 8m acoustic enclosure which is proposed to the DNO substation compound (depicted in drawing no. PL-03 REV 02) would also result in a noise reduction of at least 15dB. The conclusions of this report are confirmed to be unchanged by the noise assessment addendum provided following the re-positioning of the DNO substation compound.

- 2.200 With the noise mitigation implemented, the noise rating levels are predicted by the Noise Assessment to be no more than +4dB above the existing background noise level. This impact has been considered to be low by the assessment and the Council's Environmental Health Officer has agreed with the findings of the assessment and the addendum.
- 2.201 Of note is that the assessment has considered the impact based on the assumption that all items of plant associated with the solar farm would be fully operational continuously and simultaneously at all times. The assessment states that this would not be the reality and that the plant would only be fully operational during daylight hours, as such the assessment is considered to represent the worst-case scenario.
- 2.202 Notwithstanding this, the assessment still concludes that the proposed development is predicted to have a low impact and therefore it would not be expected to have an adverse impact on health or quality of life, compliant the requirements of the NPPF.

Gas Pipeline

2.203 A high-pressure gas pipeline runs through both development parcels and as a consequence there is a requirement to consult the Health and Safety Executive. A final response is awaited following their review of the proposal which will be reported on an addendum.

Other Considerations

- 2.204 A material consideration in the determination of planning proposals for renewable energy are the National Policy Statements (NPSs) for the delivery of major energy infrastructure. The NPSs recognise that large scale energy generating projects will inevitably have impacts, particularly if sites are in rural areas. In March 2023, the Overarching National Policy Statement for Energy (EN-1)⁶ and the National Policy Statement for Renewable Energy Infrastructure (EN-3)⁷ were published.
- 2.205 The NPS EN-3 states at paragraph 3.10.4 that solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation. At paragraph 3.10.5 it states solar farms can be built quickly and coupled with consistent reductions in the cost of materials and improvements in the efficiency of panels, large-scale solar is now viable in some cases to deploy subsidy-free.
- 2.206 NPSs can be a material consideration in decision making on applications that both exceed or sit under the thresholds for nationally significant projects.
- 2.207 The UK Government has declared a climate emergency and set a statutory target of achieving net zero emissions by 2050, and this is also a material consideration. Since the declaration, the Sixth Assessment Report⁸ of the Intergovernmental Panel on Climate Change has indicated that there is a greater than 50% chance that global

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147380/NPS_EN-1.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147382 /NPS_EN-3.pdf

⁸ https://www.ipcc.ch/assessment-report/ar6/

temperature increases will exceed 1.5 degrees Celsius above pre-industrial levels. The report indicates that delay in global action to address climate change will miss a rapidly narrow window of opportunity to secure a liveable and sustainable future for all

2.208 The UK Energy White Paper, Powering our Net Zero Future (2020)⁹, describes the costs of inaction as follows:

"We can expect to see severe impacts under 3°C of warming. Globally, the chances of there being a major heatwave in any given year would increase to about 79%, compared to a 5% chance now. Many regions of the world would see what is now considered a 1-in-100-year drought happening every two to five years.

At 3°C of global warming, the UK is expected to be significantly affected, seeing sea level rise of up to 0.83 m. River flooding would cause twice as much economic damage and affect twice as many people, compared to today, while by 2050, up to 7,000 people could die every year due to heat, compared to approximately 2,000 today. And, without action now, we cannot rule out 4°C of warming by the end of the century, with real risks of higher warming than that. A warming of 4°C would increase the risk of passing thresholds that would result in large scale and irreversible changes to the global climate, including large-scale methane release from thawing permafrost and the collapse of the Atlantic Meridional Overturning Circulation. The loss of ice sheets could result in multi-metre rises in sea level on time scales of a century to millennia."

- 2.209 The NPSs recognise that to meet the government's objectives and targets for net zero by 2050, significant large and small scale energy infrastructure is required. This includes the need to "dramatically increase the volume of energy supplied from low carbon sources" and reduce the amount provide by fossil fuels. Solar and wind are recognised specifically in EN-1 (paragraph 3.3.20) as being the lowest cost way of generating electricity and that by 2050, secure, reliable, affordable, net zero energy systems are likely to be composed predominantly of wind and solar.
- 2.210 More recently, the UK Government released the British Energy Security Strategy in April 2022 which outlines the continued support for the effective use of land for ground based solar development to be designed to avoid, mitigate and where necessary, compensate for the impacts of using greenfield sites. Furthermore, it encourages the support for solar development that is co-located with other functions (e.g. agriculture) to maximise the efficiency of land use.
- 2.211 The NPPG on renewable and low carbon energy, states that 'there are no hard and fast rules about how suitable areas for renewable energy should be identified, but in consideration locations, local planning authorities will need to ensure they take into account the requirements of the technology and critically, the potential impacts on the local environment, including from cumulative impacts.'
- 2.212 As discussed earlier in this report, paragraph 158 of the NPPF explains that when dealing with planning applications, planning authorities should require a developer to demonstrate a need for low carbon or renewable energy projects and should recognise that even small-scale projects can help reduce greenhouse gas emissions.

⁹ https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future

Paragraph 158 also explains that such schemes should be approved if any impacts are, or can be made, acceptable.

- 2.213 Whilst the Council did recently refuse a solar farm development proposal (ref: 22/00175/FUL), three applications for large-scale solar development have been approved in the district, one at London Southend Airport (ref: 15/00190/FUL), one at Land North East of Ulverston Road (ref: 14/00649/FUL) (the existing solar farm which sites between the two parcels of the application site), and most recently at South Fambridge Hall (ref: 21/00605/FUL). The Council found that in each of these three cases, the benefits of renewable energy would outweigh the harm to the Green Belt, amongst other considerations such as to heritage assets and the landscape character. Each application must however be considered on its own merits.
- 2.214 The proposed site is larger than the Southend Airport and Ulverston Road solar farms and it is therefore acknowledged that it may have greater impacts. It would however also deliver a greater level of output thus making a greater contribution towards the production of renewable energy. It is considered that the benefits in terms of the production of renewable energy weighs strongly in favour of the proposed scheme.

Planning Balance and Very Special Circumstances

- 2.215 The proposed development would result in harm to the Green Belt. This harm would consist of harm by virtue of the proposed development being inappropriate development in the Green Belt but also additional harm to openness arising from the scale of development and encroachment into the open countryside. Harm to the Green Belt would be significant given the scale of development proposed and substantial weight must be afforded to this harm. It has also been identified that the proposed development by virtue of its scale and location would result in major harm to the landscape character at a local level and would result in moderate to major harm to visual amenity which would be particularly significant to users of the public footpath to the eastern boundary of the application site where the development would be very visible in close proximity. In addition, the proposed development would result in harm to the setting and significance of a non-designated heritage asset. While the limited harm identified to the non-designated heritage asset would be outweighed by the public benefits of the proposal, for the purpose of the overall planning balance, this harm contributes to the adverse effects of the proposal.
- 2.216 The proposed scheme would not harm the integrity of the SPA, SAC, SSSI or Ramsar sites, weighing neither for nor against the proposal. Furthermore, the other considerations either result in no harm or harm that could be reduce to insignificant harm as a result of the implementation of mitigation through the imposition of appropriate conditions.
- 2.217 Conversely, the proposal would deliver a renewable energy facility that would create up to 49.9MW of power. This would provide power for over 16,500 homes, resulting in a carbon dioxide displacement of around 11,210 tonnes per annum and this would help combat climate change.
- 2.218 The NPPF identifies that many renewable energy projects in the Green Belt would comprise inappropriate development. In such cases, developers will need to demonstrate very special circumstances which could include the wider environmental benefits associated with the increased production of energy from renewable sources.

Whilst this lends support for renewable projects in the Green Belt, it does not confer an automatic approval of such schemes, where the effects of such development must take into account a broad range of issues in mind of the general presumption against inappropriate development and the resultant substantial harm conveyed to the Green Belt by this.

- 2.219 The benefits of renewable energy are substantial and are in favour of the proposal. Both national and development plan policy adopts a positive approach towards this form of renewable energy development where harm would be outweighed by the benefits of solar schemes. It is also clearly identified in Section 14 of the NPPF, where it seeks to increase the use and supply of renewable and low-cost energy and to maximise the potential for suitable such development. The delivery of suitable renewable energy projects is fundamental to facilitate the country's transition to a low carbon future in a changing climate.
- 2.220 Furthermore, as discussed within this report, a solar farm requires grid capacity and a viable connection to operate. As such, this requirement places a locational restriction on site selection that limits the number of appropriate sites for such a facility.
- 2.221 Accordingly, it is considered that the public benefits of the proposal are of sufficient magnitude to outweigh the substantial harm found to the Green Belt and all other harm identified above. These benefits identified attract very substantial weight in favour of the scheme. In this case, it is considered that the harm to the Green Belt and all other harm would be clearly outweighed by other considerations identified and therefore the very special circumstances necessary to justify the development exist. Accordingly, the proposal would satisfy local and national Green Belt policy.

3.0 CONSULTATIONS AND REPRESENTATIONS (summarised)

Ashingdon Parish Council

3.1 Objection – there are concerns for All Saints Church, it is an open church yard. Preserve the existing Church. The church will suffer with the noise and pollution from the substations. Preserve the public footpath. It is arable land, which will take food producing land out of production. The impingement of the Roach Valley Way and the England coastal path.

Canewdon Parish Council

3.2 The parish council supports the production of energy from alternative sources, however, would want to safeguard residents who live close to and may be affected by such a development in close proximity to the proposal.

Cadent Gas (first response)

3.3 The planning application is in the vicinity of our gas asset/s. We are placing a holding objection on the proposal whilst our engineering team reviews the available information. We will be in touch once we have reviewed the proposals in more detail.

Environment Agency

3.4 No objection. The site lies within the flood extent for a 0.5% (1 in 200) annual probability event, including an allowance for climate change. The site does benefit

from the presence of defences. Flood resilience/resistance measures have been proposed. The site level is a minimum of 0.90m AOD and therefore flood depths on site are 0m in the 0.5% (1 in 200) annual probability flood event including climate change. Therefore assuming a velocity of 0.5m/s the flood hazard is very low hazard in the 0.5% (1 in 200) annual probability flood event including climate change. Therefore this proposal does have a safe means of access in the event of flooding from all new buildings to an area wholly outside the floodplain up to a 0.5% (1 in 200) annual probability including climate change flood event. A Flood Evacuation Plan has been proposed. Compensatory storage is not required.

Essex County Council Highway Authority (first response)

3.5 The developer has not demonstrated that the proposal would be acceptable in terms of highway safety and efficiency. This proposal would therefore be contrary to the aims and objectives of Policy DM1 (General Policy), Policy DM2 (Strategic Routes), DM14 (Safety Audits) and Policy DM20 (Construction Management) of the Development Management Policies Feb 2011.

Essex County Council Highway Authority (second response)

- 3.6 From a highway and transportation perspective the impact of the proposal is acceptable to the Highway Authority subject to the following conditions:
 - Prior to development the areas within the site identified for the purpose of loading/unloading/reception and storage of materials and manoeuvring associated with the proposal shall be provided clear of the highway and retained at all times for that sole purpose.
 - Reason: To ensure that appropriate loading / unloading facilities are available 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.
 - 3. No unbound material shall be used in the surface treatment of the vehicular access / egress within 20 metres of the highway boundary.
 - Reason: To avoid displacement of loose material onto the highway in the interests of highway safety in accordance with policy DM1 of the Development Management Policies as adopted as County Council Supplementary Guidance in February 2011.
 - 4. Prior to commencement of the development details showing the means to prevent the discharge of surface water from the development onto the highway shall be submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be carried out in its entirety prior to the access becoming operational and shall be always retained.

Reason: To prevent hazards caused by water flowing onto the highway and to avoid the formation of ice on the highway in the interest of highway safety to ensure accordance with policy DM1 of the Development Management Policies as adopted as County Council Supplementary Guidance in February 2011.

- 5. The development shall accord, including any ground works or demolition, with the approved CEMP. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:
 - i. the parking of vehicles of site operatives and visitors
 - ii. loading and unloading of plant and materials
 - iii. storage of plant and materials used in constructing the development
 - iv. wheel and underbody washing facilities
 - v. Routeing of vehicles

Reason: To ensure that on-street parking of these vehicles in the adjoining streets does not occur and to ensure that loose materials and spoil are not brought out onto the highway in the interests of highway safety and Policy DM 1 of the Highway Authority's Development Management Policies February 2011.

- 6. Prior to commencement of the proposed development, the construction access junctions from Fambridge Road shall be provided as shown in principle on Mott Macdonald Dwg 410558-MMD-XX-BA13-DR-C-0002 with associated clear to ground visibility. (E1) from Canewdon Road shall be modified as shown in principle on Mott Macdonald Dwg 410558-MMD-XX-BA13-DR-C-0005 to provide access only to the development proposal with associated clear to ground visibility and (E2) from Lark Hill Road shall be provided as shown in principle on Mott Macdonald Dwg 410558-MMD-XX-BA13-DR-C-0006 with exit only from the development proposal with associated clear to ground visibility always retained free of any obstruction thereafter.
- 7. Any gates provided at the vehicular access shall be inward opening only and shall be set back a minimum of 20 metres from the back edge of the carriageway.

Reason: To enable vehicles using the access to stand clear of the carriageway whilst gates are being opened and closed and to allow parking off street and clear from obstructing the adjacent footway/cycleway/carriageway 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.

Essex County Council Lead Local Flood Authority

3.7 No objection subject to the following conditions:

Condition 1

- All works hereby consented to be in accordance with the Flood Risk Assessment, ref D230-DOC01-FRA-Issue 1.1, dated March 2023 by PFA Consulting
- Provision of detailed engineering drawings of each component of the drainage scheme.
- Provision of a final drainage plan which details exceedance and conveyance routes, FFL and ground levels, and location and sizing of any drainage features
- A written report summarising the final strategy and highlighting any minor changes to the approved strategy.

The scheme shall subsequently be implemented prior to operation.

Reason: To prevent flooding by ensuring the satisfactory storage of/disposal of surface water from the site. To ensure the effective operation of SuDS features over

the lifetime of the development. To provide mitigation of any environmental harm which may be caused to the local water environment. Failure to provide the above required information before commencement of works may result in a system being installed that is not sufficient to deal with surface water occurring during rainfall events and may lead to increased flood risk and pollution hazard from the site.

Condition 2

No works shall take place until a scheme to minimise the risk of offsite flooding caused by surface water run-off and groundwater during construction works and prevent pollution has been submitted to, and approved in writing by, the local planning authority. The scheme shall subsequently be implemented as approved.

Reason The National Planning Policy Framework paragraph 163 and paragraph 170 state that local planning authorities should ensure development does not increase flood risk elsewhere and does not contribute to water pollution. Construction may lead to excess water being discharged from the site. If dewatering takes place to allow for construction to take place below groundwater level, this will cause additional water to be discharged. Furthermore the removal of topsoils during construction may limit the ability of the site to intercept rainfall and may lead to increased runoff rates. To mitigate increased flood risk to the surrounding area during construction there needs to be satisfactory storage of/disposal of surface water and groundwater which needs to be agreed before commencement of the development. Construction may also lead to polluted water being allowed to leave the site. Methods for preventing or mitigating this should be proposed.

Condition 3

Prior to occupation a maintenance plan detailing the maintenance arrangements including who is responsible for different elements of the surface water drainage system and the maintenance activities/frequencies, has been submitted to and agreed, in writing, by the Local Planning Authority. Should any part be maintainable by a maintenance company, details of long-term funding arrangements should be provided.

Reason To ensure appropriate maintenance arrangements are put in place to enable the surface water drainage system to function as intended to ensure mitigation against flood risk. Failure to provide the above required information prior to occupation may result in the installation of a system that is not properly maintained and may increase flood risk or pollution hazard from the site.

Condition 4

The applicant or any successor in title must maintain yearly logs of maintenance which should be carried out in accordance with any approved Maintenance Plan. These must be available for inspection upon a request by the Local Planning Authority.

Reason To ensure the SuDS are maintained for the lifetime of the development as outlined in any approved Maintenance Plan so that they continue to function as intended to ensure mitigation against flood risk.

Condition 5

The development hereby permitted shall not be commenced until such time as a Soil Management Plan has been submitted to, and approved in writing by, the local planning authority. The scheme shall be implemented as approved.

Reason Soil compaction can cause increased run-off from the site. Therefore a soil management plan should show how this will be mitigated against. Failure to provide the above required information before commencement of works may result in a system being installed that is not sufficient to deal with surface water occurring during rainfall events and may lead to increased flood risk and pollution hazard from the site.

Essex Police

3.8 Recommendations for the applicant to considered including designing out crime, secured by design and traffic management.

Maldon District Council

3.9 Given the location of the proposed development and its low-lying nature, MDC do not consider that there would be significant adverse impacts on the Maldon District. However, please be aware of a solar development that was granted permission at Hall Farm Lane, Hazeleigh Hall Lane, Hazeleigh under the terms of application 23/05101/DET should you need to consider the cumulative impacts of nearby developments.

Natural England (first response)

3.10 No objection. The proposed development will not have significant adverse impacts on statutorily protected nature conservation sites or landscapes.

Natural England (second response)

3.11 Natural England is in agreement with the conclusions of the HRA.

Place Services Archaeology

- 3.12 No objection subject to the following conditions being imposed:
 - 1. No development or preliminary groundworks of any kind shall take place until a programme of archaeological investigation has been secured in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.
 - 2. No development or preliminary groundworks of any kind shall take place until the completion of the programme of archaeological investigation identified in the WSI defined in 1 above.

Place Services Ecology (first response)

- 3.13 No objection subject to securing a Habitat Regulations Assessment and the following conditions:
 - "Prior to commencement, a construction environmental management plan (CEMP: Biodiversity) shall be submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following.
 a) Risk assessment of potentially damaging construction activities. b) Identification of "biodiversity protection zones". c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
 d) The location and timing of sensitive works to avoid harm to biodiversity
 - 0.55

features. e) The times during construction when specialist ecologists need to be present on site to oversee works. f) Responsible persons and lines of communication. g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person. h) Use of protective fences, exclusion barriers and warning signs. The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority."

Reason: To conserve protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species).

2. "A Landscape and Ecological Management Plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority prior to commencement of the development. The content of the LEMP shall include the following: a) Description and evaluation of features to be managed. b) Ecological trends and constraints on site that might influence management. c) Aims and objectives of management. d) Appropriate management options for achieving aims and objectives. e) Prescriptions for management actions. f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over the lifetime of the solar farm). g) Details of the body or organisation responsible for implementation of the plan. h) Ongoing monitoring and remedial measures. The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details."

Reason: To allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species)

3. "Prior to commencement, a Farmland Bird Mitigation Strategy shall be submitted to and approved by the local planning authority to compensate the loss or displacement of Skylark and Corn Bunting territories identified as lost or displaced. This shall include provision of offsite compensation in nearby agricultural land, prior to commencement. The content of the Farmland Bird Mitigation Strategy shall include the following: a) Purpose and conservation objectives for the proposed compensation measure; b) detailed methodology for the compensation measures c) locations of the compensation measures by appropriate maps and/or plans; d) persons responsible for implementing the compensation measure. The Farmland Bird Mitigation Strategy shall be implemented in accordance with the approved details and all features shall be retained for the lifetime of the solar farm."

Reason: To allow the LPA to discharge its duties under the NERC Act 2006 (Priority habitats & species)

Place Services Ecology (second response)

- 3.14 I am satisfied that the proposals will not impact upon Water Vole, given that the proposed vehicular access at locations 1 and 20 are clearly unsuitable for water vole and the access locations at 4 and 14 already established.
- 3.15 I note that evidence of water vole was confirmed adjacent to location 14. This included the presence of feeding signs, latrines and possible burrows. However, if no works are proposed to enhance this access point which will directly impact the ditch at this location, I am satisfied that the impacts upon water vole and the need for a mitigation licence can be avoided. The finalised mitigation strategy can be secured by the CEMP.

Place Services Historic Buildings and Conservation Areas (first response)

- 3.16 The proposed solar farm is located immediately adjacent to the Church of All Saint's (a locally listed building), with a perimeter fence with CCTV bounding the site. The proposals would fundamentally alter the land use character of the site and attributes which positively contribute to the setting and significance of the heritage asset, failing to preserve its setting. Therefore, there would be harm to the setting and significance of the non-designated heritage asset, Paragraph 203 being relevant. Given the scale and proximity of the proposals which would result in an industrialising effect, the harm is considered to be at a medium level. The Church which has historically been experienced in an isolated rural location would be subsumed into a solar farm with other intrusive elements such as perimeter fencing and CCTV cameras.
- 3.17 Given the distance between the application site and the listed buildings, including the Church of St Andrew, the proposals are not considered to result in a significant impact to their settings or significance, thus resulting in no harm.
- 3.18 To conclude, the proposals are considered to result in harm to the setting and significance of a non-designated heritage asset, at a medium level. The local authority will have to take a balanced judgement with regards to any scale of harm or loss to the significance of the heritage asset, as per Paragraph 203 of the NPPF (2021).

Place Services Historic Buildings and Conservation Areas

- 3.19 The revised plans show that the DNO substation is proposed to be located further to the south which would afford a greater amount of open space to the Non-Designated Heritage Asset, the Church of All Saint's. Given the scale and proximity of the proposed photovoltaic farm to the Church it is considered that there would harm to the setting of the heritage asset, however the revised layout is an improvement from previous and I suggest that the harm is now lowered to the low end of the spectrum for the Non-Designated Heritage Asset.
- 3.20 To conclude, the proposals are considered to result in harm to the setting and significance of a non-designated heritage asset. The local authority will have to take a balanced judgement with regards to any scale of harm or loss to the significance of the heritage asset, as per Paragraph 203 of the NPPF (2021).

Place Services Landscaping (first response)

3.21 Not supportive on landscape grounds. We have significant concerns that the proposed development in conjunction with other notable schemes will have a significant adverse visual harm to the PRoW network, notably footpaths 280/05 and 280/19, as well as Diverse Coastal Marshland Landscape Character Type LCT and Crouch and Roach Farmland LCA. The proposed mitigation provides limited screening of the proposed solar park owed to the elevated landform and therefore increases the overall visual harm.

Place Services Landscaping (second response)

3.22 Not supportive on landscape grounds. We have significant concerns that the proposed development in conjunction with other notable schemes will have a significant adverse visual harm to the PRoW network, notably footpaths 280/05 and 280/19, as well as Diverse Coastal Marshland Landscape Character Type LCT and Crouch and Roach Farmland LCA. The proposed mitigation provides limited screening of the proposed solar park owed to the elevated landform and therefore increases the overall visual harm.

Rochford District Council Arboricultural Officer

- 3.23 The report demonstrates that the tree loss if minimal and can be mitigated with replacement planting. I am happy with the recommendation regarding tree protection, however, this will need to be condition as part of the full Arboricultural method statement and tree protection plan.
- 3.24 Interestingly the report has identified a female black poplar at the site, this is a very rare tree. It may be prudent to look into the feasibility of whether this can be propagated and new trees introduced within the area as part of the planting scheme.

Rochford District Council Environmental Health Officer (first response)

- 3.25 I have reviewed the air quality and noise reports and comment as follows:
- 3.26 A CEMP will be required for the scheme, to include all dust mitigation measures identified within section 7 of the air quality assessment. Otherwise, I have no adverse comments in respect of air quality.
- 3.27 Mitigation measures by way of acoustic louvers around the transformer adjacent to the DNO substation and other selected transformers shall be required throughout the lifetime of the development. The enclosures shall reduce noise levels by a minimum of 15dB at relevant receptor locations identified in section 6 of the acoustic report.
- 3.28 Drawing no. PL-03 indicates that the acoustic enclosure around the 6m + tall transformer at this location will be 8m high. This is relative to the 5.94m minimum height of adjacent high level disconnections and 2.4m perimeter fencing. The overall height to the enclosure is required in order to form an effective acoustic barrier.
- 3.29 A post implementation acoustic survey will be required to demonstrate performance for each relevant location. Any failure to meet this level will require additional

mitigation to be agreed by the LPA and implemented as approved until performance is achieved.

Rochford District Council Environmental Health Officer (Second response)

- 3.30 I have read the technical note which confirms that because of the minimal change in levels (i.e., different undetectable to the human ear) at the relevant receptor locations, it is implied that the enclosure at the substation is still required in the form applied for.
- 3.31 At 14 movements a day I do not see any issue with noise from the accesses. However, it may be prudent to control times so that the site access cannot be used earlier than a given time so as to remove potential unsociable hours completely.
- 3.32 In the construction management plan there should be reference to sheet and control of debris from HGVS.

Southend Airport

3.33 No safeguarding concerns.

Neighbour Contributions

3.34 7 comments have been received opposing the development from the following addresses:

Fambridge Road; Onosra Lark Hill Road; Scaldhurst Farm

Radnor Rodge; Flickan Lodge (three letters)

Ulverston Road; El Nido

No address

- 3.35 In the main, the comments received can be summarised as follows:
 - There is already an existing solar farm and one approved, so I cannot see why there
 is needed to add another solar farm to the already overdeveloped area.
 - The proposed solar farm would be 4 to 5 times larger than the existing one and would cover more of the green belt.
 - The solar panels would take about 3 years to actually become carbon neutral.
 - There is no mention of battery storage.
 - The development is just below the size to be considered by the government rather than the LPA
 - Increase in traffic would be dangerous to the school
 - Dust and noise pollution during construction
 - Increase of mud on the road
 - The land is used for arable food production and contributes towards the production of Wheat
 - Loss of habitat for mammals, birds and reptiles
 - View east of Fambridge Road will be ruined
 - No amount of landscaping will hide the development
 - O How will the public footpath be dealt with?
 - o Increase waste as the panels cannot be recycled
 - Visual harm to heritage assets and public right of way
 - Concern regarding narrow access track up to Scaldhurst Farm and its use by lorries.
 The access onto Lark Hill Road is also dangerous

3.36 In addition, 1 letter has been received in support of the application from the following address: Nutcombe Crescent; No. 50

4.0 EQUALITY AND DIVERSITY IMPLICATIONS

4.1 An Equality Impact Assessment has been completed and found there to be no impacts (either positive or negative) on protected groups as defined under the Equality Act 2010.

Phil Drane Director of Place

REPORT AUTHOR: Name: Katie Fowler

Title: Senior Urban Design and Development

Management Officer

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RELEVANT DEVELOPMENT PLAN POLICIES AND PROPOSALS

National Planning Policy Framework 2023

Core Strategy Adopted Version (December 2011) Policy GB1, ENV1, ENV2, ENV3, ENV6 Development Management Plan (December 2014) Policy DM1, DM5, DM12, DM25, DM26, DM27, DM29, DM31

National Policy Statements for Energy EN-1 (2023)

National Policy Statement for Renewable Energy Infrastructure EN-3 (2023)

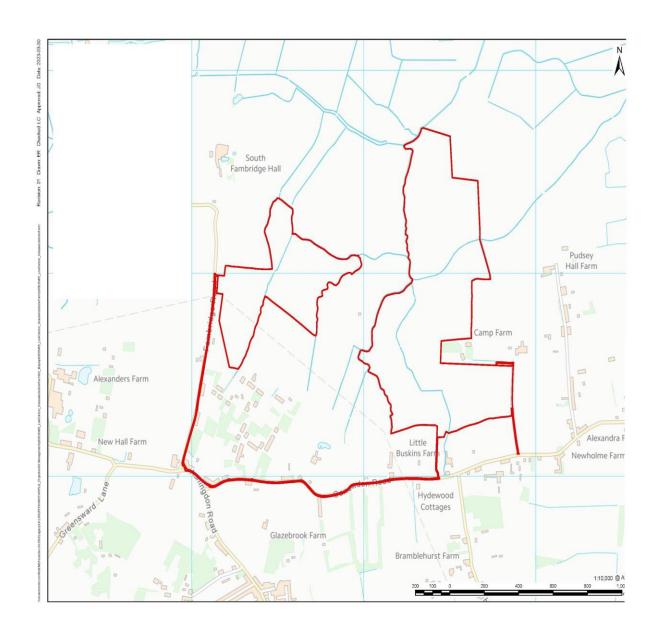
BACKGROUND PAPERS

Habitat Regulation Assessment Ecological Impacts and Mitigation

SUBJECT HISTORY (last 3 years)

Council Meeting	Date
N/A	

If you would like this report in large print, Braille or another language please contact 01702 318111.



Ecology Impacts and Mitigation

Ecological	Impact	Mitigation				
Consideration		CEMP	BPP (to be secured by the CEMP)	LEMP	Other mitigation	
Ditch	Culverting of ditches (assessed as not significant due to negligible proportion of ditch being affected and poor quality of baseline habitat)	N/A	N/A	N/A	N/A	
	Physical damage to ditches by plant machinery	Implementation of CEMP	Implementation of BPP		Buffer zones Toolbox Talk by an Ecologist Monitoring. To be secured by the CEMP	
	Habitat degradation by water pollution	Implementation of CEMP	Implementation of BPP	The LEMP will be prepared for the operational site to cover how retained and newly created habitats are managed to maximise their biodiversity value. The LEMP will also set out any measures necessary to ensure protected species are accommodated. It will include a wildlife sensitive	Buffer zones Toolbox Talk by an Ecologist Monitoring. To be secured by the CEMP	

Ecological	Impact	Mitigation				
Consideration		СЕМР	BPP (to be secured by the CEMP)	LEMP	Other mitigation	
				management schedule and techniques for the ditches and bankside habitats.		
Hedgerow	Hedgerow removal / trimming				Hedgerow planting and improved management	
	Physical damage to retained hedgerow by plant machinery				Hedgerow planting and improved management.	
					Protective fencing for external and internal hedgerows.	
					Cabling to pass through hedgerows will be done via directional drilling.	
					The ecologist on site will provide a Toolbox Talk to contractors, communicating that vehicles must not be driven or material stores within the protective buffer.	
	Physical damage to retained hedgerow	Implementation of CEMP will set out restrictions on	Implementation of BPP will set out restrictions on	The LEMP will prescribe ongoing management for new		

Ecological	Impact	Mitigation				
Consideration		СЕМР	BPP (to be secured by the CEMP)	LEMP	Other mitigation	
	by run off and dust deposition	working during heavy rain and measures to minimise dust generation	working during heavy rain and measures to minimise dust generation	and retained hedgerows to maximise their biodiversity value in the long-term. This will include rational cutting of the hedgerows to ensure a diversity of habitats on the site each year, aiming to maintain hedgerows at a minimum height of 2m		
Badgers	Direct impacts to badgers and their setts		The BPP will outline measures to be taken to reduce the probability of incidental physical harm to badgers, including the installation of planks or earth ramps in any excavation which are left open overnight.		A pre-construction badger survey within 6 weeks of construction will be completed by an experienced ecologist to confirm that no badger setts will be disturbed by site activities. If any additional setts are recorded the size of the buffer zones will be proportionate to the size and status of the setts but will be at least 5m from	

Ecological	Impact	Mitigation			
Consideration		CEMP	BPP (to be secured by the CEMP)	LEMP	Other mitigation
					the closest sett entrance.
					Permanent or temporary exclusion of badger setts is not anticipated to be required. Should exclusion be required these would need to be carried out under a NE licence.
	Loss of foraging habitat during construction (albeit it unlikely)			The landscape strategy and implementation of a LEMP is predicted to enhance the site's foraging quality for badgers	The security fencing will not sit tight to the ground and undulations in the land will provide small gaps under the fencing which badgers can then dig under to expand if necessary. This will allow badgers to push underneath the fencing and move through the solar sites.
	Change of use, grassland planting and improved	N/A	N/A	N/A	N/A

Ecological	Impact	Mitigation				
Consideration		СЕМР	BPP (to be secured by the CEMP)	LEMP	Other mitigation	
	management (positive impact)					
Bats	Temporary reduction or removal of foraging habitat (this would be temporary and not significant and cannot reasonably be avoided)	N/A	N/A	N/A	N/A	
	Change of use, grassland planting and improvement management (positive impact)	N/A	N/A	The landscaping strategy and implementation of the LEMP is predicted to enhance the site's quality for bat foraging and dispersal	N/A	
Water vole	The standard avoidance measures will ensure that any risk of physical harm to water voles or damage to their burrows is reduced to a negligible level and not reasonably likely to occur. Water vole survey confirms that any ditches impacted are	N/A	All measures to prevent impacts on water vole (if present) will be detailed in the BPP. These will include a Toolbox Talk to contractors, explaining the importance of the buffer zones adjacent ditches as described above.	N/A		

Ecological	Impact	Mitigation			
Consideration		CEMP	BPP (to be secured by the CEMP)	LEMP	Other mitigation
	not suitable for water vole.				
Reptiles	The standard avoidance measures will ensure that any risk of physical harm to reptiles is reduced to negligible level and not reasonably likely to occur.	N/A	All measures to prevent impacts to reptiles will be detailed in the BPP. Most areas of coarse grassland at field boundaries will be retained and protected as part of hedgerow and ditch protection measures. However, any areas that occur within the development footprint must be subject to a two-stage strim during warm (>9 degrees) and dry weather conditions between mid march to mid October.	The landscape strategy and implementation of a LEMP is predicted to enhance the site's quality for reptiles.	N/A
Skylarks	Displacement of nesting Skylarks (up to 13 of the recorded 19 could be displaced)	N/A	N/A	N/A	Enhanced farmland habitats would be provided. Set-aside land and spring sown cereals are capable of supporting increased territory densities. The

Ecological	Impact		Mitigation				
Consideration		CEMP	BPP (to be secured by the CEMP)	LEMP	Other mitigation		
					applicant will agree the extent of offsite mitigation needed with the council.		
					No surrounding farmland is currently optimal for Skylark (given it is on rotation as winter-sown) these areas could be enhanced via an ongoing commitment with the landowner (or alternative landowners) until the solar is decommissioned to manage the land each year so that is it more favourable for Skylark. The most important factors are that any land parcels are at least 200m wide in both directions and that vegetation height is		
					kept under 0.5m until late summer and undisturbed between April and August.		

Ecological	Impact	Mitigation			
Consideration	· ·	CEMP	BPP (to be secured by the CEMP)	LEMP	Other mitigation
					This should ideally be located within 2.5km of the site.
					A Skylark mitigation strategy will be prepared and secured by condition.
	Harm to ground nesting birds	N/A	The BPP will detail measures to be adopted to prevent harm to Skylark and other ground-nesting birds during construction. It is recommended that arable fields are ploughed and grassland fields cut short before mid-February before construction when nesting birds will be absent. Additional bird nesting precautions may be needed. If this is not possible the ecologist will need to complete a nesting bird inspection no more than 48 hours prior to	N/A	N/A

Ecological	Impact		Mitig	ation	
Consideration		СЕМР	BPP (to be secured by the CEMP)	LEMP	Other mitigation
			construction. If nesting birds are confirmed a suitable buffer zone around nests will need to be kept and protected until chicks have fledges.		
Other farmland birds	Removal of foraging and nesting habitat for Yellow Hammer and Corn Bunting.			Ongoing management of the buffer corridors through the LEMP	The landscape plan and scheme layout has integrated measures to safeguard the current hedgerow network, ditches and grassfield margins where they occur. These will continue to provide nesting habitat. Such habitat is likely to be enhanced where new hedgerows are proposed. Where the current cereal fields overlap with the proposed buffer corridors, these will be sown with an annual cereal based wild bird mixture to provide a reliable

Ecological	Impact		Mitig	gation	
Consideration		СЕМР	BPP (to be secured by the CEMP)	LEMP	Other mitigation
					source for adult Yellow Hammers an Corn Buntings
	Disturbance to hedgerow nesting birds	N/A	N/A	N/A	Hedgerow buffers and protection fencing will be implemented to protect this habitat during construction Should the removal of the hedgerow be programmed for nesting bird breedin season, these will be subjected to a nesting bird inspection. If nests are found, these will be monitored until fledging is complete and the works delayed until this time
	Landscape planting and improvement management (positive impact)	N/A	N/A	N/A	N/A