Parish:	**Sedgeford** **Snettisham**	
Proposal:	**Construction and operation of a solar farm comprising an array of ground-mounted solar photovoltaic ("PV") panels and containerised batteries and associated infrastructure**	
Location:	**Land At Sedgeford Hall Estate Fring Road Sedgeford PE31 7NE**	
Applicant:	**Regener8 Power Ltd**	
Case No:	**22/00704/FM (Full Application - Major Development)**	
Case Officer:	**Mrs N Osler**	**Date for Determination:** **18 August 2022** **Extension of Time Expiry Date:** **11 November 2022**

Reason for Referral to Planning Committee – Operational Area exceeds 1ha and Called in by Cllr Parish

Neighbourhood Plan: YES

Case Summary

This application was deferred from the previous meeting to enable the applicant to investigate comments from the RSPB (informed by the Wash Wader Research Group) relating to curlews recorded on the site. This issue has now been given full consideration.

Other issues raised in late correspondence have also been covered as well as some amendments sought by the applicant in relation to conditions. For ease, all amendments to the previous report are emboldened within the report.

Full planning permission is sought for a 21 Megawatt (MW) solar farm with battery storage capacity of 10MW hours (MWh) comprising approximately 31,800 ground-mounted solar photovoltaic panels and associated infrastructure.

The site comprises approximately 44.6ha of Grade 3b agricultural land north of Fring Road within the Parishes of Sedgeford and Snettisham. The site lies approximately 1.2km west of Fring, 1.65km south of Sedgeford and 2.6km to the east of Snettisham.

The current land use is mainly crop cultivation while the southwestern field contains free range pigs.

A separate parcel of land within the applicant's ownership to the west of the northern field is proposed to be a field managed for farmland birds.

Access to the site would be taken via a new junction off Fring Road which forms the southern boundary of the site. Vehicles would approach the site from the southeast from the A148 via Great Bircham.

The site falls within both the parishes of Sedgeford and Snettisham, both of which have Neighbourhood Plans, and incorporates three medium sized fields which are predominantly enclosed by hedges with occasional hedgerow trees. Agricultural fields surround the site on all sides with very few buildings outside of the nearby settlements of Sedgeford, Snettisham, Sherbourne and Fring.

The construction phase of the development would be approximately 6 months, with the lifetime of the development expected to be 40 years from the first export of electricity.

The site is not subject to any landscape designations. However, the site is located 215m southeast of the Norfolk Coast Area of Outstanding Natural Beauty (AONB) at its nearest points and 1.1km northwest of a schedule monument (Romano-British villa 400m west of White House.)

The development is EIA development. The development was screened and scoped under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 in September / November 2000 as it falls under Section 3 'Energy Industry' of Schedule 2 as an 'industrial installation used for the production of electricity' where the site size exceeds 0.5ha.

The application has therefore been accompanied by an Environmental Statement (ES) in line with the Scoping Opinion that concluded the scope of the ES is limited to landscape, visual and traffic impacts.

These impacts are therefore considered in the ES with other issues such as ecology, glint and glare, archaeology and heritage and flood risk addressed in separate technical reports that accompanied the application.

Key Issues

Principle of Development including EIA
Landscape / Visual Amenity
Access, Transport and Traffic
Ecology
Historic Environment
Hydrology and Flood Risk
Noise and Vibration
Glint and Glare
Crime and Disorder
Other Material Considerations

Recommendation

APPROVE

THE APPLICATION

Full planning permission is sought for a 21 Megawatt (MW) solar farm with battery storage capacity of 10MW hours (MWh) comprising approximately 31,800 ground-mounted solar photovoltaic panels and associated infrastructure comprising:

- Seven Transformers / Central Inverters – Base on which both are to be placed measures 6.9m long x 3.8m wide. The structures on the base measure 3m long x 2.3m wide x 2.3m high (including plinth) and 3.7m long x 2.1m wide 2.3m high (including plinth)and 2m long x 1.5m wide x 2.1m high (including plinth)
- Customer Cabin measuring 12m long x 4.5m wide x 2.6m high (including plinth)
- DNO building (to house equipment owned by the electrical grid operator) measuring 7.5m long x 2.8m wide x 3.3m high
- DC /DC Converter measuring 6.1m long x 2.5m wide x 2.6m high (including plinth)
- Battery storage containers – up to 12.2m long x 2.5m wide x 3m high
- 2m high perimeter (deer) security fence with c.13 mammal gates
- Gate height 2m with a width of 5m
- CCTV cameras located on 2.5m high poles
- Access tracks with a typical width of 4m comprising 0.3m deep clean limestone base (0.15m below ground; 0.15m above ground) and 0.10m crushed limestone atop. 1% fall either side of centre point for drainage
- Construction compound comprising security booth, fuel station, site office, generators, owner office, toilet, contractor office, 4 x waste skips, canteen, 2 x day rooms, HGV turning area, 51.m2 unloading area, 3.705m2 storage area and 15 parking spaces.

The panels would be dark in hue with each string (row) of panels being mounted on a rack comprising metal poles anchored to the ground via concrete footings or shallow piles. Panels will be tilted between 10 to 25 degrees from the horizontal facing south. There will be a distance of between 2 to 6 metres between strings of panels in order to avoid inter-panel shading with the distance being influenced by slope and aspect.

The panels would be mounted approximately 0.8m from the ground at the lowest point (the southern edge) rising to approximately 2.6m at the highest point (the northern edge.) No panel would exceed 3m above ground.

The export capacity of the development would not exceed 21 Megawatts (MW) whilst the battery storage capacity would be 10MW hours (MWh.) It is suggested that the solar farm would generate approximately 18,000MW hours per year (MWh/yr) which would meet the annual electricity demand of approximately 3,500 homes in the Borough of King's Lynn & West Norfolk (based on household mean annual electricity consumption in the Borough.)

Once operational there will be minimal activity, with the site predominately being monitored remotely.

SUPPORTING CASE

None received.

PLANNING HISTORY

There is no relevant planning history.

RESPONSE TO CONSULTATION

Snettisham Parish Council: None received at time of writing report.

Sedgeford Parish Council: NO OBJECTION After a full discussion, Councillors thought there was a fine balance of arguments for and against this application. Like CPRE Norfolk, we

support solar generation of electricity, but we also maintain that provision of basic foods, including grains and potatoes has become increasingly important

However, while we would generally like to see solar panels fitted on commercial roof-spaces rather than on fields which could be used to grow crops, we acknowledge that this particular site is fairly well screened and that the electricity produced could be fed into the National Grid relatively easily.

We do have some concerns about the infrastructure associated with the site and about any visual impact this might have and also about the disruption to local traffic during the construction phase.

We trust that the next review of the Borough Council's Local Plan will give greater priority to food production and to the conservation of the countryside for wildlife and limit the areas where large-scale solar arrays can be sited.

Highways Authority: NO OBJECTION Thank you for the consultation received recently relating to the above development proposal which seeks to erect a solar farm on land served by a new access from the narrow unclassified U22125 Fring Road.

Having reviewed the revised Transport Management Plan (TMP), which addresses the left-hand turn onto Fring Road, from Sherbourne road and revises the routing to use St Thomas's Lane for part of the return leg, I am now able to comment as follows:-

The storage battery element of this application is to be installed at a later stage. Whilst I concur that the same routing would function, it would be likely that a new Temporary Traffic Regulation Order (TTRO) will be required if the batteries are to be installed post construction, dependent upon the number of deliveries to be made at that time.

The solar farm would only generate increased levels of traffic during its construction phase with the movements taken over the agreed route for the duration of construction period. Once completed, is unlikely to affect the free flow of traffic or generate additional vehicular movements, and accordingly I am able to comment that Norfolk County Council does not wish to raise any objection. However, I would seek conditions relating to access provision, access gates and construction parking and construction traffic management be appended to any permission granted.

RSPB: NO OBJECTION This application has been brought to our attention, but neither the RSPB nor NWT were consulted.

As a result, potential impacts on protected species have been overlooked. We understand the consultation date has passed, but flag this because unfortunately this is not an isolated occurrence. We have registered our contact details for consultations, and queried this before, but it seems the process is not working. Is there any way we can ensure that the RSPB is automatically consulted in future? Any assistance in this matter would be greatly appreciated.

For this application in particular we're not asking for time to make comments as we appreciate the consultation period has passed (the case was flagged to us today by the Wash Wader Research Group who had recorded curlew in the fields of the application site), and we won't engage in every case, but it would be great if they could be sent to us.

Following the submission of an addendum to the Ecological Appraisal covering Curlews, the RSPB responded as follows:

The RSPB was first made aware of case 22/00704/FM at the end of September when the Wash Wader Research Group (WWRG) contacted us to flag the presence of curlew at the application site fields (evidenced by curlew tracking data collected by the Group). We passed this information onto the planning officer and put the WWRG in contact with edp to facilitate information sharing of that data. On 14 October we were invited to comment on the associated case 22/01494/FM. The protected sites of relevance to both cases are detailed below. We recommend the Borough Council planning team works with Natural England to determine the appropriate level of environmental appraisal required for both cases, to identify and consider all potential direct and indirect impacts to the interest features of the designated sites, either alone or in combination, and to ensure that no adverse impacts occur as a result of the proposed development.

The Wash SSSI
The Wash SSSI was notified in 1984 as a SSSI and is a site of importance for a wide range of coastal habitats and internationally important numbers of birds. Snettisham beach and the adjacent mudflats and subtidal areas form part of The Wash Site of Special Scientific Interest (SSSI), The Wash and North Norfolk Coast Special Area of Conservation (SAC), The Wash Special Protection Area (SPA) and The Wash Ramsar. These sites support large areas of internationally important coastal habitats, and nationally and internationally protected bird species that are sensitive to disturbance in virtually every month of the year.

The Wash SPA
The Wash SSSI underpins The Wash SPA which is designated for supporting internationally important numbers of wintering waders and wildfowl including dark bellied brent geese, Bewick's swan, pink-footed geese, shelduck, pintail, oystercatcher, grey plover, black-tailed godwit, wigeon, sanderling, common scoter, knot, dunlin, bar-tailed godwit, curlew, redshank, goldeneye, gadwall and turnstone. It is also the most important area in Britain in early autumn for moulting waders and important to certain wintering passerines, to breeding birds including black-headed gulls, shelducks, little tern, common tern, and numerous wader species including redshank, and to certain seabirds.

The Wash Ramsar
The Wash SSSI underpins The Wash Ramsar. A vast intertidal embayment incorporating one of the largest and most important areas of estuarine mudflats, sandbanks and saltmarsh in Britain. Counts of wintering waterbirds reach over 300,000 individuals and include nationally and internationally important numbers of numerous species.

FINAL COMMENTS RECEIVED: Yes, I can confirm the RSPB has no objections to the development now that the curlew data has been considered as part of the environmental assessments.

Natural England: NO OBJECTION Based on the plans submitted, Natural England considers that the proposed development will not have significant adverse impact on designated sites and has no objection.

Natural England's additional original comments can be summarised as*:

* **Agricultural Land and concludes that the development falls outside of the scope AONB – needs considering (which we have done, and NE's overarching comment suggests there will be no adverse impact because the AONB is a designated site), and should consult the relevant AONB partnership; NCP raise no objection**

* **Solar Parks Technical Information Note – all issues covered by Environmental Statement and other supporting documentation e.g. Ecology Appraisal.**

Natural England have no additional comments to make in relation to Curlews.

* ***Officer Comment:*** **Natural England's full comments can be viewed on the Planning Portal**

Norfolk Coast Partnership: NO OBJECTION The site lies outside the AONB but in the setting of the designation. Therefore, policy NPPF 176 still applies in this case: 'development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas'.

We would agree with the observations of the Parish Council and CPRE that renewable schemes need to be carefully considered in the Local Plan so as not to cause adverse landscape impact or unnecessary loss of agricultural land.

In this instance, whilst there may be some localised visual disturbance to the AONB, my opinion is that it is not enough for the special qualities to be compromised. We would fully support conditioning of the landscape strategy which through tree and hedge planting, the wildflower planting and ecological improvements for birds, mammals and invertebrates will create more opportunities for ecological networks in this farmed landscape.

It has been stated that there will be no lighting on site other than during construction. We would like this agreed in a condition to protect the AONB dark skies.

PROW: NO OBJECTION We have no objections on Public Rights of Way grounds as there are none in the vicinity. The Peddars Way long-distance trail is situated to the east of the proposed development site however, the existing terrain and vegetation will provide screening so will not be affected by the proposals.

Historic England: NO OBJECTION Based on the available information we consider that the proposed development would not have any significant adverse impact on the settings of the designated heritage assets in the surrounding landscape (including the 'Romano- British villa 400m west of White House' scheduled monument, the Fring Conservation Area and the Grade II* listed Church of All Saints which are located approximately 1.1km to its east.

We suggest that you seek the views of your specialist conservation and archaeological advisers.

Conservation Officer: NO OBJECTION It cannot be seen clearly from any direction, but excellent landscaping and boundary treatments will be essential.

Historic Environment Service: NO OBJECTION We note that an archaeological desk-based assessment and geophysical survey report has been submitted with this application. In broad terms we concur with the conclusion of the desk-based assessment. There is potential for previously unidentified heritage assets with archaeological interest (buried archaeological remains) to be present within the current application site and that their significance would be affected by the proposed development.

If planning permission is granted, we therefore ask that this be subject to a programme of archaeological mitigatory work in accordance with National Planning Policy Framework (2021), Section 16: Conserving and enhancing the historic environment, para. 205 to be secured by condition.

CSNN: NO OBJECTION Given the rural location of the proposal we have no concerns in relation to the operational phase of the proposal.

For the construction phase, anticipated to last up to six months, there will be noise associated with construction, delivery and contractor vehicle movements. I am therefore keen to limit, via planning conditions, the site hours and delivery hours. Page 12, section 2.4.2.2 'Working Hours' of the Environmental Statement advises hours are likely to be between 07:30am and 6:00pm Monday to Friday, and 07:30am until 4:00pm on Saturdays. Page 6 of the Outline CTMP, section 5.5 'Delivery Times' states these "will typically be between 8:00am and 6:00pm Monday to Friday...if work and deliveries do need to be carried out at the weekend, this will be limited only between 9:00am and 1:00pm, with no deliveries on Sundays or public holidays." We request Saturday site hours to be in line with the Saturday delivery times.

Page 12, section 2.4.2.2 'Working Hours' of the Environmental Statement states, in paragraph two, that some work lighting may be required to facilitate construction. Noting the completed site will have around 35 CCTV points, and as access will be required for inspection of the site during the operational phase, it reasonable to expect external lighting will be required. I strongly recommend that all lighting is angled downwards and not mounted higher than 3m, and that this is conditioned to enable the NCP and other relevant bodies to assess the impact on the wider setting.

I note that the underground grid connection cable will be the subject of a separate application at which time I would wish to comment on mitigation to protect residents from noise, dust and lighting during excavation / installation.

Internal Drainage Board: NO OBJECTION Our original comments (ref: 22_06522_P, 18/05/2022) recommend that any proposal wishing to use infiltration for the discharge of surface water is supported by testing in line with BRE365 standards, in order to promote sustainable development within the watershed of the Board's Internal Drainage District (IDD), therefore ensuring that flood risk is not increased (required as per paragraph 167 of the National Planning Policy Framework).

However, while the IDB take an interest in planning applications near to the Internal Drainage District (IDD), we would defer to the LLFA, and support their position.

LLFA: NO OBJECTION

Environment Agency: NO OBJECTION We have reviewed the information submitted and have no comment to make on this application.

Environmental Health & Housing – Environmental Quality: NO OBJECTION The applicant has provided a design and access statement and site layout detailing the locations of structures and providing information on the site. We have reviewed our files and the site is on land that has been undeveloped for the duration of our records. The surrounding landscape is largely agricultural. No potential sources of contamination are identified in our records, or in the information provided by the applicant. Therefore, we have no objection regarding contaminated land.

Norfolk Fire and Rescue Service (NFRS): NO OBJECTION Although I do not propose to raise any objections at this stage, providing the proposal meets the necessary requirements of the current Building Regulations 2010 – Approved Document B (volume 2 – 2019 edition) as administered by the Building Control Authority, I would like to ensure Planning are aware of the following:

Whilst Norfolk Fire and Rescue Service (NFRS) are not a statutory consultee in relation to this project we will work and engage with the developer as this project develops to ensure it complies with the statutory responsibilities that we enforce.

The developer should produce a risk reduction strategy as the responsible person for the scheme as stated in the Regulatory Reform (Fire Safety) Order 2005. We would also expect that safety measures and risk mitigation is developed in collaboration with the Service.

The strategy should cover the construction, operational and decommissioning phases of the project.

NFRS recognises the use of batteries (including lithium-ion) as Energy Storage Systems (ESS) is a new and emerging practice in the global renewable energy sector. As with all new and emerging practices within UK industry the Service would like to work with the developers to better understand any risks that may be posed and develop strategies and procedures to mitigate these risks.

The developer must ensure the risk of fire is minimised by:

- Procuring components and using construction techniques which comply with all relevant legislation
- Including automatic fire detection systems in the development design
- Including automatic fire suppression systems in the development design. Various types of suppression systems are available, but the Service's preferred system would be a water drenching system as fires involving Lithium-ion batteries have the potential for thermal runaway. Other systems would be less effective in preventing reignition
- Including redundancy in the design to provide multiple layers of protection
- Designing the development to contain and restrict the spread of fire through the use of fire-resistant materials, and adequate separation between elements of the BESS
- Developing an emergency response plan with NFRS to minimise the impact of an incident during construction, operation and decommissioning of the facility, and
- Ensuring the BESS is located away from residential areas. Prevailing wind directions should be factored into the location of the BESS to minimise the impact of a fire involving lithium-ion batteries due to the toxic fumes produced.

The emergency response plan should include details of the hazards associated with lithium-ion batteries, isolation of electrical sources to enable firefighting activities, measures to extinguish or cool batteries involved in fire, management of toxic or flammable gases, minimise the environmental impact of an incident, containment of fire water run-off, handling and responsibility for disposal of damaged batteries, establishment of regular onsite training exercises.

The emergency response plan should be maintained and regularly reviewed by the occupier and any material changes notified to NFRS.

The BESS facilities should be designed to provide:

- Adequate separation between containers
- Provide adequate thermal barriers between switch gear and batteries
- Install adequate ventilation or an air conditioning system to control the temperature
- Ventilation is important since batteries will continue to generate flammable gas as long as they are hot. Also, carbon monoxide will be generated until the batteries are completely cooled through to their core
- Install a very early warning fire detection system, such as aspirating smoke detection
- Install carbon monoxide (CO) detection within the BESS containers

- Install sprinkler protection within BESS containers. The sprinkler system should be designed to adequately contain and extinguish a fire
- Ensure that sufficient water is available for manual firefighting. An external fire hydrant should be located in close proximity of the BESS containers. The water supply should be able to provide a minimum of 1,900 l/min for at least 2 hours. Further hydrants should be strategically located across the development. These should be tested and regularly serviced by the operator, and
- The site design should include a safe access route for fire appliances to manoeuvre within the site (including turning circles). An alternative access point and approach route should be provided and maintained to enable appliances to approach from an up-wind direction.

These concerns should be dealt with by condition.

Arboricultural Officer: NO OBJECTION I have looked at the above and I can confirm that I have no objections. Please condition the Landscape Strategy, drawing number: edp6676_d020f.

National Air Traffic Services (NATS): NO OBJECTION The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En-Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en-route air traffic) based on the information supplied at the time of this application. This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted.

If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission or any consent being granted.

Norwich Airport: NO OBJECTION The planning application has been considered, and we find that provided it is in accordance with the plans attached to the application, Norwich Airport would offer no aerodrome safeguarding objections to the application.

CPRE: OBJECT Whilst CPRE Norfolk generally supports solar generation of electricity, this needs to be weighed against any harms, so that the benefits can be justified. CPRE Norfolk fully acknowledges and supports the need for solar energy generation, but this should not be sited on food-producing, attractive countryside. In this case we feel that this is not the case due to the following reasons:

- The application includes construction of an amount of infrastructure as well as the solar arrays. This amounts to new development which is outside any settlement boundary. We contend this is contrary to policy CS06, Development in Rural Areas (Core Strategy, 2011) as the application would not “protect the countryside for its intrinsic character and beauty”. Moreover, it would adversely affect the surrounding area and would not be in accordance with Policy CS10 regarding farm diversification schemes. This is because the development would not be “appropriate in size and scale to the local area” and it would be “detrimental to the local environment”.
- National Planning Policy Framework (NPPF, July 2021) paragraph 120b) states that ‘planning policies and decisions should recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation,

cooling/shading, carbon storage or food production'. CPRE Norfolk is concerned that through providing solar energy this land is then largely lost to food production commensurate with the area and quality of land involved. The cumulative effect of increasing numbers of solar farms in the area should be recognised, as increasing amounts of land used for food production is being lost.

- It is disappointing that the adopted Local Plan does not identify suitable areas for renewable and low carbon energy sources, in line with the recommendation in NPPF para. 155b, as this could avoid the increasing number of unregulated applications for solar farms across rural landscapes in the plan area. Hopefully this will be rectified during a Local Plan Review.
- In particular, research shows there are 250,000 hectares of existing south-facing commercial roof-space in the UK, sufficient to provide approximately 50% of our energy needs. In addition, other suitable brownfield and domestic sites are much more appropriate locations for solar energy generation than productive and attractive agricultural land.
- The proposal does not recognise 'the intrinsic character and beauty of the countryside' as required by NPPF para. 174b. The proposal would alter the intrinsic character of the countryside through the imposition of solar arrays and several alien structures.
- The proposed site would have a harmful impact on the setting of the Norfolk Coast AONB, which lies approximately 215 m to the northwest of the site.

REPRESENTATIONS

None received at time of writing report.

LDF CORE STRATEGY POLICIES

CS01 - Spatial Strategy

CS02 - The Settlement Hierarchy

CS06 - Development in Rural Areas

CS08 - Sustainable Development

CS11 - Transport

SITE ALLOCATIONS AND DEVELOPMENT MANAGEMENT POLICIES PLAN 2016

DM1 – Presumption in Favour of Sustainable Development

DM2 – Development Boundaries

DM15 – Environment, Design and Amenity

DM17 - Parking Provision in New Development

DM20 - Renewable Energy

NEIGHBOURHOOD PLAN POLICIES

Snettisham Policy NP05: Materials and Design

Snettisham Policy NP08: Heritage

Snettisham Policy NP09: Natural Environment

Sedgeford Policy E5: Conservation Area and buildings of historical interest

Sedgeford Policy E6: Dark Skies

NATIONAL GUIDANCE

National Planning Policy Framework (NPPF)

Planning Practice Guidance (PPG)

National Design Guide 2019

PLANNING CONSIDERATIONS

The main issues for consideration in the determination of this application are:

Principle of Development and EIA
Landscape / Visual Amenity
Access, Transport and Traffic
Ecology
Historic Environment
Hydrology and Flood Risk
Noise and Vibration
Glint and Glare
Crime and Disorder
Other Material Considerations

Principle of Development and EIA

Renewable Energy is supported at both national and local level with Planning Practice Guidance (PPG) stating that planning has an important role in the delivery of new renewable and low carbon energy infrastructure.

The PPG makes it clear that in relation to ground-mounted solar photovoltaic farms the main issues for consideration are visual impact (the effect of the development on the landscape) and impacts from potential glint and glare.

The applicant has stated that the site was picked, after a feasibility exercise to assess site suitability, on the findings of:

- Solar irradiation levels
- Proximity to an existing grid connection with capacity to accept the development
- Separation from local population
- Topography
- Field size / shape
- Access to the site for construction

- Agricultural Land Classification
- Absence of nature conservation designations
- Located within flood zone 1
- Potential for a commercial / land agreement with the landowner

Both National and local planning policy and guidance seek to retain the countryside for its amenity value, intrinsic character and beauty and agricultural provision.

Paragraph 174 of the NPPF, 2021 states *Planning policies and decisions should contribute to and enhance the natural and local environment by:*

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)
b) 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, and of trees and woodland...
d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures
e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans, and ...

Core Strategy policy CS01 seeks to *protect the countryside beyond the villages for its intrinsic character and beauty, the diversity of its historic environment; landscapes; geodiversity and biodiversity...*

Core Strategy policy CS06 expanding upon this by stating that *Beyond the villages and in the countryside, the strategy will be to protect the countryside for its intrinsic character and beauty, the diversity of its landscapes, heritage and wildlife, and its natural resources to be enjoyed by all. The development of greenfield sites will be resisted unless essential for agricultural or forestry needs.*

However, national and local planning policy and guidance also places significant importance on renewable energy and the need to cut greenhouse gas emissions.

Paragraph 155 of the NPPF states *To help increase the use and supply of renewable and low carbon energy and heat, plans should:*

a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts)
b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development, and
c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

Paragraph 158 states *When determining planning applications for renewable and low carbon development, local planning authorities should:*

a) *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; and*
b) *approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.*

Core Strategy policy CS08 states that *The Council and its partners will support and encourage the generation of energy from renewable sources. These will be permitted unless there are unacceptable locational or other impacts that could not be outweighed by wider environmental, social, economic and other benefits.*

Renewable projects should be assessed accordingly (where necessary by project level Habitat Regulation Assessment) to ensure minimal ecological impact and should undergo a detailed cumulative impact assessment.

The Site Allocations and Development Management Policies Plan (SADMPP) policy DM02 acknowledges that some development may be required outside of the development boundaries within countryside stating *The areas outside development boundaries (excepting specific allocations for development) will be treated as countryside where new development will be more restricted and will be limited to that identified as suitable in rural areas by other policies of the local plan, including...*

- *renewable energy generation (under Policy DM20 of the rural economy or to this Plan)*

SADMPP policy DM20 states *Proposals for renewable energy (other than proposals for wind energy development) and associated infrastructure, including the landward infrastructure for offshore renewable schemes, will be assessed to determine whether or not the benefits they bring in terms of the energy generated are outweighed by the impacts, either individually or cumulatively, upon:*

- *Sites of international, national or local nature or landscape conservation importance, whether directly or indirectly, such as the Norfolk Coast Area of Outstanding Natural Beauty (AONB), Sites of Special Scientific Interest (SSSIs) and Ramsar Sites*
- *The surrounding landscape and townscape*
- *Designated and non-designated heritage assets, including the setting of assets; ecological interests (species and habitats)*
- *Amenity (in terms of noise, overbearing relationship, air quality and light pollution)*
- *Contaminated land*
- *Water courses (in terms of pollution)*
- *Public safety (including footpaths, bridleways and other non-vehicular rights of way in addition to vehicular highways as well as local, informal pathway networks), and*
- *Tourism and other economic activity.*

In addition to the consideration of the above factors, the Borough Council will seek to resist proposals where:

a) *There is a significant loss of agricultural land; or*
b) *Where land in the best and most versatile grades of agricultural land (grades 1, 2 and 3a) are proposed to be used.*

Development may be permitted where any adverse impacts can be satisfactorily mitigated against and such mitigation can be secured either by planning condition or by legal agreement.

As such there is conflict between these two overarching aims (protection of the countryside / AONB and provision of renewable energy), and a balance is required, but the principle of the development can be supported.

The application was accompanied by an Environmental Statement (ES). The ES is the documented outcome of the Environmental Impact Assessment (EIA) process which is undertaken to identify and assess the likely significant effects of a proposed development on the environment and to identify measures to mitigate or manage significant adverse effects.

The ES has been prepared following provision of a Screening Opinion from the Local Planning Authority (LPA). The Screening Opinion concluded that the development had the potential to have a significant impact on the landscape character of the Norfolk Coast Area of Outstanding Natural Beauty (AONB) which lies approximately 650m north / northwest of the site. In addition, it was also noted that the amount of equipment to be delivered to the site could have the potential for there to be short-term significant impacts on the local road network and wider population.

Consequently, the ES covers landscape / visual amenity and traffic / transport effects arising from the development.

Landscape / Visual Amenity

A Landscape and Visual Impact Assessment (LVIA) was undertaken as part of the ES. The LVIA contained ten photo-viewpoints and photomontages were created for six of the ten viewpoints.

The site is not within any nationally or locally designated protected landscape areas, although the Norfolk Coast Area of Outstanding Natural Beauty (AONB) is located to the north / northwest of the site. There are also heritage designations including Conservation Areas, one Scheduled Monument and Listed Buildings within 2km of the Site.

No part of the site is located within ecological designations, and the land within the site is used for agriculture which has minimal biodiversity value, with the greatest biodiversity value around the boundaries. There are only occasional trees within the field boundary hedges of the site and within small copses within or adjacent to the site.

There are no Public Rights of Way (PRoWs) across or adjacent to the site, although there is a network within 2km of the site including the Norfolk Coast Path National Trail and Peddars Way.

The site is classified as National Character Area 76: North West Norfolk, which broadly comprises an open, rolling, plateau arable area accentuated by the large geometric field pattern of the 18th Century, and offering frequent long views. On a more localised level, the King's Lynn and West Norfolk Borough Landscape Character Assessment classifies the site within Landscape Character Type (LCA) J2: Bircham and I5: Sedgeford. LCA J2 is dominated by a mixture of gently undulating arable farmland (relatively large fields with hedgerows and trees marking field boundaries) and parkland, interspersed with small settlements, and generally having open views across the arable farmland. LCA I5 is characterised by steep valley sides surrounding the Heacham River, leading up to a flat plateaux with large arable fields with low flailed or trimmed gappy hedgerows (with the site located in the latter), and having open and panoramic views framed by the topography of the land.

The site itself comprises fields which are predominantly enclosed by hedges, which are gappy and thin in places, and occasionally contain hedgerow trees.

The rural character of the land is interrupted by a covered reservoir and security fencing between the two southern fields and a mast located in the centre of the northern boundary.

The visibility of the site to the wider area is limited by topography and vegetation.

During construction a significant change of land use will occur, from agricultural fields to a solar farm which will result in a change to its visual character and introduce noise, movement and light associated with construction activities. These effects will however be tempered by the existing vegetation, topography and detractors in the environment as mentioned above.

During operation, beyond retaining and enhancing existing vegetation features on site, the ES states that the development will be designed to reinstate and create new planting that will integrate with, and make a positive contribution to, the characteristic landscape fabric and biodiversity of the site. This effect will increase as the vegetation matures, and therefore the impact of the development will lesson over time.

The ES concluded that the impact of the development on the Landscape Character Areas (LCAs) will be limited both during the construction and operational phases, as the site represents only a small proportion of the LCAs and there will be no impacts beyond the site. The ES concludes that the impact of the development on the LCAs will not be significant.

The ES also suggests that there are no noticeable effects on the setting of the AONB due primarily to the visual containment of the site, and therefore the impact of the development on the setting of the AONB is not significant. This has been confirmed by both Natural England **(the statutory consultee)** and the Norfolk Coast Partnership neither of whom object to the proposed development on the basis of its impact on the AONB (or any other designated area) although it is acknowledged that CPRE, a non-statutory consultee, do object on the basis of the impact of the development on the AONB.

Likewise, due to intervening vegetation and localised topography there is only limited intervisibility between the site and publicly accessible routes (PRoWs, public roads, etc.) The ES individually assessed these receptors and concluded that for all of them the development was deemed not to have a not significant visual impact at any point during the development's lifetime. This is confirmed by the PROW officer's comments in relation to the limited impact on Peddars Way.

The magnitude of the effect is likely to be higher during construction and year 1 of operation, when mitigation planting is new and relatively ineffectual, but as these effects are indirect, temporary, and short-term in the case of the construction, these ES concludes these effects are not significant.

Mitigation will primarily comprise the planting of vegetation to compensate loss and enhance screening, landscape fabric, and biodiversity, such as enhancing existing hedgerows through gapping up and thickening and planting new areas of woodland at the site boundaries.

Following mitigation, the ES suggests that the only significant residual effects will be on the landscape character of the site itself, due to the land use change from agricultural fields to a solar farm. This is inevitable and unavoidable, as clearly any change of use of any greenfield site to a solar development will result in a significant change to its character. However, the ES concludes that this level of effect should not be at the detriment to the enjoyment and appreciation of the wide landscape.

It is your officers view that the development would ensure the retention, enhancement, and long-term management of a substantial majority of existing characteristic landscape elements

that contribute to the landscape character e.g. hedgerows and trees. Enhancement and addition of elements such as wildflower and grass mix planting and a small area of field to the west to be managed for farmland birds will contribute positively to the character and biodiversity of the area into the long term.

Therefore, while the solar farm is reversible and will be decommissioned after c.40 years, the proposed mitigation could predominantly remain and hence those beneficial effects could continue long into the future even when the development is no longer present.

The visual containment of the site and existing vegetation that will be retained and reinforced as detailed on the Landscape Strategy Plan, that will be conditioned if permission is granted, together with its temporary nature, suggests that the visual impact of the proposed development would be localised and not sufficient enough to warrant refusal especially when balanced against the benefits of the development itself in terms of renewal energy.

It is therefore considered that the proposal complies with the NPPF in general and specifically to paragraphs 174 and 176 of the NPPF, Development Plan Policies CS06, CS07, CS08, CS12 and DM15, Snettisham Neighbourhood Plan Policy NP09 and King's Lynn & West Norfolk Borough Landscape Character Assessment, 2007.

Access, Transport and Traffic

In relation to access, transport and traffic, the ES was informed by assessments relating to:

- Traffic generation
- Accidents and safety
- Driver delay
- Pedestrian and cyclist amenity
- Severance (the perceived division that can occur within a community when it becomes separated by a major traffic artery)
- Noise and vibration
- Hazardous loads
- Pedestrian delay
- Visual effects and
- Air quality.

Access to the site will be via a new access off Fring Road which forms the southern boundary of the site.

Fring Road is a single-track road which passes from the C88 Road to the east to the C89 Sedgeford Road to the west. The road is less than 5m in width along most of its length. The ES states that swept path analysis was undertaken for this road which indicated that it is not possible for two opposing HGVs to pass each other, or for a car to pass an HGV. Therefore, this route is not suitable for two-way construction traffic.

In order to prevent the risk of obstruction of these routes due to construction traffic, it is proposed to implement a temporary one-way system on Fring Road between the C88 Road and the C89 Sedgeford Road as follows:

- Construction vehicles will approach the site access junction from the east via the C88 Road and travel westbound on Fring Road towards the site entrance
- Construction vehicles will egress the site onto Fring Road and turn right and travel westbound towards the C86 Bircham Road via the C89 Sedgeford Road and St Thomas's Lane

- A temporary overrun area will have to be constructed on the C88 Road to facilitate the left turn movement onto Fring Road.

Full details of the construction traffic route from the A148 are as follows:

- Exit the A148 onto the B1153 towards Great Bircham Village
- Continue on the B1153 northbound for 8km until reaching Gt Bircham
- Turn left onto C86 Bircham Road (Snettisham Rd) towards Snettisham Village
- Continue westbound for approximately 5km until its junction with the C88 Road
- Turn right onto the C88 Road and continue northbound for approximately 1.4km
- Turn left onto Fring Road
- Continue westbound for approximately 1.25km to site entrance.

All construction vehicles departing the site will travel westbound on Fring Road, turn left onto the C89 Sedgeford Road, turn left onto St Thomas Land and then left on the C86 Bircham Road before continuing eastbound towards Gt Bircham.

The Local Highway Authority has confirmed it is happy with the proposed route in terms of highway safety. Construction Management, including construction routes, will be conditioned if permission is granted.

Construction materials and equipment will be delivered to site using standard Heavy Goods Vehicles (HGVs) and Large Goods Vehicles (LGVs). The ES states that abnormal loads are not required for the construction of the development but that it is anticipated that, to assist in the unloading of the larger delivery vehicles and on-site assembly, a mobile crane will be required on site.

At the peak of construction, it is stated that 40 personnel will be on site each day. In order to minimise their impact on the local road network, the majority of staff will travel to and from the site in minibuses. It is expected that during the peak of construction that 4 minibuses will access the site each day. A further three or four vehicles for managerial staff and visitors can be expected each day.

It is estimated that a total of up to 5,956 two-way vehicle movements are expected to occur during construction, associated with the arrival and departure of staff and the delivery of construction materials.

The peak week of construction is expected to occur in month four or five where there are expected to be up to 1,491 two-way movements consisting of 1,296 car movements and 195 HGV movements.

The increase in overall traffic flow was identified to have one potentially significant effect on pedestrian amenity at several sensitive receptors along the route. In order to mitigate the potentially significant effect on pedestrian amenity, mitigation measures are recommended as follows:

- As far as reasonably possible deliveries would be scheduled outside of school opening and closing times; and
- Drivers of all delivery vehicles to be made aware during induction of the presence of schools, hospitals and other amenities within the settlements that construction traffic passes through.

The above measures are recommended along with a number of other traffic management procedures and mitigation measures including:

- Drivers of site and construction traffic vehicles will be aware of the approved route and contingency measures as explained during the induction period
- Drivers of HGVs will also be inducted, and good road practice will be made clear prior to any traffic movements
- Drivers of HGVs and other vehicles will be made aware that only the approved route is to be used and that access from non-approved routes is prohibited
- The contractor will be required to implement induction procedures and promote road safety and awareness and
- Where possible, arrangements will be made for site workers to share transport and minimise unnecessary traffic movements locally
- Temporary warning signage
- Banksmen will be present at the site access junction off Fring Road to ensure the road is not blocked with delivery vehicles and ensure vehicles associated with the development do not park on the public road
- Contingency Plan will be designed to provide additional safety in the event of unplanned circumstances such as transport delay or impedance of traffic through vehicle breakdown
- Delivery Times
- Wheel Washing
- Cleansing of public roads

The ES concludes that with the above mitigation measures being implemented for the duration of the construction period, the effect of increased traffic would be considered minor and not significant in terms of the EIA Regulations.

Traffic generated during the operation and maintenance of the development would be negligible in terms of existing traffic flows on the routes.

It is anticipated that a number of Temporary Traffic Regulation Orders (TTROs) will be required in order to implement the proposed measures. These will be developed by the Principal Contractor or their appointed traffic management sub-contractor and would be agreed in consultation with Norfolk County Council Highways department prior to the start of construction. However, these orders take place outside of the planning system.

The Local Highway Authority raise no objection to the development on the grounds of highway safety, subject to conditions.

It is therefore considered that the proposal complies with the NPPF in general and specifically to Paragraphs 104, 107, 111 and 113 and Development Plan Policy CS11.

Ecology

An Ecological Appraisal (EA) accompanied the application. It incorporates the results of a desk study, an Extended Phase 1 Habitat Survey as well as roosting bat and badger surveys.

Five statutory designations within 10km of the site were identified, the closest of which is Snettisham Carstone Quarry Site of Special Scientific Interest (SSSI) located approximately 3.1km from the Site. Owing to the nature of the development proposals, the designation features of the SSSI, and geographical separation, there is not considered to be a risk of direct or indirect effects arising. Natural England has confirmed this in their consultation response.

The EA concludes that the habitats on-site are predominantly habitats of only limited nature conservation value, comprising mainly of large intensively managed arable fields.

In terms of protected species, the site has potential to support locally important farmland breeding bird. The boundary habitats have the potential to support other notable and protected

species including commuting and foraging bats, badgers, brown hare, reptiles, amphibians and invertebrates.

The EA concludes that no further surveys or licenses are required and suggests general best practice measures in terms of developing the site. These measures, along with the Landscape Strategy that includes:

- retention of the vast majority of hedgerows, mature trees and woodland habitat
- gapping up of existing hedgerows
- new woodland and hedgerow planting
- wildflower and grass mix planting around the panels
- 2ha field to the west of the site set aside for managed farmland birds and
- Barn Owl Box
- 4x Bird Boxes
- 4x Bat Boxes
- 4x invertebrate features and
- mammal gates throughout the perimeter fencing, suggests that the development would not have a significant impact on protected species.

The EA also concludes that the enhancement of existing habitats, combined with new habitat creation, will deliver a variety of ecosystem services and deliver a biodiversity net gain which has been demonstrated by biodiversity impact assessment calculation.

It is proposed that such habitat creation, enhancement, and management measures as shown on the Landscape Strategy Plan are conditioned if permission is granted.

Following comments from the RSPB, an addendum was submitted to the Ecological Appraisal covering the issue of Curlews.

The Report states the following: ***The scope of this technical note is to outline the position of the Site in relation to the bird species Curlew (Numenius arquata) as a response to feedback received from the RSPB and Wash Wader Research Group (WWRC). The report considers the potential impacts of the proposal upon the species in the context of legislative and planning policy considerations.***

Curlew are a species of conservation concern listed as Priority Species and are on the Red List of Birds of Conservation Concern (BoCC5).

Baseline Conditions and Results:

- ***As noted within the Ecological Appraisal the majority of habitats within the Site are of negligible intrinsic value owing to the prevalence of arable habitat. However, the hedgerows, woodland edge and scattered trees are considered to be of local value. Furthermore, habitats or other features which are of negligible intrinsic value may also require consideration in relation to their importance in maintaining populations of protected and/or notable species (for example curlew as discussed within this report).***
- ***The arable field parcels are relatively small in size and enclosed by tall hedgerows and parcels of woodland. The site is situated on top of a hill and as such is drier habitat.***
- ***It is concluded that the habitat would not be considered optimum habitat for breeding or overwintering curlew, or be of significance to local populations, due to the lack of suitability of the onsite habitats, with the species preferring habitats with a more open landscape in proximity to damp habitats e.g., wet grasslands, mudflats and saltmarshes.***

- ***Although curlew will forage on intensively managed arable fields, due to the enclosed nature of the field parcels, this is likely to reduce the suitability for curlew utilising the Site due to the increased risk of predation. In addition, the intensive nature of management associated with the arable fields (for example through the application of pesticides) reduces the invertebrate prey available for this species, and therefore lowering the suitability of the habitat for curlew.***
- ***No curlew were recorded using the site during site visits by experienced ecologists. Additionally, the local data search (from 2019) did not return any records for curlew.***

Desk Study and Consultation

- ***Dersingham Bog is located approximately 5.6km south-west of the Site and is designated as a Special Area of Conservation (SAC), Ramsar Site and National Nature Reserve (NNR). Designated primarily for its Annex I habitats, Dersingham Bog is known to support protected/priority bird species including curlew.***
- ***The Wash is afforded the statutory designation of Special Protection Area (SPA), Ramsar Site and Site of Special Scientific Interest (SSSI) and is located approximately 6.4km west of the Site. This is an important area of estuarine mudflats, sandbanks and saltmarsh supporting nationally and internationally important numbers of numerous species including an average of 1% of the British curlew population.***
- ***The North Norfolk Coast situated approximately 9.8km north of the Site is listed as a Ramsar Site, SAC and SSSI. The costal habitats are continuous with the Wash and also known to support an average of 1.4% of the British curlew population.***

Assessment of Effects

- ***The Site is within 6km of important breeding and overwintering habitat for curlew. The habitat available within these designated areas provide high quality undeveloped costal habitat providing excellent opportunities (both breeding and foraging) for curlew. These habitats are able to support a significant number of breeding individuals and overwintering populations.***
- ***The Site does not support any of the notable habitat types found within the designated areas and due to spatial separation and the context of the proposed developments there is not considered to be a risk of significant direct or indirect effects upon these statutory designations.***
- ***Initial discussions with the WWRC and the RSPB have confirmed that the proposed development site is used by curlew on a sporadic basis throughout the winter months as incidental foraging habitat, although full records from the WWRC have not yet been received and fully analysed. It is assessed that although there is clearly potential for individual curlews to utilise the arable habitat, it is likely they will be deterred due to the enclosed nature of the landscape and the intensive management reducing the invertebrate prey available. It is considered highly unlikely that the Site would be used by breeding curlews and in its current management only as an additional (low significance) foraging resource over the winter months.***
- ***In addition, the site is ubiquitous with the immediate surrounding landscape, with similar sized fields under similar management, of equal (and in some cases greater) value to curlew. The farming tenant has provided anecdotal records of curlew using the Site, however, has noted that they are more regularly seen in the lower (and therefore wetter) areas of the farm, which is synonymous with their ecology.***
- ***Therefore, disturbance to the individuals that occasionally use the arable fields is highly unlikely to have a significant effect on the local curlew populations and the proposed development would result in a negligible effect on any curlew population present within the local area or any designated site.***

- ***Although no peer reviewed species-specific research has been published about the use of solar sites by curlew, curlew have been recorded using solar sites, and therefore enhancements that are proposed in the design layout include wildflower grassland within the buffers between the boundary hedgerows and the new solar arrays, and a similar shade tolerant mix planted under the solar arrays. This will create rough grassland, which will not be intensively managed (i.e., through the use of pesticides) which will encourage a range of invertebrate species, potentially increasing foraging opportunities in the future for use by curlew. In addition, the area within the blue line boundary to the west of the solar site is being managed to promote foraging potential for all farmland birds, which will include curlew.***

Conclusions

Due to the facts outlined above, EDP considers that the scheme is capable of compliant with relevant local and national planning policy for the conservation of the natural environment, specifically the curlew, a Priority Species.

The RSPB requested that the LPA discuss these finding with Natural England. Natural England have made no additional comments and therefore their original representation still stands, and it is considered that Natural England has no objection to the proposed development on the basis of its impact on protected sites.

It is therefore considered that the development accords with the NPPF in general and specifically to paragraphs 179 and 180 of the NPPF, Development Plan Policies CS08, CS12, DM19 and DM20 and Snettisham Neighbourhood Plan Policy NP09.

Historic Environment

An Archaeological and Heritage Assessment (AHA) was undertaken to evaluate the effects of the development on the archaeological and heritage assets within and adjacent to the site.

The AHA notes that the site does not contain any designated heritage assets and there are no Registered Battlefields, Registered Parks and Gardens, World Heritage Sites, scheduled monuments or conservation areas located within 1km of the Site.

The main designated heritage assets within 2km of the site are as follows:

- Sedgeford Hall and adjacent barn (Grade II) – 1.1km north
- Romano-British villa (Scheduled Monument) – 1.1km east
- Church of All Saints, Fring (Grade II*) – 1.2km east within Fring Conservation Area
- Fring Conservation Area – 1.1km west
- Sedgeford Conservation Area – 1.2km north
- Snettisham Conservation Area – 2.3km west.

The AHA confirms that none of the identified heritage assets would experience changes to their setting that would affect their significance. This is confirmed by Historic England and the LPA's Conservation Officer's lack of objection.

With regard to archaeology, a geophysical survey was undertaken within the site to inform the assessment. In summary, the survey detected anomalies which enabled identification for the potential for large enclosures which, based on their morphology, suggested later prehistoric / Romano-British agricultural activity. Little evidence for more extensive settlement activity was identified.

The AHA states that whilst there is archaeological potential at the site, the evidence would not suggest this to be of more than local/regional value.

In terms of direct impacts from the proposed works, below-ground impact would be limited and localised, and highly likely to result in minimal intrusions rather than wholesale loss of archaeological features or deposits. Any impacts would also be tempered by the fact that any features or deposits present would have already experienced a degree of truncation through ploughing. This is supported by the comments from the Historic Environment Services and their requirement for archaeological investigations to be secured by condition.

It is therefore considered that the development complies with the NPPF in general and specifically to paragraphs 199-208 of the NPPF and Development Plan Policies CS06, CS08, CS12, DM15 and DM20, Snettisham Neighbourhood Plan Policies NP08 and Sedgeford Neighbourhood Plan Policy E5.

Hydrology and Flood Risk

Whilst the site lies within Flood Zone 1, because it is greater than 1ha in size, a Flood Risk Assessment is required as per the requirements of the NPPF.

The FRA submitted with the application confirms that the site is located within Flood Zone 1 and that the risk of flooding form all potential sources is negligible.

Surface water and run-off at the site will be managed through the implementation of a surface water drainage regime. Given the limited amount of hardstanding proposed at ground level, superficial cover, runoff rates and infiltration potential will remain largely the same as the baseline. Permeable surfaces will be used for new access tracks and the proposed impermeable areas amount to 395m2, which makes up 0.09% of the total site area. Any increase in runoff rates associated with the impermeable areas will be therefore be negligible.

The solar PV arrays will have regular rainwater gaps to prevent water concentrating, and rainfall landing on the solar panels will drain through rainwater gaps and infiltrate into the ground beneath and between each row of panels. As mentioned above, the ground surrounding and between PV arrays will be planted with native species grassland and wildflower mix which will limit the potential of surface water to run across the surface and into the surrounding hydrological network in concentrated volumes.

Neither the IDB, LLFA or Environment Agency raise any objections to the findings of the FRA or surface water drainage regime as outlined.

It is therefore considered that the development will be safe for its lifetime and will not increase flood risk elsewhere and therefore complies with the NPPF in general and specifically to paragraphs 163 and 168 of the NPPF and Development Plan Polices CS01, CS08, CS12 and DM20.

Noise and Vibration

Solar development does not typically generate a significant amount of noise or vibration outside of the construction period. The only component of the development which has the potential to give rise to noise impacts at receptors during the operational period is the substation.

The battery storage container will be located well over 0.5 of a mile from the nearest dwelling. Given the distance from residential properties, any noise impact from the substation would be negligible and it is not anticipated that the development would give rise to noise of a volume

that would be audible from residential properties. This is supported by the lack of objection from the LPA's Community Safety and Neighbourhood Nuisance Team.

It is therefore considered that the development complies with the NPPF in general and specifically with paragraph 185 of the NPPF and Development Plan Polices CS08, DM15 and DM20.

Glint and Glare

The Design and Access Statement states that a Glint and Glare Study (GGS) was undertaken to assess the potential impact of the development on surrounding road users and dwellings, as well as aviation.

'Glint' is defined as a momentary flash of bright light, while 'Glare' is defined as a continuous source of bright light.

The GGS states that previous studies have measured the intensity of reflections from solar panels with respect to other naturally occurring and manmade surfaces. The results show that the reflections produced are of intensity similar to or less than those produced from still water and significantly less than reflections from glass and steel.

The GSS also suggests that glint and glare effects can only occur when the weather is clear and sunny. When a solar reflection towards a road user or resident is possible, the individual will also be looking in the direction of the sun. This means the sun and solar reflection will be visible simultaneously. The sun is a significantly brighter source of light than a reflection from a solar panel.

The GGS concluded that no significant impacts upon any of the assessed ground-based receptors have been identified.

The National Air Traffic Services (NARS) and Norwich Airport have confirmed they have no objection in relation to air safety.

It is therefore considered that the development complies with the NPPF and NPPG in general.

Crime and Disorder

There are no specific crime and disorder issues arising from this development.

Other Material Considerations

In relation to the only objection to the proposed development, by CPRE, your officers respond as follows:

- The proposed development is contrary to policy CS06 as it is outside of the development and contrary to policy CS10 as it is not farm diversification or appropriate in size and scale to the local area and would be detrimental to the local environment – this is covered in the main body of the report under Principle of Development and Landscape / Visual Amenity
- Loss of agricultural land – whilst the development will result in the loss of agricultural land it is Grade 3b land and the policy proposal in the SADMPP allows for this type of development outside of agricultural grades 1-3a
- The Local Plan Review should identify suitable areas for renewable and low carbon energy sources – this is not a material planning consideration in the determination of this application

- Such development would be better located on commercial roof-space and brownfield land – the application has to be determined as submitted
- The proposal does not recognise 'the intrinsic character and beauty of the countryside' – covered in main body of report under Landscape / Visual Amenity
- The proposed site would have a harmful impact on the setting of the Norfolk Coast AONB - covered in main body of report under Landscape / Visual Amenity.

CONCLUSION

The main considerations in the determination of this application are visual and landscape impacts, traffic and transportation impacts, loss of agricultural land, ecology and biodiversity, impacts on the historic environment, flood risk / hydrology, noise and vibration and glint and glare.

Such applications, that result in the loss of agricultural land and have the potential to have significant landscape and visual amenity and traffic and transportation impacts, require a balance to be made against the benefit of providing renewable energy.

It is noted that the agricultural land lost is grade 3b, and the policy on renewable energy proposals in the SADMPP allows for this type of development outside of agricultural grades 1-3a.

The Environmental Statement and other supporting information, together with comments from statutory consultees, suggests that the impacts of the development are limited and not significant and can be made acceptable by condition. Indeed, no objections have been received from statutory consultees, although the CPRE do object to the development.

It is of note that neither Natural England nor the Norfolk Coast Partnership raise objections in relation to the impact on the AONB, protected sites or other landscape designations. In relation to glint and glare, neither NATS nor Norwich Airport Safeguarding raises concerns or objections.

It is therefore considered, given the limited impacts of the proposed development, that are lessened by the fact that the development is reversible, and the short-term highway impacts that will be associated with the construction and decommissioning phases only, that the benefits of providing renewable energy outweigh any harm.

It is therefore recommended that this application be approved subject to the following conditions.

RECOMMENDATION

APPROVE subject to the imposition of the following condition(s):

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

1 Reason: To comply with Section 91 of the Town and Country Planning Act, 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act, 2004.

2 Condition The development hereby permitted shall be carried out in accordance with the following approved plans:

4173-REP-012	Site Location Plan
4173_DR_P_0001 Rev.-	Site Entrance Junction

edp6676_d020f	Landscape Strategy
edp6676_d021b (x3)	Cross Sections
RNR1003-100 Rev.N	PV Layout
RNR1003-180 Rev.-	Construction Compound Layout
RNR1003-200 Rev.A	PV Array Details
RNR1003-202 Rev.-	Inverter Elevations
RNR1003-**221** Rev.-	Customer Cabin Details
RNR1003-220 Rev.-	DNO Details
RNR1003-229 Rev.-	DC/DC Converter Details
RNR1003-230 Rev.-	Access Track Section Details
RNR1003-231 Rev.-	Fence & Gate Section Details
RNR1003-232 Rev.-	CCTV Pole Mounting Details
01SEDG-CDAMET-E1	Battery Container Details

2 Reason: For the avoidance of doubt and in the interests of proper planning.

3 Condition No development shall take place until an archaeological written scheme of investigation (WSI) has been submitted to and approved by the local planning authority in writing. The scheme shall include an assessment of significance and research questions; and

a) The programme and methodology of site investigation and recording
b) The programme for post investigation assessment
c) Provision to be made for analysis of the site investigation and recording
d) Provision to be made for publication and dissemination of the analysis and records of the site investigation
e) Provision to be made for archive deposition of the analysis and records of the site investigation and
f) Nomination of a competent person or persons/organization to undertake the works set out within the written scheme of investigation.

3 Reason: To safeguard archaeological interests in accordance with the principles of the NPPF. This needs to be a pre-commencement condition given the potential impact upon archaeological assets during groundworks/construction.

4 Condition: No development shall take place other than in accordance with the written scheme of investigation approved under condition 3 and any addenda to that WSI covering subsequent phases of mitigation.

4 Reason: To safeguard archaeological interests in accordance with the principles of the NPPF.

5 Condition: The development shall not be put into first use until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the archaeological written scheme of investigation approved under condition 3 and the provision to be made for analysis, publication and dissemination of results and archive deposition has been secured.

5 Reason: To safeguard archaeological interests in accordance with the principles of the NPPF.

6 Condition: Prior to the installation of any battery storage facility:

1. A Fire Safety Risk Reduction and Mitigation Strategy (FSRRMS) shall be submitted to and agreed in writing by the Local Planning Authority. The FSRRMS shall include

the design, construction, installation, operation and decommissioning phases of the project. The agreed FSRRMS shall be complied with during all stages of the development.

2. A Fire Safety Emergency Response Plan (FSERP) shall be submitted to and agreed in writing by the Local Planning Authority. The FSERP shall include site specific information regarding hazards, locations of hydrants and electronic isolators, measures to be taken during an incident and responses required post incident. The FSERP shall also include regular onsite training and familiarisation for operational fire service personnel. The site shall be construction, operated and decommissioned in accordance with the agreed plan.

3. A Fire and Emergency Transport Strategy (FETS) shall be submitted to and agreed in writing by the Local Planning Authority. The FETS shall identify the construction and decommissioning road network and produce a strategy to mitigate conflict and prevent an increase in the potential number of traffic incidents along those routes. The construction and decommissioning phases of the development shall be carried out in accordance with the agreed strategy.

4. Details of automatic detection systems shall be submitted to and agreed in writing by the Local Planning Authority. The details shall include an automatic fire, heat, smoke and gas detection system linked to an external alarm receiving centre and include redundancy in the design to provide multiple layers of protection. The systems must be capable of detecting off-gases in low concentrations, provide an early warning of an impending thermal runaway and trigger shutdown systems to electrically isolate the individual or bank / rack of battery cells and thus avoid thermal runaway occurring in a single cell. The development shall be constructed in accordance with the approved details and shall thereafter be maintained and retained as agreed.

5. Details of automatic fire suppression systems shall be submitted to and approved in writing by the LPA. The development shall be constructed in accordance with the approved details and shall thereafter be maintained and retained as agreed.

6. Details of ventilation and air conditioning systems to maintain the temperature of batteries and charging equipment within their recommended safe operating range shall be submitted to and agreed in writing by the Local Planning Authority. The development shall be constructed in accordance with the approved details and shall thereafter be maintained and retained as agreed.

7. Details shall be submitted to and agreed in writing by the Local Planning Authority of design features that will contain and restrict the spread of fire through the use of fire-resistant materials and adequate separation between elements of the BESS (battery storage.) The design must include a safe access route for fire appliances to manoeuvre within the site including turning circles. An alternative access point and approach route should be provided prior to any battery installation to enable appliances to approach from an up-wind direction if necessary. The development shall be constructed in accordance with the approved details and shall thereafter be retained and maintained as agreed.

6 Reason: In order to minimise the impacts in the event of an emergency in accordance with the NPPF.

7 Condition: **Prior to the installation of any battery storage facility** a scheme for the provision and maintenance of fire hydrants shall be implemented in accordance with a

scheme that has previously been submitted to and approved in writing by the Local Planning Authority. The scheme shall provide for an external fire hydrant in close proximity to the BESS (battery storage) containers with a water supply capable of providing a minimum of 1900 litres/min for at least 2 hours, and additional hydrants within the site. The development shall be constructed in accordance with the approved scheme and shall thereafter be maintained and retained as agreed.

7 Reason: In order to ensure that water supplies are available in the event of an emergency in accordance with the NPPF.

8 Condition: For the duration of the construction and decommissioning periods of the development hereby permitted all traffic associated with the construction / decommissioning of the development will comply with the Construction Traffic Management Plan, use only the 'Construction Traffic Access Route' as contained within the revised Outline Construction Traffic Management Plan dated July 2022 (Technical Appendix A5.1 to the ES), and park within the approved Construction Compound unless otherwise agreed in writing with the Local Planning Authority.

8 Reason: In the interests of maintaining highway efficiency and safety in accordance with the NPPF and Development Plan.

9 Condition: **Prior to the commencement** of the development hereby permitted the vehicular access as shown on approved drawing no: 4173_DR_P_0001 Rev.- shall be provided with a minimum width of 4.5 metres and provided with kerb radii of 10 metres in accordance with the Norfolk County Council industrial access construction specification for the first 5 metres as measured back from the near channel edge of the adjacent carriageway. Arrangement shall be made for surface water drainage to be intercepted and disposed of separately so that it does not discharge from or onto the highway carriageway.

9 Reason: To ensure construction of a satisfactory access and to avoid carriage of extraneous material or surface water from or onto the highway in the interests of highway safety and traffic movement in accordance with the NPPF and Development Plan. **This needs to be a precommencement condition given that the access will be used for construction traffic.**

10 Condition: No deliveries shall be taken at or despatched from the site outside the hours of 08:00 and 18:00 on weekdays and 09:00 and 13:00 on Saturdays. There shall be no deliveries at any time on Sundays, Bank or Public Holidays.

10 Reason: In order that the Local Planning Authority may retain control over the development in the interests of the amenities of the locality in accordance with the NPPF.

11 Condition: Construction or development work on site shall only be carried out between the hours of 07:30 and 18:00 weekdays, and 09:00 - 13:00 on Saturdays, with no work allowed on Sundays and Bank/Public Holidays.

11 Reason: In order that the Local Planning Authority may retain control over the development in the interests of the amenities of the locality in accordance with the NPPF.

12 Condition: Prior to the installation of any external lighting associated with the operational development of the development hereby permitted, a detailed outdoor lighting scheme shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include details of the type of lights, the orientation / angle of the luminaries, the spacing and height of the lighting columns, the extent/ levels of illumination over the

site and on adjacent land and the measures to contain light within the curtilage of the site. The scheme shall be implemented in accordance with approved scheme and thereafter maintained and retained as agreed.

12 Reason: In the interests of minimising light pollution and to safeguard the amenities of the locality in accordance with the NPPF and Development Plan.

13 Condition: Prior to the first use of the development hereby permitted, **or within the first planting season**, all landscape works shall be carried out in full accordance with the Landscape Strategy Plan (Figure 4.7), drawing no.edp6676_d020f including ecological enhancements. Any trees or plants that within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of similar size and species as those originally planted, unless the Local Planning Authority gives written approval to any variation.

13 Reason: To ensure that the work is carried out within a reasonable period in accordance with the NPPF.

14 Condition: No existing trees, shrubs or hedges that are shown on approved drawing no.edp6676_d020f to be retained, other than those shown to be necessary to be removed to enable the access as approved on drawing no.4173_DR_P_001 Rev.-, shall be felled, uprooted, willfully damaged or destroyed, cut back in any way or removed without the prior written approval of the Local Planning Authority. Any trees, shrubs or hedges removed without such approval or that die or become severely damaged or seriously diseased within 5 years from the completion of the development hereby permitted shall be replaced with trees, shrubs or hedge plants of a similar size and species in the next available planting season, unless the Local Planning Authority gives written approval to any variation.

14 Reason: To ensure that the development is compatible with the amenities of the locality in accordance with the NPPF.

15 Condition: The development hereby permitted shall be carried out in full accordance with the Mitigation contained within Chapter 5 of the Ecological Appraisal that accompanied the application (Ref. edp6676_r003f, dated Feb 2022 produced by The Environmental Dimension Partnership Ltd (EDP).)

15 Reason: In the interests of ecology and biodiversity in accordance with the NPPF and Development Plan.

16 Condition: The development shall be carried out in accordance with the mitigation measures set out in the Environmental Statement unless provided for in any other conditions attached to this planning permission.

16 Reason: To ensure that the development takes place substantially in accordance with the principles and parameters contained with the Environmental Statement.

17 Condition: **Prior to the commencement of the development hereby permitted a Construction and Environmental Management Plan (CEMP) shall be submitted to and agreed in writing by the Local Planning Authority. The development shall be carried out in full accordance with the agreed CEMP.**

17 Reason: **In the interests of the amenity of the locality, ecology and biodiversity in accordance with the NPPF and Development Plan. This needs to be a pre-commencement condition given the mitigating nature of CEMP.**

18 Condition: Within six months of the cessation of electricity generation by the solar facility hereby permitted, all above ground infrastructure shall be dismantled and removed from the site. The site shall be restored to its condition prior to the implementation of the planning permission or in line with a scheme, the details of which shall be submitted to and be approved in writing by the Local Planning Authority no later than three months following the cessation of power production.

18 Reason: To ensure satisfactory restoration of the site in accordance with the NPPF and Development Plan.