



Hastings

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Section 1: Introduction

1. Introduction

- 1.1 This report presents the results of a Landscape and Visual Impact Assessment (LVIA) in relation to a proposed new development at Waterfields, Wickhambreaux, Kent, CT3 1RW. The proposals are for part two, part single storey extensions to the rear of the existing house and installation of a green energy system (comprising a ground source heat pump and solar PV array) within Waterfields Meadow which is adjacent to the property to the east (Site). The latter is designed to ensure the house is energy independent and carbon neutral in line with national targets to counter the effects of climate change.
- 1.2 The proposed scheme has benefited from pre-application engagement with Canterbury City Council (CCC) (ref: PRE/21/00118) with feedback indicating support for the proposed extensions to the rear of the dwelling, but seeking more information in relation to the potential impact of the proposed solar array located within Waterfields Meadow. The LVIA is therefore focussed on the impact of the proposed solar array.
- 1.3 This report has been prepared by fellendorf perkins design in collaboration with Sarah Singleton CMLI. It describes the planning context, proposed methodology and the baseline conditions with respect to the landscape character and visual amenity for the Site and its surroundings. It then assesses potential impacts on landscape character, visual amenity and views, as a result of the proposed solar array, and proposes measures, as appropriate, to mitigate any impacts.
- 1.4 Waterfields was constructed in 1997/1998 and has been sympathetically designed. The dwellings garden borders the meadow which was acquired in 2010, and has been subject to change. The meadow has been restored with pernicious weeds removed, native hedgerows and trees planted, and orchard and riparian vegetation established. Additionally, works to naturalise the river alignment and depth and the reinstatement of eroded embankments were completed by Kentish Stour Countryside Partnership in conjunction with the Environment Agency (EA). New boundary and river bank fencing have been installed and low intensity grazing and hay cutting have been introduced, which have contributed to enhancing the landscape character, and visual amenity, as well as improving biodiversity and flood resilience.

- 1.5 The LVIA baseline studies have been used to assist in positioning the proposed solar array within the Site in order to limit visibility and the other effects of the solar array on the landscape character and landscape features.
- 1.6 The optimal location of the proposed solar array from a visibility and generation efficiency perspective, impinged on the 5 m exclusion zone of the overhead High Voltage (HV) power lines which traverse across the whole Site. This required an approach to be made to the Distribution Network Operator (DNO) to underground the overhead power lines and remove the associated electrical infrastructure from the Site.
- 1.7 UK Power Networks have agreed to undertake the work to remove of the HV overhead power lines, poles, pole mounted transformers and other infrastructure, which subject to planning consent, will allow the proposed green energy system to be installed and will at the same time enhance the visual amenity and character of the Site.
- 1.8 The proposed solar array will consist of ground screws and a removable aluminium frame, with all black non-reflective panels that have a lifespan of 25 30 years. The proposed array layout design also incorporates some minor earthshaping and planting to further integrate the propose solar array in the landscape.

Section 2: Planning context

2. Planning context

2.1 The following section looks at planning policies, strategies and designations that are of particular relevance to the assessment of landscape and visual context of the Site.

2.2 National policy

National Planning Policy Framework (2021)

- 2.2.1 The National Planning Policy Framework (NPPF) is the current National Planning document in England and was first published on 27th March 2012, and subsequently updated on 24th July 2018, 19th February 2019 and 20th July 2021. This sets out the government's planning policies for England and how these are expected to be applied and is supported by government published Planning Practice Guidance (PPG).
- 2.2.2 In accordance with Chapter 2, paragraphs 7 and 10, there is a strong presumption in favour of sustainable development within the NPPF. In addition, Paragraph 8c of the NPPF notes that a key part of achieving sustainable development is "mitigating and adapting to climate change, including moving to a low carbon economy".
- 2.2.3 With regards to low carbon and renewable energy, the NPPF states in Paragraph 152 that the planning system should "support the transition to a low carbon future in a changing climate" and "support renewable and low carbon energy and associated infrastructure".
- 2.2.4 Paragraph 158 states that applicants are not required to demonstrate the overall need for renewable or low carbon energy and that Local Planning Authorities (LPAs) should "recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions." LPAs are directed to approve applications if impacts are (or can be made) acceptable.
- 2.2.5 Enhancement aims to improve the character and quality of the landscape. It may take many forms, including improved land management or creation of new landscapes or features. Paragraph 174 states that "Planning policies and decisions should contribute to and enhance the natural and local environment by, 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)".

Planning Practice Guidance (PPG): Landscape sensitivity

- 2.2.6 Renewable & Low Carbon Energy PPG includes advice to local councils on developing policies for renewable energy in their local plans. Paragraph 4 states that "Local planning authorities are responsible for renewable and low carbon energy development of 50 megawatts or less installed capacity (under the Town and Country Planning Act 1990)."
- 2.2.7 Paragraph 25 states that "where a planning application is required, factors to bear in mind include: the importance of siting systems in situations where they can collect the most energy from the sun; need for sufficient area of solar modules to produce the required energy output from the system; the effect on a protected area such as an Area of Outstanding Natural Beauty or other designated areas; the colour and appearance of the modules, particularly if not a standard design".

2.3 Local policy

2.3.1 The Committee on Climate Change (Committee) says that LPAs have a crucial role in contributing to emissions reductions and helping the UK meet its carbon budgets targets. Local Authorities are well placed to drive and influence emissions reductions in their wider areas through the services they deliver, their role as social landlords, trusted community leaders and major employers, and their regulatory and strategic functions. Local authorities have powers or influence over roughly a third of emissions in their local areas.

Outline

- 2.3.2 Local authorities have increasingly ambitious in their plans to tackle climate change. As of October 2020, over 300 local authorities, including Canterbury City Council (CCC) have declared climate emergencies, and many have developed plans to deliver against ambitious Net Zero targets. Local authorities have a range of existing levers that can be used to deliver local action that reduces emissions and prepares local areas to a changing climate.
- 2.3.3 These levers alone are unlikely to be sufficient to deliver local authorities' Net Zero ambitions, due to gaps in powers,

- policy and funding barriers, and a lack of capacity and skills at a local level.
- 2.3.4 Alongside the Sixth Carbon Budget, the Committee are publishing an accompanying report on the role of local authorities in delivering the UK's Net Zero ambition. The report aims to provide a framework for aligning climate action at the local level with the Committee's pathways for the UK, as well as recommendations for local, regional and national Governments aiming to remove barriers to delivering local climate action in the UK.

Key recommendations

- The UK Government and local authorities share a common goal to deliver Net Zero.
- The Sixth Carbon Budget can only be achieved if Government, regional agencies and local authorities work seamlessly together.
- More than half of the emissions cuts needed rely on people and businesses taking up low-carbon solutions - decisions that are made at a local and individual level. Many of these decisions depend on having supporting infrastructure and systems in place. Local authorities have powers or influence over roughly a third of emissions in their local areas.
- Top-down policies go some way to delivering change, but can achieve a far greater impact if they are focused through local knowledge and networks.
- Four key things are needed to achieve this vision of collaborative delivery:
 - Framework: An agreed framework for delivery for Net Zero incorporating local and national climate action
 - Financing: Appropriate long-term financing to support local authorities in delivering Net Zero
 - Flexibility: Local operational flexibility around how local areas address climate change
 - Facilitation: coherent policy and powers for the facilitation of delivery.

Section 2: Planning context

2.4 Canterbury District Local Plan

2.4.1 The Canterbury District Local Plan was adopted on 13th July 2017 and sets out CCC's vision for the area from 2011 to 2031.

Policy SP 1

2.4.2 Sustainable Development states that the Council will take a positive approach that reflects the presumption of sustainable development when assessing development proposals in line with the NPPF.

Policy CC 1

2.4.3 Renewable and Low Carbon Energy Production Development Proposals for the utilisation, distribution and development of renewable and low-carbon sources of energy, including freestanding installations, will be encouraged in appropriate locations. In considering such proposals, the Council will give significant weight to their environmental, community and economic benefits, public health and safety and impacts on biodiversity, air quality, landscape character, the historic environment and residential amenity of the surrounding area and the protection of the best and most versatile agricultural land, and restoration plans.

Policy DBE 2 Renewable Energy

- 2.4.4 In determining applications for the development of renewables, the City Council will expect applicants to:
 - Avoid any significant adverse impacts (visual, noise and amenity impacts);
 - Have given weight to the environmental, social and economic benefits;
 - Have minimised the visual impacts by providing the optimum layout and design of the development including screening;
 - Ensure that the development will not have a significant adverse effect on the amenity of local residents;
 - Ensure that the installation would not have an adverse cumulative impact on the environment;

- Show there is no adverse impact on heritage assets (Policy HE1);
- Demonstrate that there is no significant impact on the landscape setting, habitats, biodiversity, wildlife or designations such as the AONB, AHLV, Ramsar, SACs or SPAs.
- Ensure protection of the best and most versatile agricultural land unless it is demonstrated that it is necessary and no alternative poor quality land is available.

2.5 Landscape designations

National and Local designations

2.5.1 The site is not covered by any National nor Local landscape designations.



Ickham, Wickhambreaux and Seaton conservation area with listed buildings indicated in red

2.6 Cultural Heritage

2.6.1 The Site lies within the Ickham, Wickhambreaux and Seaton Conservation Area (IWSCA).

Policy HE8 Heritage Assets in Conservation Area states that;

"The Council has a presumption in favour of the conservation of heritage assets. The more significant the asset, the greater the presumption in favour of conservation and the greater the justification required for its alteration. Proposals involving substantial harm to heritage assets within a conservation area will normally be refused unless it can be shown that the harm or loss is necessary to achieve substantial public benefits. If the proposal will lead to less than substantial harm to the significance of a heritage asset, or the building, or the element affected does not contribute to the significance of the area, the harm will be weighed against the public benefits of the proposal."

IWSCA Appraisal

2.6.2 The Conservation Appraisal was produced by CCC and made available on the Council website and the offices in January 2011. It was adopted as a material consideration. The purpose of the Appraisal is to provide a firm basis upon which proposals for the development within the IWSCA can be assessed, through defining those key elements that contribute to the special historic and architectural character.

3. Assessment methodology

- 3.1 The methodology employed to undertake this LVIA follows the guidance provided in 'Guidelines for Landscape and Visual Impact Assessment' 3rd edition, 2013, Landscape Institute and Institute of Environmental Management and Assessment (IEMA).
 - "Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of and the effects of change resulting from development on both landscape as an environmental resource in its own right and on people's views and visual amenity."
- 3.2 It should be noted that the above guidance does not provide a prescriptive LVIA methodology and recommends that the specific methodology applied to a project is based on professional judgement and experience, is clear and transparent, and is appropriate to the particular development proposal and the landscape in which it is located. For this Site the LVIA has contributed to the appraisal of the Site at an early stage, allowing it to be used iteratively to shape development proposals and contributing to the 'landscape-led' approach that has permeated the approach to the entire project.
- 3.3 The definition of 'landscape' takes account of the European Landscape Convention (ELC), 2000, which regards landscape as a resource in its own right, resulting from the interplay of its physical, natural and cultural components:
 - "Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."
- 3.4 The ELC makes it clear that particular attention should be paid to landscape because of its importance to individuals, communities and public bodies in that it provides:
 - a shared resource which is important in its own right as a public good;

- an environment for flora and fauna;
- the setting for day to day lives for living, working and recreation:
- opportunities for aesthetic enjoyment;
- a sense of place and a sense of history; which in turn can contribute to individual, local, national and European identity;
- continuity with the past through its relative permanence and its role in acting as a cultural record of the past;
- a source of memories and associations, which in turn may contribute to well being;
- inspiration for learning, as well as for art and other forms of creativity.'
- 3.5 It is also recognised that the landscape is changing and evolving as a result of a range of pressures, and will continue to do so, creating new landscapes. There is a need to accommodate such changes in a sustainable manner and a LVIA has an important contribution to make in achieving this.
- 3.6 Visual amenity and views are derived from the relationship of people to the landscape and the assessment of the effects of development on views and visual amenity is therefore a related but different consideration in LVIA. LVIA therefore consists of two separate, but interrelated components:
 - 'assessment of landscape effects: assessing effects on the landscape as a resource in its own right;
 - assessment of visual effects: assessing effects on specific views and on the general visual amenity experienced by people.'
- 3.7 This report summarises the baseline information for the Site and has been used as one of the evidence reports to underpin the proposed development at Waterfields Meadow. Impacts of the proposals are assessed against this baseline. In the assessment, 'impacts' are defined as actions being taken and 'effects' are the changes resulting from those actions.

Assessment of the nature of effects

- 3.8 In determining the nature of effects on the landscape or visual receptors, judgements are made concerning the nature of the receptor (summarised as sensitivity) and the nature of the effects (summarised as magnitude):
- 3.9 Sensitivity is assessed as High, Medium or Low according to:
 - the susceptibility of the receptor to the type of change arising from the specific proposal, and
 - the value attached to the receptor.
- 3.10 Magnitude is assessed as High, Medium, Low or Negligible according to:
 - the size and scale of the impact;
 - the geographical extent of the area to be affected; and
 - the duration of the impact and its reversibility.
- 3.11 To determine the nature of the effect the sensitivity of the receptor and magnitude of impact are considered in combination and conclusions drawn as to whether the overall effect is likely to be adverse or beneficial; negligible, minor, moderate or major. Further mitigation measures may be proposed, beyond those already incorporated within the project proposal, in order to further reduce or compensate for any remaining adverse effects.

Assessment of landscape effects

- 3.12 For the purposes of this assessment the extent of the area to be assessed for landscape effects has been taken as the Site itself, the Landscape Character Area (LCA) within which the proposed development Site lies, and adjoining character areas where the character might be affected by the proposed development, directly or indirectly.
- 3.13 Existing landscape character assessments were used in order to establish the key characteristics of the landscape character of the Site and its surroundings, to gain an understanding of the historic and present landscape context and the degree to which the Site reflects the characteristics that define the character areas. This understanding also assists in informing what is appropriate landscape mitigation and how character could be enhanced.
- 3.14 Published National, County and District landscape character assessments are available.

Landscape sensitivity

- To predict the sensitivity of the landscape receptor, judgements are made on its susceptibility to change of the type proposed and the value of the landscape receptor (Guidelines for Landscape and Visual Impact Assessment GLVIA, Paragraph 5.39). Current guidance (GLVIA 5.42) indicates that assessments of intrinsic sensitivity, often found in Landscape Character Assessments or Capacity Studies, cannot be used to reliably inform assessment of the susceptibility to change of a landscape, if they are carried out without reference to any particular type of development. Landscape effects in LVIA are particular to the specific landscape and nature of the proposed development.
- 3.16 The susceptibility of the landscape depends on a range of criteria includina:
 - Pattern, complexity and physical susceptibility to change

 a simple, monotonous and/or degraded landscape
 with common or indistinct features and lack of variation
 in landscape pattern is likely to be less susceptible to
 change than a strongly patterned/textured and distinctive
 landscape with high value features which are essentially
 - visual susceptibility a very enclosed landscape which contains or strongly filters views and with an absence of visual landmarks and a lack of intervisibility with designated landscapes is likely to be less susceptible to change than an open or exposed landscape with extensive intervisibility, limited visual filtering or enclosure. Landscapes with high susceptibility may also have prominent visual landmarks and intervisibility with, for example, designated landscapes.
 - experiential susceptibility a landscape with prominent visual or noise intrusion, close to large scale built development/infrastructure or with light pollution is likely to be less susceptible to change than a tranquil, wild or

- remote landscape or where there are few light sources and dark skies.
- 3.17 The value of the landscape is usually expressed in designations or local policy but also to relates to the status of components of the landscape (TPOs, important hedgerows etc) and any special contributions made by such components.
- 3.18 Landscape value is assessed according to whether the landscape reflects a range of criteria with high value landscapes strongly reflecting most of the high value criteria and low value landscapes poorly reflecting these criteria:
 - designations ranging from undesignated landscapes (low value) to those with national designations such as National Parks or AONB (high value);
 - quality and condition of the landscape based on whether the pattern and features that typically make up the landscape are relatively intact as well as their condition;
 - scenic quality related to sense of place as well as aesthetic qualities;
 - whether the landscape contains rare landscape types or features or are important examples of a particular character or feature;
 - the conservation interest including cultural heritage and nature conservation attributes that add to the value of the landscape;
 - recreational value especially where the landscape is important to its enjoyment;
 - perceptual qualities such as wildness and tranquillity and where there is a lack of noticeable or intrusive detractors;
 - cultural associations for example whether a landscape has been recorded in paintings or in literature.
- 3.19 Overall landscape sensitivity is assessed as High, Medium or Low.

Magnitude of landscape impacts

- 3.20 To predict the magnitude of impacts on landscape receptors the impact is assessed in terms of:
 - the size or scale of impact the extent of landscape elements that will be lost and how these effects change the key characteristics of the landscape, which make it distinctive including changes in perceptual and aesthetic qualities;
 - the geographical extent whether at Site level, the immediate setting, at the level of the character area or in a wider area;
 - duration whether the impacts are likely to be short (0-5 years), medium (5-10 years) or long term (10-25 years) and are reversible or irreversible.
- The assessment considers the effects of development on the individual components of the landscape (landscape receptors), and whether the development will result in loss of any key components that are characteristic of the landscape or introduce new components, whether characteristic or discordant. It then assesses the effects that these changes will have on the overall landscape character, its quality and condition.
- 3.22 The magnitude of change for landscape receptors is assessed as High, Medium, Low and Negligible with the criteria range as follows:
 - High where there is major loss/addition of landscape features or unusual, distinctive or rare features characteristic of the landscape; addition of conspicuous new features which may alter the character of the landscape to a high degree. In general introduction of uncharacteristic or intrusive features would result in adverse impacts whilst introduction of characteristic features would be beneficial:
 - Negligible where there is barely discernible loss or addition of landscape features and in the overall landscape character.
- 3.23 The decision as to whether the effects are positive, negative or neutral is based on professional judgement and will depend on

- the degree to which the proposal fits with existing character but also the contribution that the proposed development may make to the landscape, usually due to enhancement or good design, even if this contrasts with existing character.
- 3.24 In order to determine the overall landscape effects of the proposals judgements on the sensitivity of the receptor and magnitude of impacts are combined and an assessment of the landscape effect is made using the terminology of Major, Moderate, Minor or Negligible. Landscape effects can be adverse, beneficial or neutral.
- 3.25 Landscape effects are likely to be assessed as Major adverse where:
 - there is permanent, extensive loss of mature or diverse landscape elements which are characteristic of the landscape character of the area;
 - there is loss of mature and characteristic features which would change the quality of a valued, rare or distinctive landscape;
 - the development is at considerable variance with the landform, scale and pattern of the landscape or its setting;
 - mitigation is required to reduce/offset or compensate for these adverse effects.

Assessment of visual effects

- 3.26 For the purposes of this assessment the extent of the area to be assessed for visual effects has been identified, first through desk based study and then by fieldwork to verify the extent of visibility on the ground taking into account the topography, vegetation cover and network of roads and footpaths, which contribute to likely visibility of the Site. Comprehensive fieldwork was considered to be a more useful method for establishing actual public views.
- Viewpoints have been selected which represent views that can be obtained by people living and working in the area, people using the landscape for recreational purposes such a walking, formal recreation or visiting promoted landscapes or attractions, and people passing through the area on roads.

- 3.28 The majority of selected viewpoints are from public places such as public footpaths and roads. Two public footpaths cross the Site (CB184 major and minor). The minor footpath is located towards the northern part of the Site and runs parallel with the boundary adjacent to Seaton Road. The major footpath runs diagonally through the centre of the Site in a west-east direction. In order to understand the visibility of the Site from other sensitive receptors, such as residents whose properties back on to the Site, viewpoints have been selected to consider theses views where necessary. As is normal practice, it is views from principal ground floor living rooms that are considered to be of greatest importance, and has been a primary factor in determining the location of the proposed solar array.
- The potential viewpoints were ground checked on Site and photographs were taken. These include viewpoints that had views of the Site and potentially of the proposed solar array, but also viewpoints where there are no views of the Site and are unlikely to be impacted by development. The viewpoints selected are intended to be representative, not exhaustive.
- 3.30 The initial fieldwork to assess views was undertaken in August 2021 on a sunny day in the summer to help understand seasonal variation in screening afforded by vegetation and in March 2022 on a sunny day when the trees were not in leaf, thus reflecting 'worst case' in terms of any screening afforded by vegetation. Photographs were taken at each viewpoint using a Cannon G7X digital camera set at 25 mm equivalent focal length. This focal length was chosen as Light, Colour and Vision, Hunt et al., Chapman and Hall, Ltd, London, 1968, page 49 for 'standard European adult's' states that: "Image focal length of the eye = 22.3 mm. "The assessment therefore reflects the effect that screening vegetation has on visual amenity when the trees are bare. Comments may also be made on the seasonal variation in views, where relevant. The views are reproduced in this report as annotated panoramas with visual representations shown in Section 5 to assist in understanding the overall effects.

Visual sensitivity

- 3.31 Visual receptors whose views or visual amenity may be affected by the proposed development have differing sensitivities to change arising from development which is a function of the occupation or activity of people experiencing the view at a particular location and, as a result, the extent to which their attention or interest may be focussed on the views and the visual amenity. Visual receptors most susceptible to change (and therefore with highest sensitivity) are considered to be:
 - residents at home;
 - residents or visitors engaged in recreation whose interest or attention is likely to be focussed on the landscape, such as walkers on public rights of way particularly at scenic viewpoints or in valued landscapes;
 - visitors to heritage assets or attractions where views to the surrounding area are an important contributor to the experience;
 - communities where the views contribute to the landscape setting enjoyed by residents;
 - travel along scenic routes where awareness of views is likely to be particularly high.
- 3.32 Visual receptors likely to be less sensitive to change include for example:
 - people engaged in outdoor sport or recreation which does not include or depend on appreciation of views;
 - people at their place of work whose attention is generally focussed on their work activities and not on their surroundings or where the setting is not important to the quality of their working life;
 - people travelling along roads where the main purpose is associated with routine day-to-day activities such as commuting, school runs, shopping or where the rate of travel means that the time exposed to the view is very limited.

Magnitude of Visual Impacts

- 3.33 The magnitude of visual impact will depend on the size or scale of the proposed development, its geographical extent, duration and reversibility:
 - scale of change within the view with respect to loss or addition of features, changes in composition and proportion of the view affected;
 - degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements that are characteristic in terms of form, mass, scale, line, height, colour and texture
 - the nature of the view of the proposed development depending on whether it is glimpsed, partial or in full view.
 - duration and reversibility related to whether the impacts are short, medium or long-term. Growth of vegetation where it is important for screening will be a factor in determining the duration of visual effects.
- 3.34 Magnitude is assessed as High, Medium, Low or Negligible typically according to the following criteria:
 - High the proposed development becomes the dominant feature in the view, close to the receptor;
 - Medium the proposed development is noticeable within a proportion of the view;
 - Low the proposed development is perceptible within the view but generally doesn't affect the overall balance of the view;
 - Negligible proposed development is barely discernible or is not visible within the view.

Changes can be adverse or beneficial depending on whether the change is discordant or intrusive or contributes positively to the composition of the view.

Assessment of Visual Effects

- 3.35 Visual effects are assessed by combining the judgements on sensitivity with the magnitude of impacts. Visual effects are likely to be greater where::
 - people are particularly sensitive to changes in views and visual amenity;
 - development introduces large-scale, non-characteristic or discordant and intrusive elements into people's views and/or,
 - views that are affected are from recognised viewpoints or scenic routes especially in valued landscapes.

Visual effects are assessed as Negligible, Minor, Moderate or Major and can be beneficial or adverse.

Section 4: Baseline



Site layout at Waterfields Meadow

Baseline

4.1 Site description and context

- The Site comprises of approximately 8 acres of land, including 4.1.1 the garden associated with the residential property, and is located on the south-east edge of Wickhambreaux, bordered by Seaton Road to the north-east, and includes the river frontage of The Little Stour to the south-west. The Site is comprised of a small orchard, two meadows (Dew Pond Meadow and Lime Tree Meadow) currently used for haying and sheep grazing as well as The Little Stour wildlife site LB7. The Site is actively managed and over the last 10 years the owners have made significant improvements in collaboration with the Environment Agency (EA) and other interested parties. A group of houses lies to the west of the Site, and to the east is the small hamlet of Seaton, which is dominated by Seaton Mill and the associated old mill boiler room, now known as Millend. The mill is located on The Little Stour, and was used to grind India rubber in the 19th century.
- 4.1.2 Two public footpaths (PRoW CB184 major and minor) cross the Lime Tree Meadow connecting Wickhambreaux with Seaton. The Site is accessed from Seaton Road via two field gates. There is one internal field gate from the Lime Tree Meadow providing access to the Dew Pond Meadow.
- The Waterfields Meadow lies within the IWSCA. 4.1.3
- The proposed solar array would be situated in the Dew Pond 4.1.4 Meadow, and is roughly positioned just off centre to the north-west.
- The Site has been planted with hedges, hedgerows and trees along Seaton Road, the main PRoW, The Little Stour and in the orchard. It is estimated that over 250 trees and in excess of 430 m of hedges including traditional hedgerows have been planted over the last decade.

Local Wildlife Site

The Site benefited from the intervention of the EA which facilitated the repair of leaking river embankments and raising low sections of the bank along the northern embankment of The Little Stour at the end of 2016. These actions were taken to protect the lower areas of Wickhambreaux and Seaton from risk of flooding as the Site lies in Flood Zone 3a.



Seaton Road seen from Seaton looking towards Wickhambreaux with The



The group of housing to the west of Waterfields Meadow with The Little Stour river in the foreground



The Local Wildlife Site LB7 due to works undertaken by the land owners in collaboration with the Environment Agency



Millend with Seaton Mill in the hamlet of Seaton lying to the east of Waterfields



View from the Dew Pond towards Seaton across the grazing land



The Little Stour river looking south towards Ickham with the St John's Church in the background

4.1.7 The Little Stour river corridor was fenced to prevent cattle grazing and polluting The Little Stour as well as to prevent the cattle from degrading the newly repaired banks. The profile of the river bed was also reshaped, which entailed increasing the depth of the river in some sections to allow for a richer oxygen water content for the benefit of the riparian water life including trout.

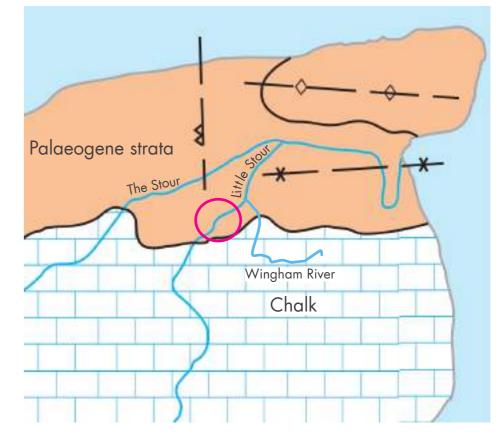
4.2 Geology and soils

- 4.2.1 Little Stour Marshes to the south east of Wickhambreaux are an extensive area of alluvial deposits. These mostly overlay a bedrock of Thanet Sand Formation and the white chalk subgroup.
- 4.2.2 The loamy clayey soil of the marshes are naturally wet due to the high groundwater.
- 4.2.3 The Site consists of Grade 3b agricultural land.

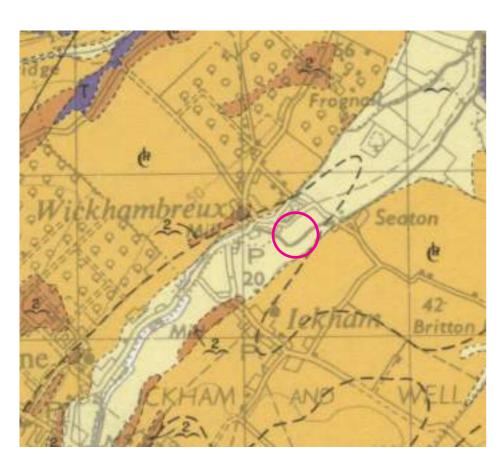
4.3 Topography and hydrology

4.3.1 The land sits in The Little Stour valley which is relatively flat

- and is approximately 5 m above sea level.
- 4.3.2 The Thanet Sand Formation confines the groundwater within the Chalk and is the major aquifer in east Kent.
- 4.3.3 The Little Stour is a major tributary of the Great Stour. The upper reaches are a chalk stream fed by springs which flow when the water table is sufficiently high to supply them, and which fade when the water table falls. The river ceases to be a chalk stream after its confluence with the Wingham River. The very lowest reaches of The Little Stour are tidal as it flows into the Great Stour at Pluck's Gutter.
- 4.3.4 The Little Stour has been affected by human activity. The river's history of milling has left a legacy of straightened river channels, levees and weirs, which prevent fish migration.
- 4.3.5 The northern section of The Little Stour river, within which the Site lies, flows in an area of Palaeogene strata. As the chalk dips north beneath Palaeogene strata and becomes confined, transmissivity and storage decrease markedly, although at the feather edge of these deposits pumping tests have proved



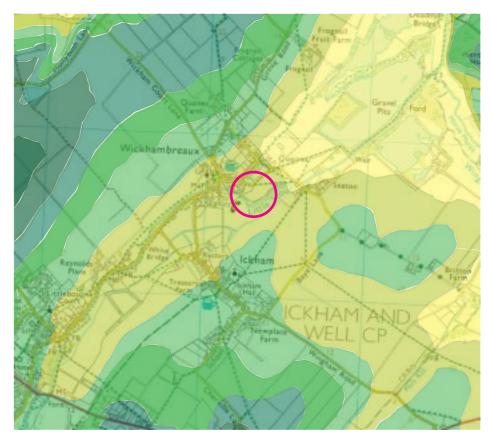
The Site lies on the feathered edge of the chalk structure and The Little Stour is defined as a chalk stream before the confluence with the Wingham River.



Geology map showing Alluvium covering the Site highlighted in pink.



The Agricultural Land Classification MAP shows that the Site is Grade 3b.



The topography map shows that the Site sits in the relatively flat section of The Little Stour valley.

high values for transmissivity. As one of theses high values was obtained at Littlebourne, thought to be due to enhanced dissolution and enlargement of fractures caused by increased chemically aggressive recharge due to surface run-off from the Palaeogene deposits. The Little Stour is a good quality small river with a strong chalk river influence along this section. Chalk rivers are a UK BAP priority habitat, and although the habitat is greatly influenced by a series of mill structures, the river provides an important wildlife corridor through this area.

Vegetation and biodiversity

Arboricultural Survey

- An arboricultural survey was undertaken in September 2021, by fellendorf perkins design. The tree survey plan documents the on-site trees and hedges as well as the trees adjacent to the Site. The trees were surveyed on the Lime Tree Meadow, the Dew Pond Meadow, The Little Stour meadow, in the orchard and the gardens adjoining the Site at Seaton Row Cottages and along Seaton Road in Wickhambreaux and at Millend in Seaton. The Site tree survey is used as a baseline assessment of arboricultural features, so that the design of the proposed solar array takes proper account of the above and below ground constraints associated with existing trees, tree belts and hedgerows, on, and adjacent to the Site.
- In total 246 individual trees, 2 areas of fruit/nut trees and 8 hedgerows/hedges were identified growing on or immediately adjacent to the Site. Tree species recorded include Common Lime, Hornbeam, English Oak, Ash, Hawthorn, Field Maple, Willow, Silver Birch, Bird Cherry, Black Alder, Wild Pear, various fruit/nut trees, Yew, Pine and Holly with occasional Horse Chestnut, Poplar and June Berry.
- Most of the trees and hedgerows have been planted in the past decade by the owners, to enrich the landscape and create biodiversity and are subject to ongoing management by the land owners. None of the trees or hedges are affected by the proposed development and there are no trees with Tree Preservation Orders (TPO) on Site.



The tree survey plan shows three groups of mature trees one on the Lime Tree Meadow, the second one on the dew pond meadow adjacent to The little Stour and the third one along the boundary of housing in Wickhambreaux. The remainder of trees are newly planted trees and hedges which have been planted over the last decade.

4.5 Ecology

- 4.5.1 Habitat and protected species surveys have been undertaken by GES Ecology Consultants and this is reported within the Preliminary Ecological Appraisal which is submitted with this planning application.
- 4.5.2 The habitat survey confirms that the grasslands on Site are semi-improved with scattered trees, hedgerow and standing water. The fields are grazed by sheep or cut for a hay crop, so that the ecological interest is reduced. There is a dew pond with some standing water on Site.
- 4.5.3 No Great Crested Newts were recorded in the standing water.
 A common lizard was recorded on a brash pile.
- 4.5.4 No nesting birds were recorded. There is no evidence of dormouse and badger setts.
- 4.5.5 The survey identified no other evidence or potential for protected or notable species within the Site or potential zone of influence.
- 4.5.6 There are no statutory designated sites of nature conservation interest within the Site. There are two statutory designated sites within 2km of the Site, Preston Marshes Site of Special Scientific Interest (SSSI) and Stodmarsh SSSI/Special Area of Conservation (SAC)/Special Protection Area (SPA)/National Nature Reserve (NNR)/Ramsar site.
- 4.5.7 Five non-statutory designated Local Wildlife Sites (LWS) were identified within 2km of the Site according to MAGIC and Kent and Medway Biological Records Centre (KMBRC) as follows;
 - Seaton Pits and Wenderton Manor Pits LWS,
 - Chislet Marshes, Sarre Penn and Preston Marshes LWS,
 - Littlebourne Stream LWS,
 - Swanton aerial site, Littlebourne LWS and
 - Stodmarsh LWS
- 4.5.8 The Ecologist confirms that: "Due to the temporary nature of the works within the Site, and their small, localised scale, it is not considered that there will be any impact on nearby designated Sites."



Preston Marshes Site of Special Scientific Interest and Stodmarsh SSSI/Special Area of Conservation (SAC)/Special Protection Area (SPA)/National Nature Reserve (NNR)/Ramsar Site are situated to the north of the Site



Semi-improved grassland and newly planted scattered trees on site looking from the Dew Pond to the north over the Dew Pond Meadow - Source: GES Report



Semi-improved grassland and scattered trees on site in the Orchard looking north towards Seaton Road - Source: GES Report



Waterbody filled with reeds and rushes in the foreground on site at the Dew Pond looking towards the Orchard - Source: GES Report

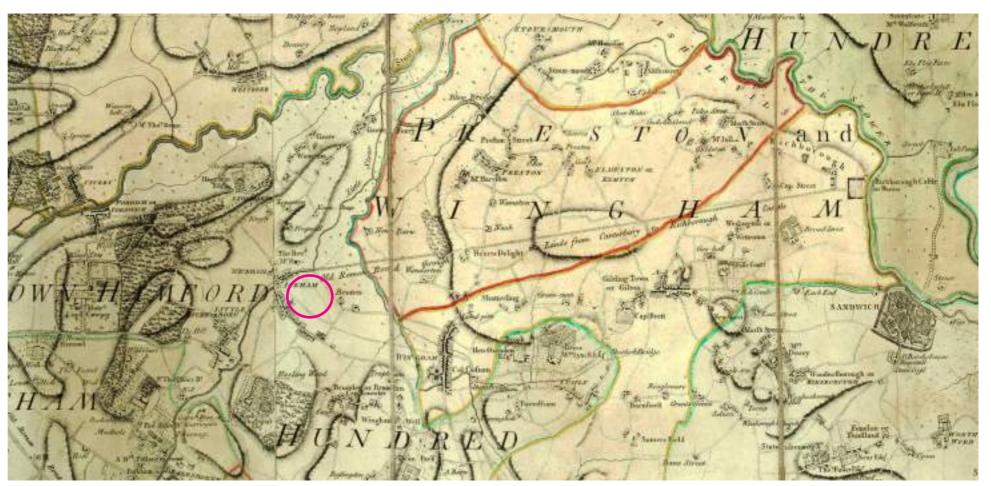
Section 4: Baseline



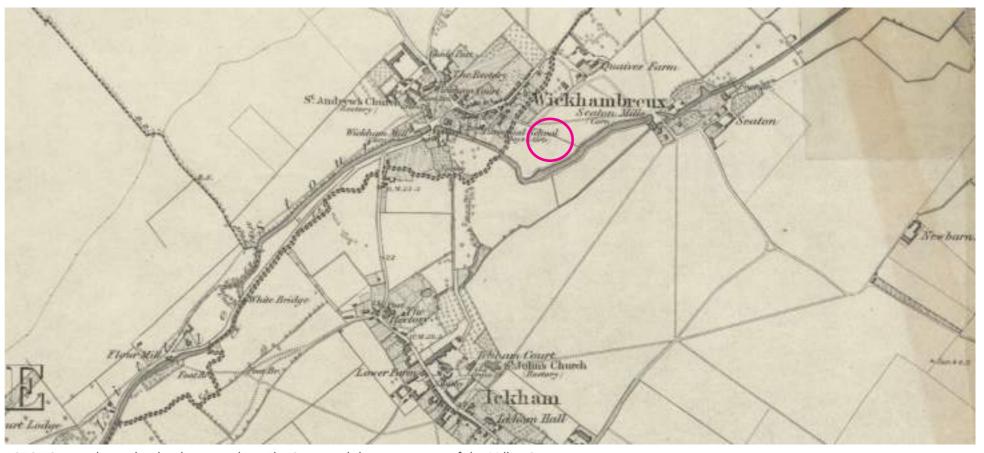
The Phase 1 habitat survey plan by GES (Preliminary Ecological Appraisal August 2021) shows the semi improved grasslands, water body and hedgerows.

4.6 Historical context

- 4.6.1 During the prehistoric period (c 2500BC AD 43) evidence for the form, settlement and use of the local landscape is limited. Millennia of cultivation have remoulded earlier topographic features and reduced prehistoric cultural monuments to subsoil level. Air photographs have proved positions of five ring-ditches to the west of Wickhambreaux and are likely to been constructed during the early Bronze Age.
- 4.6.2 The layout and character of settlement along The Little Stour valley during the Roman period (c AD 43 450) is better understood. The most striking feature is the former alignment of the Roman road originally connecting Richborough and Canterbury, which passes close to the Site.
- 4.6.3 The principal activity carried out in the area appears to have been metalworking. Anglo-Saxon and Medieval (c 700-1100).
- 4.6.4 Wickhambreaux is first recorded in 948 as Wicham. There is archaeological evidence however for earlier sixth- to eighth-century settlement at Wickhambreaux. A group of three Anglo-Saxon pottery vessels found near Wickhambreaux church may be related to burials sited adjacent to the Bronze Age burial mounds.
- 4.6.5 There is little material evidence for early medieval settlement in the area, the historical sources show that both hamlets were well established by the mid-late Saxon period. By the later eleventh century the church of St Andrew and adjacent home or court farm, Wickham Court, formed the manorial focus of the medieval agrarian settlement.
- 4.6.6 From the late seventeenth century settlement was extended at Wickhambreaux along the east side of Grove Road. Further expansion of Wickhambreaux occurred from the mid eighteenth century with ribbon development of cottages in individual plots along both sides of The Street.
- 4.6.7 The early 19th century saw the rebuilding of water mills in Wickhambreaux and Seaton as the period of industrialisation in Britain intensified the use and efficiency of older milling infrastructure as technology advanced.



Andrews, John Dury and William Herbert. A Topographical Map of the County of Kent, 1769. The line of the Roman Road is clearly visible and the original course of The Little Stour



1872-73 map shows the development along The Street and the construction of the Mill in Seaton



1946 - the aerial photograph shows the levees along The Little Stour, no trees or hedges on the field nor electrical transformers or HV lines, but there is a hedgerow along the south-eastern field boundary



1951 - the aerial photograph shows the faint line of HV lines, poles and transformers in the north-western corner of the Site



1959 - the aerial photograph shows the expansion of Wickhambreaux along The List and Grove Road as well as the large areas for fruit tree farming which have now been replaced with poly-tunnel farming or disappeared altogether. There are also large areas given up to market farming/allotments.



1976 - the aerial photograph shows the allotment north of Seaton Road changed into a chicken farm, intensive cattle farming on the fields and the hedgerow on the south-eastern boundary increased in size. The HV poles are clearly visible traversing the Site as well as the telecommunication posts on the north-eastern section.

- 4.6.8 The early part of the 20th century did not see any expansion, however during the mid to late century new houses have been built along The List, Grove Road, Wickham Road (Spicer's Place & Mill Hamlet) and Seaton Road as well as infrastructure works such as electricity and telecommunications have been installed above ground on the Site.
- 4.6.9 No new houses or any infrastructure works nor smart technologies have been built or installed in Wickhambreaux during the early part of the 21st century.



1985 - the aerial photograph shows the chicken farm north of Seaton Road changed into a playing field, the Site completely fenced and the willow trees along the Little Stour.

Landscape character

"Landscape character is what makes an area unique. It is defined as "a distinct, recognisable and consistent pattern of elements, be it natural (soil, landform) and/or human (for example settlement and development) in the landscape that makes one landscape different from another, rather than better or worse" (Natural England, 2012)

National character assessment

- England is sub-divided into 159 National Character Areas (NCA) providing a picture of the differences in landscape character at the national scale. The Site lies in NCA 113: North Kent Plain.
- In summarising the character of NCA 113, Natural England states that:

"The North Kent Plain National Character Area (NCA) is the strip of land between the Thames Estuary to the north and the chalk of the Kent Downs to the south. The area is open, low and gently undulating. It is a very productive agricultural area with predominantly high-quality, fertile loam soils characterised by arable use. Traditional orchards, soft fruits and other horticultural crops exist in central and eastern areas giving rise to the use of the title 'Garden of England'. it is generally an open landscape: characteristic shelterbelts occur within the fruit-growing areas, but the agricultural land is mostly devoid of hedgerows."

The key characteristics of NCA 113 are:

- The area's geology is dominated by Palaeogene clays and sands, underlain by the Chalk.
- Geologically a chalk outlier and historically an island separated from the mainland by a sea channel - Thanet forms a discrete and distinct area that is characterised by its unity of land use, arising from the high quality fertile soils developed in thin drift deposits over chalk.
- Large arable/horticultural fields with regular patterns and rectangular shapes predominating, and a sparse hedgerow pattern.

- Orchards and horticultural crops characterise central and eastern areas, and are often enclosed by poplar or alder shelterbelts and scattered small woodlands.
- Other semi-natural habitats include fragments of neutral, calcareous and acid grassland, and also heathland.
- The area has rich evidence of human activity from the Palaeolithic period. Key heritage assets include Roman Sites at Canterbury, Reculver and Richborough; the Historic Dockyard at Chatham; military remains along the coast; and historic parks and buildings.
- Large settlements and urban infrastructure (including lines of pylons) are often visually dominant in the landscape, with significant development around Greater London and the Medway Towns, as well as around towns further east and along the coast. Major rail and road links connect the towns with London.

The Site, although impoverished by past uses, exhibits some of the characteristics of the National Character area including the sparse hedgerow pattern, areas enclosed by poplar or alder, grassland and infrastructure (overhead power lines and pole mounted transformers) being visually dominant in the landscape.

County Character Assessment

The Kent County Landscape Character Assessment, 2004, includes the Site within the The Stour Valley. The following descriptions are relevant to the Little Stour:

> "The Stour Valley incorporates the flat-bottomed floodplain of the Great Stour and Little Stour rivers. The Little Stour drains a small area from Wickhambreaux and Wingham down to its outlet on the marsh of West Stourmouth.

> The valley is well contained as the fertile, well cultivated sides rise resolutely on either side of the flat valley floor.

> The course of the river winds through wet, marshy and reed fringed land which has scrub and dense riparian vegetation along the river margins. Agriculturally, it is classified as poor, the alluvial soils being generally waterlogged with some peat.

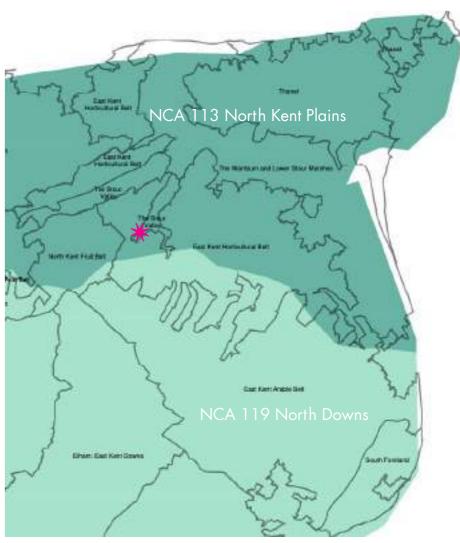
> Wetland pasture is still much in evidence although larger arable fields sweep up the valley sides, such as near

Trenleypark Wood. The pasture still exists in small pockets either side of the meandering river, where it is drained by a close network of regular ditches. A variety of scrub vegetation and trees, including poplars and willows, line the ditches and enclose small spaces within the valley.

Both rivers are characterised by the old watermills which can be found along their courses. At Wickhambreaux, the tall weatherboarded mill house provides a striking feature at the edge of the picturesque village.

The much shorter course of The Little Stour runs through a banked canalised section through the tiny hamlet of Seaton. The river was diverted during the 18th century to serve a purpose-built mill and now follows a shallow depression through wetland pasture.

Gravel extraction has been a major influence on the valley."



The Site lies in Kent National Character Assessment area 113 - the North Kent Plains and in the Landscape Character Assessment area: The Stour Valley

- 4.7.4 The key characteristics of the Stour Valley are:
 - Flat valley floor, widening towards the river mouth.
 - Valley sides are steep, dropping in height as the valley widens towards the river mouth.
 - Wetland pasture drained by well vegetated ditches and dykes; small scale, well enclosed field pattern.
 - Marshland, colourful reeds and grasses, lakes and open water. Rich and diverse habitats.
 - Settlement on river at edge of floodplain and linear settlement surrounding the valley.
 - Watermills.

The Site lies on a well contained flat bottomed valley floor with a banked canalised section of river between Wickhambreaux and Seaton.

- 4.7.5 The condition of the Stour Valley area is considered as moderate, with a flat valley floor and coherent pastoral landscape, but interrupted by linear settlements along the road and around existing hills. Visual detractors include transport and power corridors and the urban edge. The river is the basis for a strong ecological corridor with a surrounding network of ditches, and some unfarmed marsh, wetlands and open water. The extent of tree cover is poor, although there is some plantation woodland tree lines along water courses are generally mature. Historic cores to enlarged settlements, vernacular details and historic water mills are noticeable within more recent development. Built form has a moderate positive impact.
- 4.7.6 Landscape enhancements that have been undertaken by the owners over that last decade have been in line with the landscape actions noted within this Assessment, notably:
 - Conserve ditches and the pattern of sinuous pastures.
 - Conserve the strong ecological corridor of the river, wetlands and ditch network, and enhance it with sensitive management.

- Conserve areas of non-intensive use within farmland.
- Restore managed tree cover in and around areas of settlement.
- Conserve and restore tree lines along water courses.

District Character Assessment

- 4.7.7 The Canterbury Landscape Character Assessment and Biodiversity Appraisal (LUC, 2020) locates the Site within the character area F5: The Little Stour, which includes the following key characteristics:
 - Low lying and waterlogged, flat alluvial flood plain of the Little Stour river.
 - Rectangular fields comprising mainly pasture with areas of grazing marsh.
 - Large man-made lakes formed as a result of gravel extraction.
 - Wetland habitats associated with the river corridor providing biodiversity interest, including the Preston Marshes SSSI, Wenderton Manor Pits LWS and part of the Chislet Marshes, Sarre Penn and Preston Marshes LWS.
 - Distinctive riparian landscape character borne from historic functions.
 - Little Stour valley located between small picturesque historic villages and buildings of unique character, encompassing part of the Ickham - Wickhambreaux -Seaton Conservation Area.
 - Narrow winding lanes frequently cross the river.
 - Views restricted by large areas of mature vegetation, although occasionally long across valley floor and areas of open water.
- 4.7.8 Key Sensitivities and Value are summarised as follows, however the list is not exhaustive as only key sensitivities and values applicable to the Site have been listed:
 - Little Stour as a priority habitat chalk river, provides an

- important biodiversity corridor containing priority habitats including coastal and floodplain grazing marsh and blocks of deciduous woodland.
- Large man-made lakes forming part of the Seaton Pits and Wenderton Manor Pits LWS, being important for wetland birds.
- The small, historic village of Wickhambreaux and its distinctive local vernacular of Georgian and Victorian red brick, thatched roofs and flint – a Conservation Area – with many historic buildings including the Grade I listed Church of St Andrew's.
- Rural and historic setting to the Ickham Wickhambreaux
 Seaton and Littlebourne Conservation Areas.
- Traditional features of the river corridor including overgrown mill ponds and mill races, tall weather boarded mill houses, contributing towards the sense of tranquillity.
- Perceptual tranquil qualities of the valley.
- Long distance views from PRoW including towards the Church of St John in Ickham.



The Canterbury Landscape Character Assessment and Biodiversity Appraisal locates the Site within the character area F5 - The Little Stour

4.7.9 Landscape guidelines and key habitat opportunities identified within the district Landscape Character Assessment include:

Landscape Management

- Protect the landscape's valued semi-natural habitats including at The Preston Marshes SSSI, the Seaton Pits and Wenderton Manor Pits LWS and at the Chislet Marshes, Sarre Penn and Preston Marshes LWS.
- Conserve, restore and enhance marsh grazing and wetland habitats which follow the corridor of the Little Stour river. Encourage management practices to conserve the mosaic of habitats including low intensity grazing of semi-natural grassland.
- Enhance and create further areas of species-rich floodplain grassland as part of the wider county requirements.
- Conserve the traditional field pattern of rivers, dykes and ditches by avoiding unsympathetic culverting of water courses.
- Increase the extent of native deciduous woodland, using locally occurring native species in order to link to existing woodland. Seek to avoid the introduction of coniferous boundaries/shelterbelts.

Zoomed in view of the Church of St John's in Ickham from Seaton Road shown in the The Canterbury Landscape Character Assessment and Biodiversity Appraisal under character area F5, The Little Stour, finalised in 2020

- Implement habitat opportunities identified within the Biodiversity Opportunity Area (BOA) including the creation of wet woodland, fertile soils woodland, grazing marsh, river floodplain, wetland, neutral grassland.
- Create and implement a long term management plan for invasive species across the river catchment. Excavation and removal techniques should be favoured, where this is not possible an appropriate herbicide treatment is recommended.

Development Management

- Conserve the local distinctiveness and strong vernacular of historic buildings, particularly within the Wickhambreaux and Littlebourne Conservation Areas, maintaining their rural character by resisting proposals for new development.
- Conserve the undeveloped character and tranquillity of the landscape by avoiding the introduction of large scale or incongruous elements, retaining long views towards the Church of St John in Ickham.
- Protect the valued recreational use of the landscape, seeking opportunities to further enhance opportunities for access and enjoyment around the lakes, while retaining the perceptual tranquil qualities that they offer.



View of the Church of St John's in Ickham from PRoW CB184 minor in March 2022



2021 View of the Church of St John's in Ickham from Seaton Road at the PRoW



View of the Church of St John's in Ickham from Seaton Road partially obscured by overgrown hedgerows in July 2021

4.7.10 The ongoing management of the Site by the owners has included extensive indigenous re-vegetation along The Little Stour, allowing for different regimes of grazing and grass cutting, reduction of pernicious weeds/invasive species with careful spot treatment and reestablishment of hedgerows.

Local Landscape designations

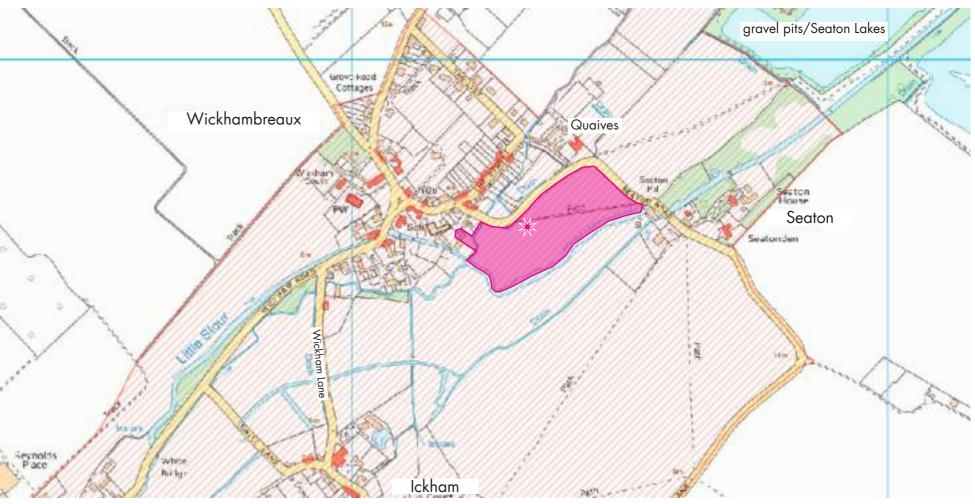
4.7.11 There are no local landscape designations but the Site is within the Conservation Area as it forms part of the historic setting of the village.

Heritage designations

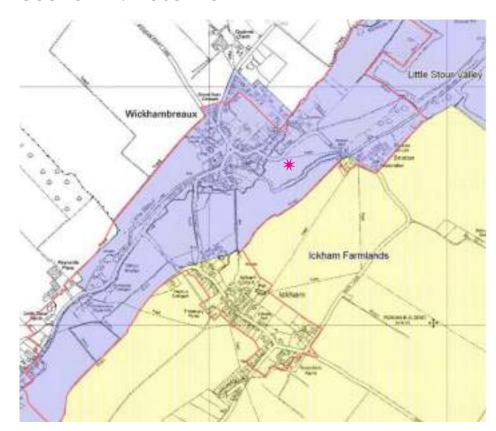
- 4.7.12 The Site lies within the IWSCA. The conservation area was originally two small conservation areas tightly drawn around the built environs of Ickham (designated 26.05.1972) and Wickhambreaux (designated 29.08.1969). In response to proposals for gravel extraction at Ickham and Seaton these conservation areas were amalgamated and extended to include land along The Little Stour and around Seaton. The designation was approved on 7 July 1989 to protect the villages and their historic landscape setting.
- 4.7.13 Key characteristic for the IWSCA are detailed as the most significant features -
 - rural villages that are well integrated into the landscape;
 - Little Stour meandering through flat topography:
 - a mix of 17th to 19th century older buildings with little modern infill;
 - open rural landscape setting with fields, vistas and low boundary hedges and pockets of woodland;
 - large established trees and high hedges with the settlements that provide visual enclosure;
 - linear form of built development including old farm and manor buildings;
 - use of a mixed palette of materials but a wide range of building styles and types;
 - narrow soft edged roads lined with hedgerows on most routes into the villages;

- mill buildings and churches that punctuate the skyline due to the flat landscape;
- traditional water meadows and fields adjacent to the river;
- natural wildlife habitat and corridor value of the Little Stour and associated vegetation.
- 4.7.14 The Site is managed by grazing and is cut as hay meadow as is traditional for water meadows. Waterfields Meadow is situated adjacent to the river and enclosed with large established trees and high hedges at the village/hamlet fringes and within the river valley.
- 4.7.15 Through the landscape management over the last decade the Little Stour in the Site area has become a natural wildlife habitat with associated vegetation. The Little Stour valley with its grazing/haying pastures terminates to the north at the

- gravel pits, now fishing lakes, beyond is the wooded Preston Hill. To the south The Little Stour valley is visually interrupted along Wickham Lane by an established avenue of trees and tall hedgerows.
- 4.7.16 The Site sits in the flat river valley whilst the churches are typically built on the highest points of the natural landform, whereas the mills sit at river level.
- 4.7.17 The listed houses in Seaton are surrounded by large runs of established trees as are those along The Street in Wickhambreaux which face towards The Street, and whose back roof lines and long gardens are aligned towards the fields. The Quaives faces east towards Seaton and is situated behind a tall hedge and evergreen trees.
- 4.7.18 The conservation area includes two landscape areas; 1) Little Stour Valley and 2) Ickham Farmlands. It should be noted that the map does not show the full extent of the conservation area.



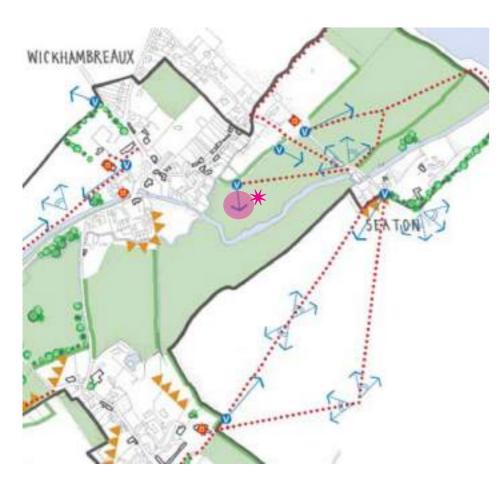
The Site shown in the Ickham, Wickhambreaux and Seaton conservation area with listed buildings indicated in red



Landscape types of the Ickham, Wickhambreaux and Seaton conservation area



View looking east towards Seaton on Seaton Road with mature trees and



Landscape features have changed with additional planting/growth of trees and hedgerows



View looking north-east towards Seaton with new tree planting and an established hedge row along the public right of way CB184

- 4.7.19 Key characteristics of The Little Stour Valley closest to the Site are outlined in the Conservation Appraisal in a discussion on views from Seaton and is defined as The Little Stour and water surrounds:
 - water meadows and associated trees along the banks of The Little Stour
 - large established trees and hedgerows
 - rural views and vistas, crossed by public footpaths
 - a tightly formed built environment amongst trees.
- 4.7.20 The landscape features defining The Little Stour Valley between Wickhambreaux and Seaton have changed over the last 11 years since the Conservation Appraisal was adopted. Tree and hedge planting as well as the introduction of different grass varieties and lower intensity grazing has created a more biodiverse landscape. The view point at the Wickhambreaux stile of CB184, highlighted in pink now has very limited views to the South.

Site Landscape Character

- 4.7.21 The landscape character of the Site can be further broken down into Local Landscape Character Areas (LLCAs). The Site has a PRoW running diagonally through the centre in a eastwest direction which is fenced and planted with a hedgerow.
 - Orchard Area no public access

The level south western corner of the Site (Orchard) is bordered by housing and gardens with mature trees and hedges on three sides. The Orchard area consists of newly planted fruit and nut trees, semi improved grassland and cut grass areas. It also has a large pole mounted transformer in the northern corner of the LLCA and a HV overhead line network. The area is well fenced/hedged and not overlooked apart from a few upstairs bedroom windows of the adjacent cottages. This LLCA is of low sensitivity as it forms a good buffer for the existing housing due to relatively good enclosure and lack of intervisibility with the north-eastern section of the grazing field (Dew Pond Meadow). The only significant landscape features are the mature trees along the boundaries and within adjacent properties which are important features from both

a landscape and ecological perspective. The only access is afforded from Seaton Road to the Site via a locked field gate.

• Haying Field

The undulating northern field (Lime Tree Meadow) is crossed by the PRoW CB184 major, along the southern boundary and contained by fencing and a hedgerow as well as the PRoW CB184 minor on the north-eastern boundary which is less used due to the proximity of Seaton Road running parallel to it. The Site is fenced and has some hedgerows planted alongside the chestnut post and rail fencing on the western and northern boundary. It can also be accessed by a locked field gate at the apex of the northern fence line. The LLCA has an enclosed character resembling a parkland like meadow mainly due to the hayed grassland, mature trees and high hedge structure along the north-western boundary and a group of large Ash trees. Perceptually this fields has a sense of place due to dense tree coverage at the Wickhambreaux village and Seaton hamlet as well as the line of trees along Seaton Road. The HV overhead lines, poles and a pole mounted air break switch disconnector as well as telecommunication wires that cross the field are an overhead feature, and below are various augmentation boreholes with one being capped above ground with a steel borehole lining. There are long views from the minor PRoW and some from the northern sections of Seaton Road towards the Church of St John in Ickham which are affected by the overhead infrastructure in the foreground. This LLCA is attributed medium to low sensitivity in keeping with the District character area assessment.

• Grazing Field - no public access

The south-western field (Dew Pond Meadow) whilst enjoying the long view south towards the St John Church tower in Ickham and west towards the grazing pasture from the advantage point of the raised riverbank, is dominated by the HV overhead lines and posts which traverse across the whole field. A group of willow trees adjacent to The Little Stour is a prominent feature. The hedgerow adjacent to the PRoW CB184 major, mature trees on the fringes of Wickhambreaux and Seaton contains any views northwards, westwards and eastwards and this area is only visible from the PRoW CB180 between Seaton and Ickham. The extensive tree planting alongside The Little Stour will limit views towards the Site from

the PRoW CB180. The Site consist of semi-improved grassland with low intensity grazing. A dew pond with seasonal water content is situated on the southern section of the field as well as a sheep shelter. The access is from the Orchard or the locked field gate adjacent to the PRoW major CB184. There is no public access to this area. This LLCA is attributed a low sensitivity due to its enclosure, low laying area, the mature hedgerow on the north-west field boundary and mitigated planting along the northern riverbank of The Little Stour.

• Riparian Wildlife Belt - no public access

The Riparian Wildlife belt (Little Stour Meadow) follows the Little Stour from Wickhambreaux in the south-west corner to Seaton in the east. The river is fenced on both sides to exclude cattle/grazing animals. On the southern side of the river, the levees or raised river banks are lower than those on the northern side, as this area includes the flood relief channel and wetland areas, built specifically to accommodate excess flood waters. On the northern side of the river the banks are higher which redirect the water of the reconfigured Little Stour to the Seaton Mill. In this area The Little Stour boasts reestablished reed beds and scattered trees on the northern bank as well as semi-improved grassland with cut grass paths. The LLCA is accessed via four field gates and includes a river crossing point. HV overhead lines, posts and pole mounted transformers are also located in the eastern section. This LLCA is of medium sensitivity due to the improvement/restoration works of the EA in collaboration with the land owners as well as forming an important element of enclosure for the grazing field on the south-eastern side. There is intervisibility with views of St John Church in Ickham.



The Riparian Wildlife Belt at The Little Stour



The Riparian Wildlife Belt at the Little Stour with high levees



Grazing field in the Dew Pond meadow with electrical infrastructure overhead



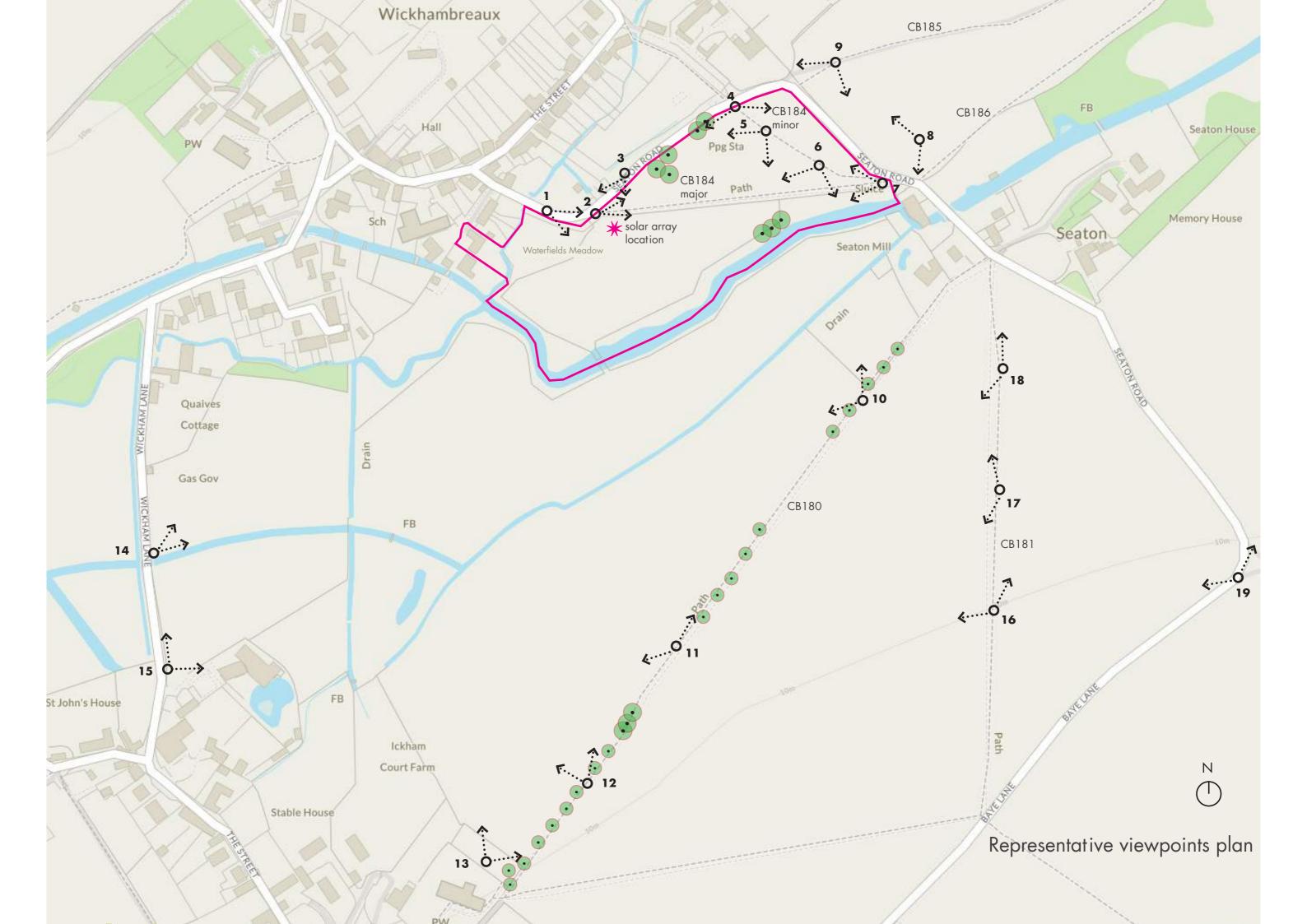
Orchard with electrical infrastructure overhead



Haying field in the Lime Tree meadow with electrical infrastructure overhead



Local landscape character and features



Visual receptors 4.8

Extent of Visibility

- The proposed solar array site is well contained through a combination of topography, urban development, mature trees and hedgerows. These combine to limit the visual envelope to a relatively small area which is defined by:
 - the urban area to the west including large trees within gardens and along boundaries;
 - the hedgerow to the north, which generally runs along the PRoW CB184 major and tree planting and hedging along Seaton Road;
 - the urban edge to the east at Seaton where the adjacent residential properties are generally hidden by mature vegetation and the gently rising agricultural land with PRoW CB180 partially hidden by a mature hedgerow as well as the tree planting along The Little Stour Wildlife Meadow;
 - the proposed solar array site sits at the bottom of The Little Stour valley approximately 5-9 m above sea level and is surrounded by agricultural field to the north-east and south with the urban fringe and the playing field to the north and Seaton in the east;
 - intermediate hedgerows and tree belts within the Site further compartmentalise it so that there are limited open views across the Site. Views are usually restricted to the immediate fields.

Visual Receptors

- Visual receptors were identified by desktop study and then confirmed in the field in order to determine where there might be visual receptors that would be sensitive to development of the Site. Visual receptors were only identified on publicly accessible land. They provide representative viewpoints reflecting the overall visibility of the Site from visual receptors.
- The viewpoint photographs were taken in March 2022 when the trees were bare reflecting a 'worst case' scenario with respect to views to and from the Site. Summer visits confirmed that views into and within the Site are more effectively screened by vegetation when the deciduous trees are in full leaf.



Viewpoint 1 view from the north-western corner of the Site next to Seaton Road. The viewpoint is located where PRoW CB184 major enters the Site in the Lime Tree Meadow. The view eastwards is towards Seaton and is framed by trees, hedges and hedgerows to the south along Seaton Road and the PRoW, which obscures the power line. A strong grown-out hedgerow to the north screens residential properties. Distance to Site 30 m. Height approx. 4.5 m AOD. Receptors: drivers and walkers on Seaton Road. View in March 2022.



Viewpoint 2 view looking east from Seaton Road, to the east of the Site. The viewpoint is located at the entrance of the PRoW CB184 major in Wickhambreaux. The footpath is screened on the southern boundary by a hedgerow with the power lines visible in the background and above the foreground. The view of the hamlet Seaton is dominated by large runs of established trees along the boundary of the conservation area. Distance to Site: 11 m; Height approx. 4.5 m AOD. Receptors: drivers on Seaton Road, users of PRoW. View in March 2022.



Viewpoint 3 view from Seaton Road, west of the Site. The viewpoint is located on Seaton Road at the back entrances to residential properties in Wickhambreaux looking to the south, showing a glimpse of St John's Church tower in Ickham in the background and the power lines in the middle ground. Two lines of hedgerows screen the Site. Distance to Site: 45 m; Height approx. 4.5 m AOD. Receptors: drivers and walkers on Seaton Road. View in March 2022.



Viewpoint 1 view from the north-western corner of the Site next to Seaton Road. The viewpoint is located where PRoW CB184 major enters the Site in the Lime Tree Meadow. The view eastwards is towards Seaton and is framed by trees, hedges and hedgerows to the south along Seaton Road and the PRoW, which obscures the power line. A strong grown-out hedgerow to the north screens residential properties. Distance to Site 30 m. Height approx. 4.5 m AOD. Receptors: drivers and walkers on Seaton Road. View in July 2021.



Viewpoint 2 view looking east from Seaton Road, to the east of the Site. The viewpoint is located at the entrance of the PROW CB184 major in Wickhambreaux. The footpath is screened on the southern boundary by a hedgerow with the power lines less visible in the background. The view of the hamlet Seaton is dominated by large runs of established trees along the boundary of the conservation area. Distance to Site: 11 m; Height approx. 4.5 m AOD Receptors: drivers on Seaton Road, users of PRoW. View in July 2021.



Viewpoint 3 view from Seaton Road, west of the Site. The viewpoint is located on Seaton Road at the back entrances to residential properties in Wickhambreaux looking to the south, showing a glimpse of St John's Church tower in Ickham in the background and the power lines in the middle ground. Two lines of hedgerows screen the Site. Distance to Site: 45 m; Height approx. 4.5 m AOD. Receptors: drivers and walkers on Seaton Road. View in July 2021.



Viewpoint 4 view from the northern corner of the Site next to Seaton Road. The viewpoint is located where PRoW CB184 minor enters the Site in the Lime Tree Meadow. The view southwards is towards St John's Church with high voltage wires, posts and pole mounted transformers in the foreground and hedgerows in the fore and middle ground. The view eastwards is towards Seaton which is dominated by trees with large runs of established trees and telecommunication/HV posts and wires. There is a mature group of willow trees to the east and mature Ash trees to the south and west along Seaton Road. Distance to Site 137 m. Height approx. 4.5 m AOD. Receptors: drivers on Seaton Road and walkers at the stile of the PRoW. View in March 2022.

Viewpoint 4 view from the northern corner of the Site next to Seaton Road. The viewpoint is located where PRoW CB184 minor enters the Site in the Lime Tree Meadow. The view southwards is towards St John's Church with HV lines, posts and pole mounted transformers in the foreground and hedgerows in the fore and middle ground. There is a mature group of willow trees to the east and mature Ash trees to the south and west along Seaton Road. Distance to Site 137 m. Height approx. 4.5 m AOD. Receptors: drivers on Seaton Road and walkers at the stile of the PRoW. View in July 2021.





Viewpoint 5 view from the northern corner of the Site. The viewpoint is located on PRoW CB184 minor in the Lime Tree Meadow towards Wickhambreaux. The view southwards is towards St John's Church with high voltage wires, post in the foreground and hedgerows in the fore and middle ground. The view westwards is towards Wickhambreaux which is dominated by trees with large runs of established trees and telecommunication/high voltage posts and wires There is a mature group of willow trees to the east and mature Ash trees to the west along Seaton Road. Distance to Site 146 m. Height approx. 3.7 m AOD. Receptors: walkers on the PRoW. View in March 2022.



Viewpoint 6 view from the northern section of the Site. The viewpoint is located on PRoW CB184 minor in field Lime Tree Meadow towards St John's Church with high voltage wires, post and pole mounted transformers as well as hedgerow and the levee in the foreground. In the middle ground are mature hedgerows and beyond trees on the PRoW CB180 and trees in Ickham. The view westwards is towards Wickhambreaux which is dominated by trees with large runs of established trees and high voltage posts and wires. There is a mature group of willow trees to the south. Distance to Site 161 m. Height approx. 3.7 m AOD. Receptors: walkers on the PRoW. View in March 2022.



Viewpoint 7 view from the eastern corner of the Site next to Seaton Road. The viewpoint is located where PRoW CB184 major enters the Site in the Lime Tree Meadow. The view westwards is towards the back roof lines of Wickhambreaux and trees which form a significant boundary. The view northwards is towards The Quaives which is screened by tall hedges and evergreens. HV lines, posts and pole mounted transformers run the length of the PRoW CB 184 major as well as across the Site towards the playing field. There is a mature group of willow trees to the east, a line of lime trees to the north and hedgerows along the PRoW CB184 major and some scattered remnants of old hedgerows along Seaton Road. Distance to Site 222 m. Height approx. 4 m AOD. Receptors: drivers and walkers on Seaton Road and on the PRoW. View in March 2022.



Viewpoint 7 view from the eastern corner of the Site next to Seaton Road. The viewpoint is located where PRoW CB184 major enters the Site in the Lime Tree Meadow. The view westwards is towards the back roof lines of Wickhambreaux and trees which form a significant boundary. The view northwards is towards The Quaives which is screened by tall hedges and evergreens. HV lines, posts and pole mounted transformers run the length of the PRoW CB 184 major as well as across the Site towards the playing field. There is a mature group of willow trees to the east, a line of lime trees to the north and hedgerows along the PRoW CB184 major and some scattered remnants of hedgerow along Seaton Road. Distance to Site 222 m. Height approx. 4 m AOD. Receptors: drivers and walkers on Seaton Road and on the PRow. View in July 2021.



Viewpoint 8 view from the east towards the Site in the south and Wickhambreaux in west. The viewpoint is located where PRoW CB186 enters the adjacent grazing field to the Site, which lies below the level of Seaton Road. The view westwards is towards the back roof lines of Wickhambreaux and trees, tall hedges and evergreens form a significant enclosure. HV lines, posts and pole mounted transformers as well as telecommunication poles and wires are noticeable in the foreground. There is a mature group of willow trees to the south. Distance to Site 241 m. Height approx. 3.7 m AOD. Receptors: walkers on the PRoW. View in March 2022.



Viewpoint 8 view from the east towards the Site in the south and Wickhambreaux in west. The viewpoint is located where PRoW CB186 enters the adjacent grazing field to the Site, which lies below the level of Seaton Road. The view westwards is towards the back roof lines of Wickhambreaux and trees, tall hedges and evergreens form a significant enclosure. HV lines, posts and pole mounted transformers as well as telecommunication poles and wires are noticeable in the foreground. There is a mature group of willow trees to the south. Distance to Site 241 m. Height approx. 3.7 m AOD. Receptors: walkers on the PRoW. View in July 2021.



Viewpoint 9 view from the north towards the Site in the south. The viewpoint is located where PRoW CB185 enters the adjacent grazing field to the Site, which lies below the level of Seaton Road. The view eastwards towards the hamlet Seaton is dominated by large runs of established trees along the boundary with Millend being visible. There is a mature group of willow trees to the south. Infrastructure wires, posts and transformers and signage are visible in the middle and background, whereas St John's Church spire is less prominent in the far background. A strong grown-out hedgerow to the north screens residential properties. Distance to Site 196 m. Height approx. 3.7 m AOD. Receptors: drivers on Seaton Road and walkers on PRoW. View in March 2022.



Viewpoint 9 view from the north towards the Site in the south. The viewpoint is located where PRoW CB185 enters the adjacent grazing field to the Site, which lies below the level of Seaton Road. The view eastwards towards the hamlet Seaton is dominated by large runs of established trees along the boundary with Millend being visible. There is a mature group of willow trees to the south. Infrastructure wires, posts and transformers and signage are visible in the middle and background, whereas St John's Church spire is less prominent in the far background. A strong grown-out hedgerow to the north screens residential properties. Distance to Site 196 m. Height approx. 3.7 m AOD. Receptors: drivers on Seaton Road and walkers on PRoW. View in July 2021.



Viewpoint 10 view from the east across agricultural fields in Ickham. The viewpoint is located at PRoW CB180 to the east of Seaton. The view westwards is towards the back roof lines of Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. The view northwards is towards The Quaives which is screened by tall hedges and evergreens and HV lines, posts and pole mounted transformers are noticeable in the middle ground. Distance to Site 237 m. Height approx. 7.5 m AOD. Receptors: walkers on the PRoW. View in March 2022.

Section 4: Baseline





Viewpoint 11 view from the south across agricultural fields in Ickham. The viewpoint is located at PRoW CB180 to the north-east of Ickham. The view northwards is towards Wickhambreaux and to the west is Ickham. Both villages are enclosed with significant tree boundaries. In the background the top section of Wickhambreaux Mill is visible towards the west, St John's Church to the south, a glimpse of the north and Seaton to the east. Established trees and hedgerows form a significant boundary enclosing the Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. Some HV lines, posts and pole mounted transformer are noticeable in the background. Distance to Site 346 m. Height approx. 7.5. m AOD. Receptors: walkers on the PRoW. View in March 2022.



Viewpoint 11 view from the south across agricultural fields in Ickham. The viewpoint is located at PRoW CB180 to the north-east of Ickham. The view northwards is towards Wickhambreaux and to the west is Ickham. Both villages are enclosed with significant tree boundaries. In the background the top section of Wickhambreaux Mill is visible towards the west, St John's Church to the south and a glimpse of the north. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. Some HV lines, posts and pole mounted transformer are noticeable in the background. Distance to Site 346 m. Height approx. 7.5. m AOD. Receptors: walkers on the PRoW. View in July 2021.

Section 4: Baseline







Viewpoint 12 view from the south across agricultural fields in Ickham. The viewpoint is located at PRoW CB180 to the north of Ickham. The view northwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley which encompasses the Site is nearly completely screened. The view northwards is towards The Quaives is screened with only the tip of the roof visible. Distance to Site 444 m. Height approx. 8 m AOD. Receptors: walkers on the PRoW. View in March 2022.



Viewpoint 12 view from the south across agricultural fields in Ickham. The viewpoint is located at PRoW CB180 to the north of Ickham. The view northwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley with larger gaps allowing views towards the meadows/grazing fields in the southern section. The northern section of The Little Stour Valley which encompasses the Site is nearly completely screened. The view northwards is towards The Quaives is screened with only the tip of the roof visible. Distance to Site 444 m. Height approx. 8 m AOD. Receptors: walkers on the PRoW. View in July 2021.



Viewpoint 13 view from the graveyard at St John's Church in Ickham. The viewpoint is located at the bench located in the churchyard to the morth of Ickham. The view northwards is towards Seaton and to the west towards Wickhambreaux. In the background the top of the roof of The Quaives is just visible. Established trees and hedgerows form a significant boundary enclosing the Little Stour valley which encompasses the Site is nearly completely screened. Distance to Site 526 m. Height approx. 10 m AOD. Receptors: visitors in the churchyard. View in March 2022.



Viewpoint 14 view from Wickham Lane in Ickham. The viewpoint is located at a pedestrian gate in a grazing field to the west of lckham. The view northwards is towards the Little Stour Valley. Distance to Site 452 m. Height approx. 5.5 m AOD. Receptors: walkers and drivers along Wickham Lane. View in March 2022.



Viewpoint 15 view from Wickham Lane in Ickham. The viewpoint is located at the field gate to the grazing field to the west of Ickham. The view northwards is towards Wickhambreaux and the Little Stour Valley. Wickhambreaux Mill is visible behind established trees. The northern section of the Site is screened with established trees and hedgerows forming a significant boundary whilst there are long views down the Little Stour valley to the south up to Preston Hill. Distance to Site 511 m. Height approx. 5.5 m AOD. Receptors: walkers and drivers along Wickham Lane. View in March 2022.



Viewpoint 16 view from the south-east across agricultural fields in Ickham. The viewpoint is located at PRoW CB181 to the south of Seaton. The view westwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill is visible. The topography and established trees and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. The view northwards is towards The Quaives which is screened by tall hedges and evergreens. Distance to Site 446 m. Height approx. 10 m AOD. Receptors: walkers on the PRoW. View in March 2022.



Viewpoint 16 view from the south-east across agricultural fields in Ickham. The viewpoint is located at PRoW CB181 to the south of Seaton. The view westwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill is visible. The topography and established trees and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. The view northwards is towards The Quaives which is screened by tall hedges and evergreens. Distance to Site 446 m. Height approx. 10 m AOD. Receptors: walkers on the PRoW. View in July 2021.



Viewpoint 17 view from the east across agricultural fields in Ickham. The viewpoint is located at PRoW CB181 to the south of Seaton. The view westwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. The topography and established trees and hedgerows form a significant boundary enclosing the Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. The view southwards is towards St John's Church. Distance to Site 393 m. Height approx. 8.5 m AOD. Receptors: walkers on the PRoW View in March 2022.



Viewpoint 17 view from the east across agricultural fields in Ickham. The viewpoint is located at PRoW CB181 to the south of Seaton. The view westwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. The topography and established trees and hedgerows form a significant boundary enclosing the Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. The view southwards is towards St John's Church. Distance to Site 393 m. Height approx. 8.5 m AOD. Receptors: walkers on the PRoW. View in July 2021.



Viewpoint 18 view from the east across agricultural fields in Ickham. The viewpoint is located at PRoW CB181 to the east of Seaton. The view westwards is towards Wickhambreaux and Seaton. In the background the top of the roof of Wickhambreaux Mill is visible. Established trees, hedges and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields. The view southwards is towards St John's Church. Distance to Site 322 m. Height approx. 8.5 m AOD. Receptors: walkers on the PRoW. View in March 2022.



Viewpoint 19 view from the east across agricultural fields in Ickham. The viewpoint is located at corner of Bay Lane and Seaton. The view westwards is towards Wickhambreaux and Seaton. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. The topography and established trees, hedges and hedgerows form a significant boundary enclosing The Little Stour valley. Distance to Site 580 m. Height approx. 10.5 m AOD. Receptors: drivers and walkers on the Bay Lane. View in March 2022.

Section 5: Solar Array Proposal

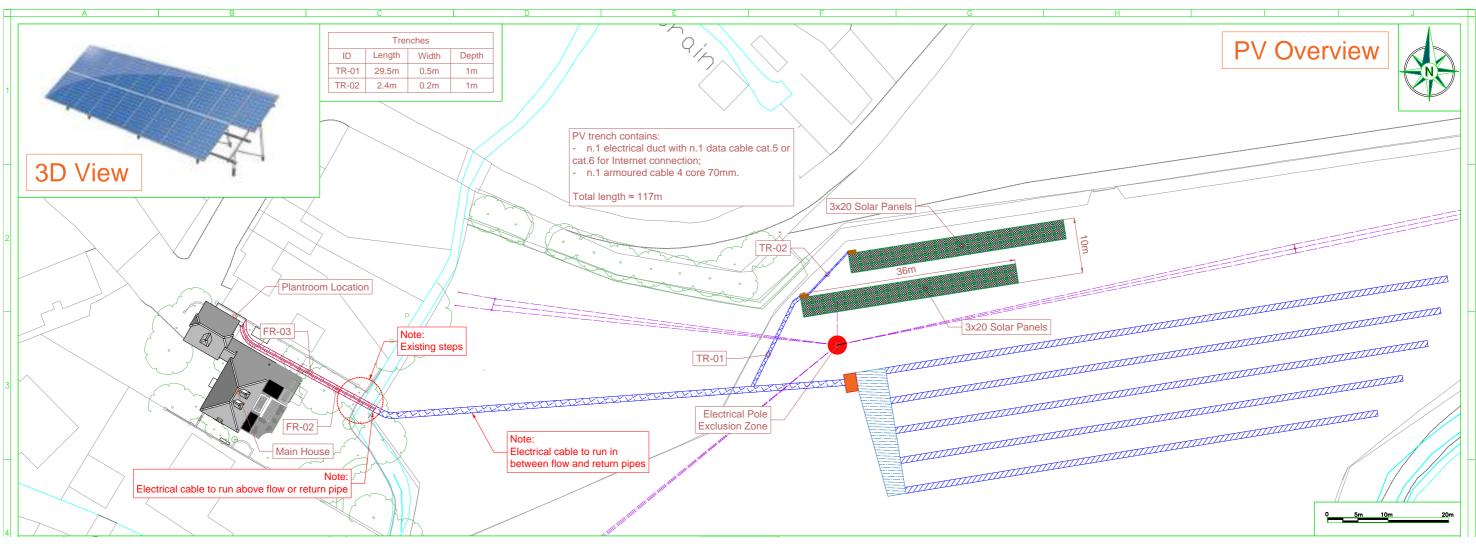
Solar Array Proposal

- The proposed solar project will not be a field-scale installation, 5.1 rather it is of small scale, limited to two tables covering a very small percentage of the Site, and will be located along the north-western boundary in the Dew Pond Meadow, and will be stepped back off the hedge screening by about 3 m to the rear of the panels, and some 5 m from the PRoW CB184 major. The panels will be south facing for power efficiency and optimally positioned so that they are not over looked by any residential properties. Small berms have been positioned to the south and east of the proposed array, which have been seeded with a herbal grazing ley mix, which has 19 different species of grasses, legumes and herbs which will add varying heights and textures to berm profile, in an effort to effectively screen the base of the array tables.
- The installation will have a capacity of approximately 44kW 5.2 direct current power (DC), which has been calculated to produce enough alternating current (AC) electricity to run the ground source heat pump used for hot water and central heating, and the electricity demands of the reconfigured house with a significantly improved insulation rating. The green energy project will also include the installation of 3 single phase 13.5kWh Tesla PowerWall batteries. The batteries have a charge/discharge capacity of 5kW each which will allow any excess generation from the proposed solar array to be stored for future on-site usage, and any excess power produced will be fed into the local grid. The DNO permission has been granted for the proposed solar generation and battery system to be linked to the local electricity network.
- 5.3 The array angle and layout has been redesigned to accommodate suggestions made by the heritage consultant, who requested that the array would not exceed 1.7m in height above the adjacent ground level. The proposed array will consist of 120, 365W panels mounted on south facing ground mounted tables, in 2 rows. Each table will hold 3 rows of 10 panels in a landscape arrangement. The array will measure approximately 35m wide x 10m depth and hence will cover an area of 350sqm, which represents approximately 1.5% of the 8 acre site area.



Proposed solar array location

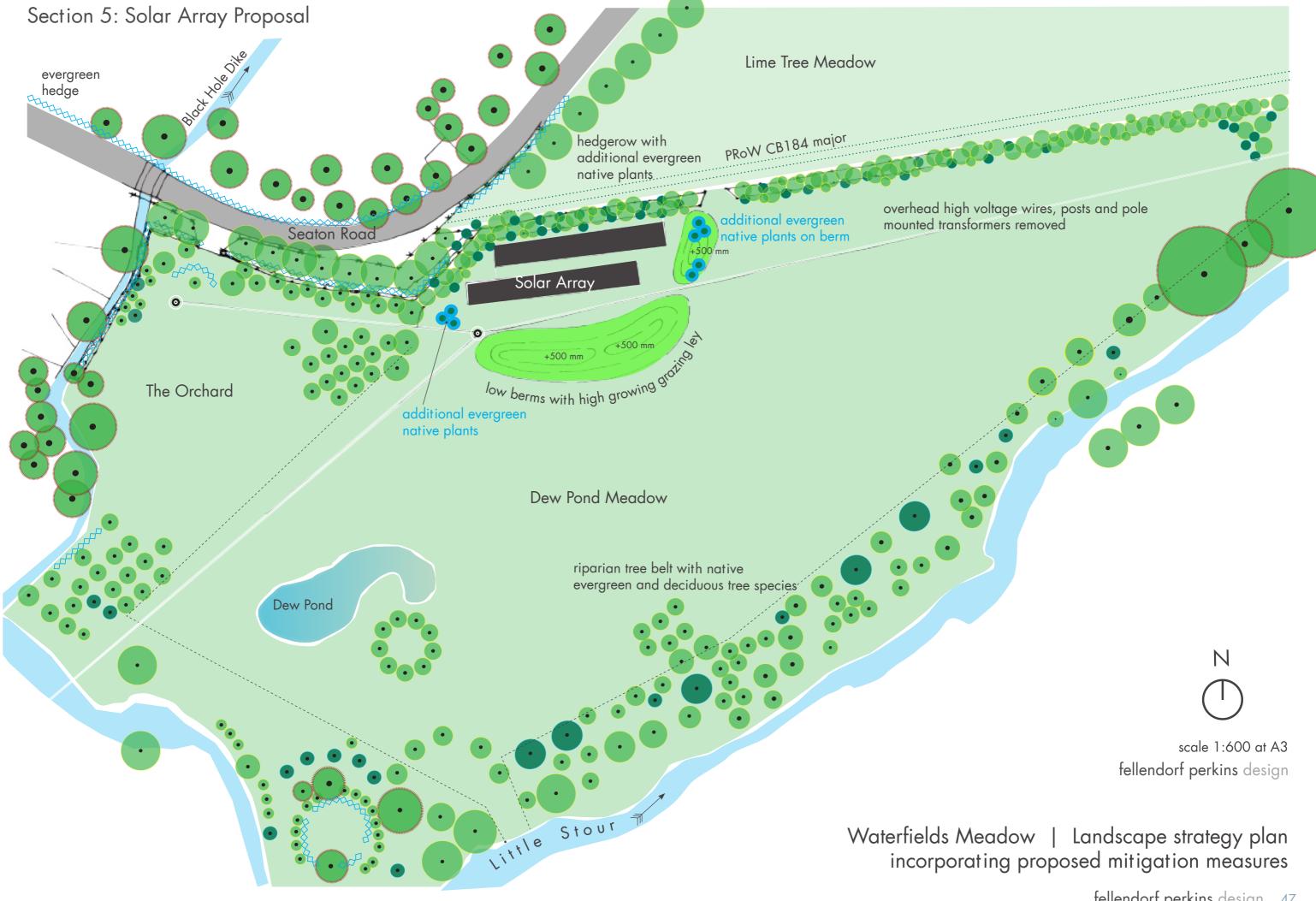
Section 5: Solar Array Proposal

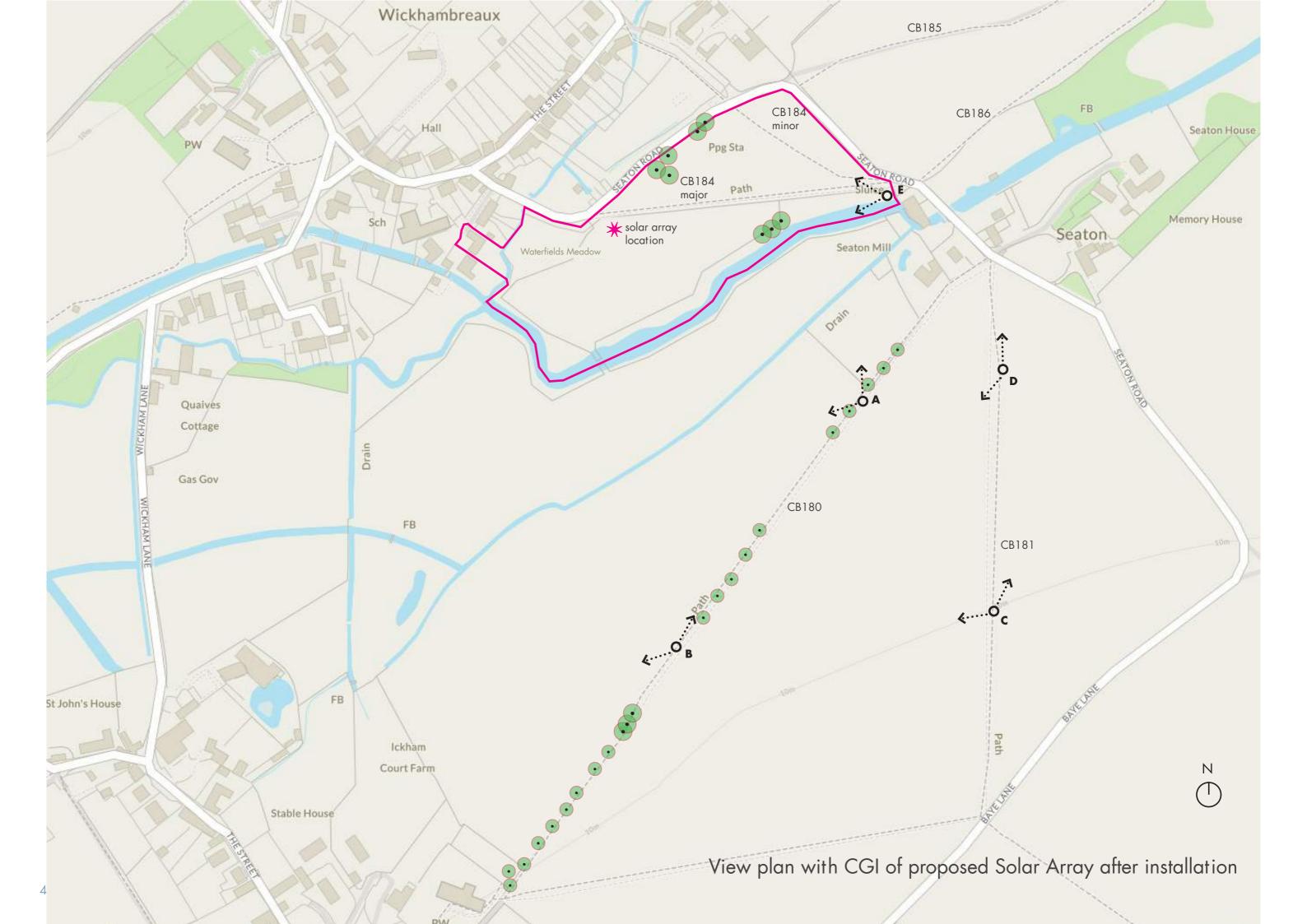


Proposed solar array layout and 3D view

- The installed arrays will be made up of non-reflective all black panels with black frames as well as backs and are 1.776 m x 1.052 m x 0.035 m in size. Similar array layouts have been likened to rows of silage bales wrapped in black plastic or standing water when viewed from a distance, which would not be incongruous in the proposed setting. The aluminium tables will be inclined at approximately 20 degrees and mounted on ground screws which do not require invasive foundations and can be removed with minimal impact. The array will be connected into 2 x 20kW three-phase solar inverters which will be mounted on the back of the mounting system, and convert the solar generated DC to AC. The inverters will then be connected into the power supply at Waterfields.
- 5.5 The proposed solar array will be mounted on ground screw foundations and the industry standard for a solar panel's productive lifetime is 25-30 years. As such the proposed solar array would be temporary and any effects would be

- reversible due to of the lack of permanence.
- The proposed solar array orientation and positioning was carefully considered during the design stage to make sure that the array was not visible from any principal rooms of properties that overlook the Site, by utilising the existing hedge and tree screening to the best effect, as well ensuring that the size and scale of the array was minimised through the optimal orientation of the panels. The preferred true south facing location was however compromised as it was within the HV overhead network's 5 m exclusion zone. Negotiations with the electricity DNO to re-route the overhead HV lines took place and approval for the enhancement scheme was given by UK Power Networks and agreements have been finalised. The undergrounding of the HV lines is not however limited to the proposed solar array location, but rather the scheme will involve replacing all the HV overhead lines with underground cables across the whole Site, which will have a
- immediate beneficial impact on the landscape and will mean that the preferred screened solar array location can be used.
- 5.7 The agreed removal of from the Site of approximately 650 m of HV overhead electricity power lines and other infrastructure standing at a minimum of 8-10 m high would not have occurred if a more exposed location within the Site had been promoted for the proposed solar array.





Section 5: Solar Array Proposal



View A after installation of proposed solar array prior to removal of electrical infrastructure in winter - View from the east across agricultural fields in Ickham at PRoW CB180 to the east of Seaton. The view westwards is towards the back roof lines of Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church as a glimpse of the roof of The Quaives are visible.



View B after installation of proposed solar array prior to removal of electrical infrastructure in winter - View from the south across agricultural fields in Ickham at PRoW CB180 to the north-east of Ickham. The view northwards is towards Wickhambreaux and in the background the top section of Wickhambreaux Mill is visible as is a glimpse of the roof of The Quaives to the north.

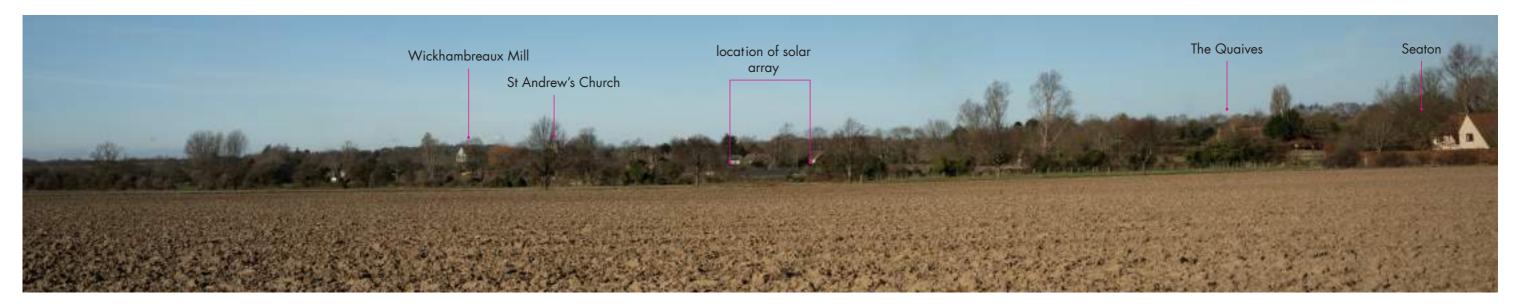
Section 5: Solar Array Proposal



View C after installation of proposed solar array prior to removal of electrical infrastructure in winter - View from the south-east across agricultural fields in Ickham at PRoW CB181 to the south of Seaton. The view westwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church as the roof of The Quaives are visible.



Zoomed in View C after installation of proposed solar array prior to removal of electrical infrastructure in winter - View from the east across agricultural fields in Ickham at PRoW CB181 to the south of Seaton. The view westwards is towards the back roof lines of Wickhambreaux.



View D after installation of proposed solar array prior to removal of electrical infrastructure in winter - View from the east across agricultural fields in Ickham. The viewpoint is located at PRoW CB181 to the east of Seaton. The view westwards is towards Wickhambreaux and Seaton. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church is visible.

Section 5: Solar Array Proposal



View E after installation of proposed solar array prior to removal of electrical infrastructure in winter - View from the north-east on the raised banks of the Little Stour at Millend in Seaton. The view westwards is towards the back roof lines of Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill is visible. There is no public access at this view point.

6. Landscape and visual assessment

- 6.1 Effects on Landscape Character
- 6.1.1 The likely effects on landscape character include the direct and indirect effects on the landscape character areas surrounding and including the Site itself, and the direct effects on the character of the Site and on the landscape features within it. The assessment assumes that the Waterfields Meadow landscape strategy plan is fully implemented.
- 6.2 Direct effects on landscape features
- 6.2.1 All landscape features will be retained as part of the solar array proposals.
- 6.2.2 There are no tree removals.

The magnitude of impact on landscape features is assessed as **Negligible**. The effects on existing landscape features is assessed as **Negligible**.

- 6.3 Effects on landscape character LCAs
- 6.3.1 In assessing the effects on landscape character, the effects are assessed at a number of levels:
 - at Site level direct effects on landscape character;
 - direct and indirect effects on the character and setting of the IWSCA
 - at District level direct and indirect effects on the District LCA - F5 The Little Stour :
 - direct and indirect effects on the National Character Area NCA 113 North Kent Plain:
 - direct and indirect effects on the Kent County Landscape Character Assessment - The Stour Valley.

6.3.2 Local Landscape Character Areas - landscape effects

The landscape character of the Site has been defined as discrete LLCAs:

Orchard Area LLCA

The Orchard is in the level south western corner of the Site and is surrounded by housing and gardens with mature trees and hedges on three sides. There is no public access to this area.

Landscape Sensitivity

This LLCA is of **Low** sensitivity as established vegetation forms a good buffer for the existing housing and lack of intervisibility with the northern section of the grazing field (Dew Pond Meadow) due to relatively good enclosure.

Magnitude of Impact -

The main landscape features associated with this area are the mature trees in neighbouring gardens and along Seaton Road, deciduous and evergreen hedges along boundaries as well as fruit and nut trees in the Orchard. There will be no views of the proposed solar array from the neighbouring properties due to its enclosed nature. The HV overhead lines and associated electrical infrastructure in the Orchard will be removed.

The magnitude of impact is assessed as Negligible.

Assessment of Landscape Effects

Given the low sensitivity of the landscape receptor and negligible magnitude of impact, the landscape effect of the proposed development is assessed as **Negligible**. The required removal HV overhead lines and associated electrical infrastructure in the north-west corner of the Orchard is likely to improve the landscape effect to **Moderate to Major beneficial**.

Haying Field LLCA

The undulating northern field (Lime Tree Meadow) is crossed by the PRoW CB184 major and minor. The Site has an enclosed character resembling a parkland like meadow. There are long views from the minor PRoW towards the Church of St John in Ickham which are currently affected by the HV overhead infrastructure in the foreground.

Landscape Sensitivity

This LLCA is attributed **Low to Medium** sensitivity.

Magnitude of Impact

The landscape structure and key features will be retained, and it will remain as a haying field. The landscape structure will be enhanced with undergrounding of the HV overhead lines and removal of the pole mounted air break switch disconnector, which will improve its quality and value, in particular the long view towards St John's Church in Ickham. The magnitude of change is assessed as **Negligible**.

Assessment of Landscape Effects

The landscape effects in the haying field LLCA is assessed as **Negligible**, because in the short to medium-term the existing planting will mature providing further screening to the proposed solar array and due to the non-permanent nature of solar arrays in the long-term. The combined effects of the development, resulting in the required removal of the HV detractors suggests a classification of **Moderate to Major beneficial** will be achieved in the medium-term, with views to St John's Church in Ickham enhanced.

Grazing Field LLCA (Dew pond Meadow)

The south-western field (Dew Pond Meadow) is dominated by the HV overhead lines and posts. The Site consist of semiimproved grassland with low intensity grazing and is well contained due to existing vegetation. There is no public access to this area.

Landscape Sensitivity

This LLCA is attributed **Low** sensitivity as it is an enclosed low lying area, with a mature hedgerow on the north-west field boundary and mitigated planting along the northern riverbank of The Little Stour. The proposed solar array will be located behind a low berm to the south and the east, seeded with a high growing drought resistant herbal grazing ley, and is screened adjacent to the foot path to the west, by a traditional hedgerow with evergreens inter-planted.

Magnitude of Impact

The landscape structure and key features will be retained as low intensity grazing field. As the solar array is located in this LLCA a small portion of grassland will be overlain with panels which are low profile and non-reflective. The solar array will affect the grassland character in this small area of the LLCA, however species of grasses specified for ground mounted arrays have been planted which will mitigate the limited impact. Solar installations are removable and therefore the change is reversible. The impact is therefore assessed as **Low adverse**.

Assessment of Landscape Effects

The effect will be **Low adverse** in the short to medium-term and **Negligible** in the long-term as the panels can be removed. This should also be seen in the context of the changing baseline where the removal of the HV overhead lines and the maturing vegetation, will mean that the landscape character improves over the long-term to become **Moderate to Major beneficial.**

Riparian Wildlife Belt LLCA

The Riparian Wildlife belt (Little Stour Meadow) follows The Little Stour as it enters the Site from Wickhambreaux to Seaton. The river is fenced on both sides, with higher river banks on the northern side. The Little Stour boasts reestablished reed beds and scattered trees on the northern bank as well as semi-improved grassland with mown grass paths. There is no public access to this area.

Landscape Sensitivity

This LLCA is of **Medium** sensitivity due to the improvement/ restoration works of the EA in collaboration with the land owners. There is intervisibility with views of St John's Church in Ickham.

Magnitude of Impact

The magnitude of impact is assessed as Negligible.

Assessment of Landscape Effects

The impact the landscape effect is assessed as **Negligible** with the potential for enhancement of the landscape structure, due to the undergrounding the HV overhead lines and removal of the pole mounted transformers in the eastern corner at Seaton, improving the landscape effect to **Moderate to Major beneficial**.

6.3.3 Ickham, Wickhambreaux and Seaton Conservation Area - landscape effects

The Site lies within the IWSCA which was designated on 29 August 1969 and extended to include land along The Little Stour and around Seaton in order to protect the villages and their historic landscape setting on 7 July 1989.

The Site exhibits some of the typical features of the IWSCA such as The Little Stour meandering through the flat topography, large established trees and high hedges with the settlements that provide visual enclosure with narrow soft edged roads lined with hedgerows into the villages. The mill building in Wickhambreaux and the churches in Ickham and Wickhambreaux punctuate the skyline due to the flat landscape. There are traditional water meadows and fields adjacent to the river with The Little Stour presenting a

natural wildlife habitat and valuable corridor with associated vegetation.

The Site consists of grazing/haying fields which are a traditional water meadow situated adjacent to the river and are enclosed with large established trees and high hedges at the village/hamlet fringes and within the river valley. Through the landscape management over the last decade the Little Stour corridor within the Site has become a natural wildlife habitat with associated vegetation. The Site sits in the flat river valley with some cross views to the churches which typically have been built on the highest points of the natural landform, whereas the mills in Seaton and Wickhambreaux sit at river level. Listed houses in Seaton are surrounded by large runs of established trees as are those along The Street in Wickhambreaux which face towards The Street, and whose back roof lines and long gardens are aligned towards the fields, and are not visible from the Site. The Quaives faces east towards Seaton. Seaton and is situated behind a tall hedge and evergreen trees only the roof is noticeable from the Site.

Magnitude of Impact

The magnitude of impact of the proposed scheme on the IWSCA has been assessed in HCUKs Heritage Statement, as resulting "in no harm to any designated heritage assets". The main landscape structures and features that contribute to its character will be retained, and the solar array will be limited in height to 1.7 m above the existing ground level and will be screened by small berms and additional evergreen planting, maintaining the pattern and characteristic features of the existing landscape so the impact on the setting will be **Very low adverse**.

Assessment of Landscape Effects

The landscape effect on the IWSCA is assessed as **Minor adverse** in the short-term and **Negligible** in the long-term. In the short-term, undergrounding of the HV electrical infrastructure will enhance the overall landscape structure and is assessed as is likely to result in **Moderate to Major beneficial** effects on the Conservation area with the views to Ickham Church being enhanced.

6.3.4 District Character Area - landscape effects

The Canterbury Landscape Character Assessment and Biodiversity Appraisal (LUC, 2020) locates the Site within the character area F5: The Little Stour.

The Site exhibits typical features of the LCA such as Low lying and flat alluvial flood plain of The Little Stour river with fields comprising mainly pasture with areas of grazing marsh and wetland habitats associated with the river corridor.

The existing Site has benefitted from improvements made over the last decade which include new hedgerows, hedges and tree planting. The development retains the existing the landscape pattern. Within this landscape structure the solar array will be located in the Grazing Field (Dew Pond Meadow) on the northern boundary set back 5-6 m from the PRoW CB184 major. The Solar array will be located behind a low berm of high growing drought resistant herbal grazing ley to the south and the east, is screened on the west adjacent to the foot path by a hedgerow with evergreens. The Lime Tree Meadow, the Orchard, the Dew Pond Meadow and the Little Stour Meadow are retained and are enhanced with the proposed removal of HV overhead lines, posts, pole mounted transformers and other associated electrical infrastructure. The district landscape character assessment assesses the LCA as having Medium to high sensitivity.

Magnitude of Impact

The magnitude of impact on the LCA is assessed as **Very low adverse** as the Site is a small part of the LCA which is already dominated by the HV and telecommunication infrastructure. The main landscape structure and features that contribute to its character are to be retained, so maintaining the pattern and characteristic features of the landscape.

Assessment of Landscape Effects

The landscape effect on the District Character Area is assessed as **Minor adverse** and in the long-term **Negligible** as the installation of the proposed solar array is reversible. In the short-term, the undergrounding of the HV electrical infrastructure will enhance the overall landscape structure and is assessed as is likely to result in **Moderate to Major beneficial** effects on the district LCA.

6.3.5 NCA Profile:113 North Kent Plain - landscape effects

The Site, although impoverished by past uses, exhibits some of the characteristics of the national character area.

The existing Site has benefitted from improvements made over the last decade. The development retains the existing the landscape pattern. Within this landscape structure the proposed solar array will be located in the Dew Pond meadow on the northern boundary set back 5-6 m from the PRoW CB184 major. The Lime Tree Meadow, the Orchard, the Dew Pond Meadow and The Little Stour Meadow are retained and will be enhanced by the proposed removal of the HV overhead lines, posts and pole mounted transformers.

Assessment of Landscape Effects

The sensitivity of the North Kent Plain is assessed as **Low to Medium**. The magnitude of impact on this small part of the North Kent Plain National Character Area is assessed as **Negligible**. The landscape effect on the National Character Area is assessed as **Negligible**.

6.3.6 Kent County Landscape Character Assessment: The Stour Valley - landscape effects

The Site exhibits the characteristics of the county landscape character definition, which is a well contained flat bottomed valley floor with a banked canalised section of river between Wickhambreaux and Seaton.

The Site has benefitted from improvements made over the last decade. The development retains the existing the landscape pattern and these are enhanced with the proposed removal of detractors

Assessment of Landscape Effects

The sensitivity of the Stour Valley is assessed as **Low to Medium**. The magnitude of impact on this small part of the
Kent County Character Area, the Stour Valley, is assessed
as **Negligible**. The landscape effect on the Kent County
Character Area is assessed as **Negligible**.

6.4 Visual Effects

6.4.1 Effects on visual amenity have been assessed from each of the representative viewpoints and assuming that the proposed landscape strategy embedded within the Illustrative Waterfields Landscape Strategy plan (page 47) is implemented. Although the HV overhead lines and electrical infrastructure have to be contemporaneously removed to accommodate the preferred positioning of the proposed solar array, the visual assessments have been considered as though the proposed works are separate and distinct, because of the overwhelming landscape influence of the detractors at the Site.

6.4.2 Viewpoint 1: view from the north-western corner of the Site next to Seaton Road

The viewpoint is located where PRoW CB184 major enters the Site in the Lime Tree Meadow. The view eastwards is towards Seaton and is framed by trees, hedges and hedgerows to the south along Seaton Road and the PRoW, which obscures the existing HV power lines. A strong grown-out hedgerow to the north, along Seaton Road, screens residential properties.

Receptor sensitivity

Drivers and walkers on Seaton Road are assessed as having **Low and Medium** sensitivity respectively to changes in views and visual amenity at this viewpoint.

Magnitude of impact

The roadscape with adjoining fields are well screened on both sides of the road and has been subject to landscape enhancements including tree and hedge planting. The proposed solar array will not be visible.

The magnitude of change in the view is likely to be **Negligible** as there are no landscape changes. It is assessed that there will be no views of the proposed solar array from Seaton Road due to intervening vegetation.

Assessment of effects

The visual effects of the proposed development on receptors at this viewpoint are assessed as **Negligible.**

6.4.3 Viewpoint 2: View looking east from Seaton Road, to the east of the Site.

The viewpoint is located at the entrance of the PRoW CB184 major in Wickhambreaux. The footpath is screened on the southern boundary by a hedgerow with the HV power lines visible in the background and above in the foreground. The view of the hamlet Seaton is dominated by large runs of established trees along the boundary of the conservation area.

Receptor sensitivity

Drivers on Seaton Road are assessed as having a **Medium** sensitivity to changes in views and visual amenity and users of PRoW are assessed as having a **High** sensitivity to changes in views and visual amenity.

Magnitude of impact

The Dew Pond Meadow within this view has been subject to landscape enhancements including tree and hedgerow planting and management to enhance/thicken the hedgerows which will limit glimpses of the back of the proposed solar array. The backs of the panels will be black which will reduce the visual impact.

The magnitude of change in the view due to the proposed solar array is likely to be **Low-adverse to Negligible** as there will be no landscape changes in the view towards Seaton/Wickhambreaux and the haying field (Lime Tree Meadow). It is assessed that there will be glimpses of the back of the proposed solar array from the stile at the PRoW in the short-term during winter, however, due to the planted holly and yew these glimpses will be meditated in the medium-term. There will be no views of the array in summer. The contemporaneous removal of the HV overhead lines and associated electrical infrastructure is likely to improve the magnitude of change in view to **Moderate to Major beneficial**.

Assessment of effects

The visual effect on High to Medium sensitivity receptors at Viewpoint 2 is likely to be **Moderate beneficial** in the short-term due to the removal of above ground electrical infrastructure increasing to **Major beneficial** in the medium-term as the landscape enhancements mature and contribute to improved visual amenity.

6.4.4 Viewpoint 3: View from Seaton Road, west of the Site.

The viewpoint is located on Seaton Road at the back entrances to residential properties in Wickhambreaux looking to the south, showing a glimpse of St John's Church tower in Ickham in the background, and the HV overhead power lines in the middle ground. Two lines of hedgerows screen the Site.

Receptor sensitivity

Drivers on Seaton Road are assessed as having a **Medium** sensitivity to changes in views and visual amenity and users of PRoW are assessed as having a **High** sensitivity to changes in views and visual amenity.

Magnitude of impact

The Dew Pond Meadow within this view has been subject to landscape enhancements including tree and a double row of hedgerow planting and management to enhance/thickening of hedgerows which will limit glimpses to the back of the proposed solar array.

The magnitude of change in the view due to the proposed solar array is likely to be **Low-adverse to Negligible** as there will be limited landscape changes. It is assessed that there will be glimpses of the back of the proposed solar array from the stile at the PRoW in the short-term during winter, however due to the planted holly and yew these glimpses will be mitigated in the medium-term. There will be no views of the array in summer. However, the contemporaneous removal of the HV overhead lines and associated electrical infrastructure is likely to improve the magnitude of change in view to **Moderate to Major beneficial** with improved distant views of St John's Church in Ickham.

Assessment of effects

The visual effect that can be solely attributed to the proposed solar array on Medium to High sensitivity receptors is likely to be **Negligible** in the medium-term as the landscape enhancements mature and contribute to an improved visual amenity, but when the contemporaneous removal of above ground HV overhead infrastructure is taken into account the visual effect is likely to be defined as **Moderate to Major beneficial**.

Viewpoint 4: View from the northern corner of the Site next to Seaton Road.

The viewpoint is located where PRoW CB184 minor enters the Site in the Lime Tree Meadow. The view southwards is towards St John's Church with HV lines, posts and pole mounted transformers in the foreground and hedgerows in the fore and middle ground. The view eastwards is towards Seaton which is dominated by trees with large runs of established trees and telecommunication/HV lines and posts. There is a mature group of willow trees to the east and mature Ash trees to the south and west along Seaton Road.

Receptor sensitivity

Drivers on Seaton Road and walkers at the stile of the PRoW are assessed as having **Medium and High** sensitivity respectively to changes in views and visual amenity.

Magnitude of impact

The Dew Pond Meadow within this view has been subject to landscape enhancements including tree and hedge planting and it has been assessed that the proposed solar array will not be visible.

The magnitude of change in the view is likely to be **Negligible** as there will be limited landscape changes. It is assessed that there will be no views of the proposed solar array from Seaton Road due to intervening vegetation. The magnitude of change in the view would be classified as **Moderate to Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, contributing to an improved view of St John's Church in Ickham.

Assessment of effects

The visual effect that can be solely attributed to the proposed solar array on Medium to High sensitivity receptors is likely to be **Negligible** in the medium-term as the landscape enhancements mature and contribute to improved visual amenity, but when the contemporaneous removal of above ground HV overhead infrastructure is taken into account the visual effect is likely to be defined as **Moderate to Major beneficial**.

Viewpoint 5: View from the northern corner of the Site.

The viewpoint is located on PRoW CB184 minor in the Lime Tree Meadow towards Wickhambreaux. The view southwards is towards St John's Church, with HV overhead lines and posts in the foreground and hedgerows in the fore and middle ground. The view westwards is towards Wickhambreaux which is dominated by trees with large runs of established trees and telecommunication/HV lines and posts. There is a mature group of willow trees to the east and mature Ash trees to the west along Seaton Road.

Receptor sensitivity

Walkers on PRoW CB184 are assessed as having **High** sensitivity to changes in views and visual amenity.

Magnitude of impact

The Dew Pond Meadow within this view has been subject to landscape enhancements including tree and hedge planting and it has been assessed that the proposed solar array will not be visible.

The magnitude of change in the view is likely to be **Negligible** as there will be limited landscape changes. It is assessed that there will be no views of the proposed solar array from Seaton Road due to intervening vegetation. The magnitude of change in the view would be classified as **Moderate to Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, contributing to an improved view of St John's Church in Ickham.

Assessment of effects

The visual effect which can be solely attributed to the proposed solar array on High sensitivity receptors are likely to be **Negligible** in the medium-term as the landscape enhancements mature and contribute to improved visual amenity, but when the contemporaneous removal of above ground HV overhead infrastructure is taken into account the visual effect is likely to be defined as **Moderate to Major beneficial**.

6.4.5 Viewpoint 6: view from the northern section of the Site.

The viewpoint is located on PRoW CB184 minor in field Lime Tree Meadow towards Seaton. The view southwards is towards St John's Church with HV overhead lines, post and pole mounted transformers as well as hedgerow and the river levee (raised bank) in the foreground. In the middle ground are mature hedgerows, and beyond there are trees on the PRoW CB180 and trees in Ickham. The view westwards is towards Wickhambreaux which is dominated by large runs of established trees and HV overhead lines and posts. There is a mature group of willow trees to the south.

Receptor sensitivity

Walkers on PRoW CB184 are assessed as having **High** sensitivity to changes in views and visual amenity.

Magnitude of impact

The Dew Pond Meadow within this view has been subject to landscape enhancements including tree and hedge planting and it has been assessed that the proposed solar array will not be visible.

The magnitude of change in the view is likely to be **Negligible** as there are limited landscape changes. It is assessed that there will be no views of the proposed solar array from Seaton Road due to intervening vegetation. The magnitude of change in the view is likely to be **Moderate to Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, contributing to an improved view of St John's Church in Ickham.

Assessment of effects

The visual effect that can be solely attributed to the proposed solar array on High sensitivity receptors are likely to be **Negligible** in the medium-term as the landscape enhancements mature and contribute to improved visual amenity, but when the contemporaneous removal of above ground HV overhead infrastructure is taken into account the visual effect is likely to be defined as **Moderate to Major beneficial**.

6.4.6 Viewpoint 7: view from the eastern corner of the Site next to Seaton Road.

The viewpoint is located on Seaton Road where PRoW CB184 major enters the Site in the east of the Lime Tree Meadow. The view westwards is towards the back roof lines of Wickhambreaux village and trees which form a significant boundary. The view northwards towards The Quaives is screened by tall hedges and evergreens. HV overhead lines, post and pole mounted transformers run the length of the PRoW CB184 major as well as across the Site towards the playing field. There is a mature group of willow trees to the east, a line of lime trees to the north and hedgerows along the PRoW CB184 major and some scattered remnants of old hedgerows along Seaton Road.

Receptor sensitivity

Drivers and walkers on Seaton Road are assessed as having **Medium and High** sensitivity respectively to changes in views and visual amenity

Magnitude of impact

The Dew Pond Meadow within this view has been subject to landscape enhancements including tree and hedge planting and it has been assessed that the solar array will not be visible.

The magnitude of change in the view is likely to be **Negligible** as there are no landscape changes. It is assessed that there will be no views of the proposed solar array from Seaton Road, nor the back of houses along The Street in Wickhambreaux or The Quaives due to intervening vegetation. The magnitude of change in the view is likely to be **Moderate to Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, contributing to an improved view of St John's Church in Ickham.

Assessment of effects

The visual effect that can be solely attributed to the proposed solar array on Medium to High sensitivity receptors are likely to be **Negligible** in the medium-term as the landscape

enhancements mature and contribute to improved visual amenity, but when the contemporaneous removal of above ground HV overhead infrastructure is taken into account the visual effect is likely to be defined as **Moderate to Major beneficial**.

6.4.7 Viewpoint 8: view from the east towards the Site in the south and Wickhambreaux in west.

The viewpoint is located where PRoW CB186 enters a grazing field adjacent to the Site, and lies below the level of Seaton Road. The view westwards is towards the back roof lines of the Wickhambreaux village and trees, tall hedges and evergreens form a significant enclosure. HV overhead lines, post and pole mounted transformers as well as telecommunication poles and wires are noticeable in the foreground. There is a mature group of willow trees to the south.

Receptor sensitivity

Walkers on the PRoW is assessed as having **High** sensitivity to changes in views and visual amenity.

Magnitude of impact

The magnitude of change in the view is likely to be **Negligible** as there are no landscape changes. It is assessed that there will be no views of the proposed solar array from the footpath due to intervening vegetation and lower topography. The magnitude of change in the view is likely to be **Moderate to Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, creating an improved long distance view of St John's Church in Ickham.

Assessment of effects

The visual effects of the proposed solar development on receptors at this viewpoint are assessed as **Negligible** increasing to **Moderate to Major beneficial** due to the removal of above ground HV electrical infrastructure.

6.4.8 Viewpoint 9: view from the north towards the Site in the south.

The viewpoint is located on PRoW CB185 where it enters the grazing field adjacent to the Site, and which lies below the level of Seaton Road. The view eastwards towards the hamlet Seaton is dominated by large runs of established trees along the field boundary, with Millend being visible. There is a mature group of willow trees to the south. HV overhead lines, posts, pole mounted transformers and signage are visible in the middle and background. St John's Church spire is less prominent in the far background. A strong grown-out hedgerow to the north screens residential properties.

Receptor sensitivity

Walkers on PRoW are assessed as having a **High** sensitivity respectively to changes in views and visual amenity.

Magnitude of impact

The magnitude of change in the view is likely to be **Negligible** as there are no landscape changes linked to the solar array. It is assessed that there will be no views of the proposed solar array from the footpath due to intervening vegetation and lower topography. The magnitude of change in the view is likely to be **Moderate to Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, contributing to improved long distance views of St John's Church in Ickham.

Assessment of effects

The visual effect which can be solely attributed to the proposed solar array on High sensitivity receptors are likely to be **Negligible** in the medium-term as the landscape enhancements mature and contribute to improved visual amenity, but when the contemporaneous removal of above ground HV overhead infrastructure is taken into account the visual effect is likely to be defined as **Moderate to Major beneficial**.

Viewpoint 10: view from the east across agricultural fields in Ickham.

The viewpoint is located on PRoW CB180 to the east of Seaton. The view westwards is towards the back roof lines of Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below .The view northwards is towards The Quaives is screened by tall hedges and evergreens and HV overhead lines, posts and pole mounted transformers are noticeable in the middle ground.

Receptor sensitivity

Walkers on the PRoW CB180 will have **High** sensitivity to changes in views and visual amenity.

Magnitude of impact

The Dew Pond Meadow within this view has been subject to landscape enhancements including tree planting and management to enhance/thicken the riparian tree belt. A low berm of high growing drought resistant herbal grazing ley has been created which will limit glimpses of the proposed solar array.

The magnitude of change in this view is likely to be **Low-adverse to Negligible** as there are limited landscape changes. It is assessed that there will be limited views of the proposed solar array in the short-term and specifically during winter. The planted pines and yew will reduce these glimpses in the medium-term. There will be no views of the array in summer. The magnitude of change in the view is likely to be **Moderate** to **Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, creating an improved view of St John's Church in Ickham.

Assessment of effects

The visual effect on High sensitivity receptors is likely to be **Minor adverse to Negligible** in the short-term as the removal of the detractor HV overhead lines and other electrical infrastructure will not create as large an impact, as they are not as prominent a feature from this distant viewpoint.

In the medium-term as the landscape enhancements mature and contribute to improved visual amenity views will likely be **Moderate to Major beneficial**.

Viewpoint 11: view from the south across agricultural fields in Ickham.

The viewpoint is located at PRoW CB180 to the north-east of Ickham. The view northwards is towards Wickhambreaux and to the west lies Ickham. Both villages are enclosed with significant tree boundaries. The upper section of Wickhambreaux Mill is visible in the background towards the west, St John's Church is to the south, a glimpse of the roof of The Quaives can be sen to the north, and Seaton to the east. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. Some of the HV lines, posts and pole mounted transformer are visible.

Receptor sensitivity

Walkers on the PRoW CB180 will obtain the described view. Sensitivity to changes in views and visual amenity is **High**.

Magnitude of impact

The Site within this view has been subject to landscape enhancements including tree planting and management to enhance/thicken the riparian tree belt, as well as the forming of a low berm seeded with tall growing drought resistant herbal grazing ley, which will reduce the glimpses of the proposed solar array.

The magnitude of change in the view is likely to be **Low-adverse to Negligible** as there are limited landscape changes. It is assessed that there will be limited views of the proposed solar array in the short-term during winter. The planted pines and yew will reduce these glimpses over the medium-term. There will be significantly reduced views of the proposed array in summer. The magnitude of change in the view is likely to be **Moderate to Major beneficial** with respect to landscape changes due to the undergrounding of the HV overhead lines and removal of associated electrical infrastructure, which will improve the view of St John's Church in Ickham.

Assessment of effects

The visual effect on High sensitivity receptors is likely to **Minor adverse** in the short-term increasing **Moderate beneficial** if the removal of the detractor HV overhead lines and associated infrastructure is taken in to account, as it should be, and **Moderate to Major beneficial** in the medium term as the landscape enhancements mature and contribute to improved visual amenity.

Viewpoint 12: view from the south across agricultural fields in lckham.

The viewpoint is located at PRoW CB180 to the north of lckham. The view northwards is towards Wickhambreaux. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley with larger gaps allowing views towards the meadows/grazing fields in the southern section. The northern section of The Little Stour Valley encompasses the Site which is nearly completely screened. The view northwards is towards The Quaives is screened with only the tip of the roof visible.

Receptor sensitivity

Walkers on the PRoW CB180 sensitivity to changes in views and visual amenity is **High**.

Magnitude of impact

The existing established hedgerow and trees along the field boundary in the middle ground is likely to completely screen the Site.

The magnitude of impact is assessed as Negligible.

Assessment of effects

The visual effects from this viewpoint is assessed as **Negligible**.

6.4.9 Viewpoint 13: view from the graveyard at St John's Church in Ickham.

The viewpoint is located at the bench located in the St John's churchyard, to the north of lckham. The view northwards is towards Seaton and to the west is Wickhambreaux. In the background the ridge line of the roof of The Quaives is just visible. Established trees and hedgerows form a significant boundary enclosing The Little Stour valley with larger gaps occurring in the southern section of the valley. The northern section of The Little Stour Valley, which encompasses the Site is nearly completely screened.

Receptor sensitivity

Visitors in the churchyard will obtain this view. Sensitivity is assessed as **High**.

Magnitude of impact

The existing established hedgerow and trees along the field boundary in the background is likely to completely screen the Site.

The magnitude of impact is assessed as Negligible.

Assessment of effects

The visual effects from this viewpoint are assessed as **Negligible**.

6.4.10 Viewpoint 14: view from Wickham Lane in Ickham.

The viewpoint is located at an access gate on Wickham Lane adjacent to a grazing field to the west of Ickham. The view northwards is towards The Little Stour Valley.

Receptor sensitivity

Receptors will walkers and drivers along Wickham Lane. Sensitivity to changes in views and visual amenity are regarded as **High** for walkers and **Low** for drivers, largely due to the small opening.

Magnitude of impact

The existing established hedgerow and trees along field boundaries in the background completely screens the Site.

The magnitude of impact is assessed as Negligible.

Assessment of effects

The visual effects from this viewpoint are assessed as **Negligible**.

6.4.11 Viewpoint 15: view from Wickham Lane in Ickham. .

The viewpoint is located at a field gate in Wickham Lane adjacent to a grazing field to the west of Ickham. The view northwards is towards Wickhambreaux and The Little Stour Valley. Wickhambreaux Mill is visible behind established trees. The northern section of the Site is screened with established trees and hedgerows forming a significant boundary whilst there are long views down The Little Stour valley to the south up to Preston Hill in the far distance.

Receptor sensitivity

Receptors will be walkers and drivers along Wickham Lane. Sensitivity to changes in views and visual amenity are **High** for walkers and **Low** for drivers as the gate is located on a blind corner.

Magnitude of impact

The existing established hedgerow and trees along field boundaries in the back ground is likely to completely screen the Site.

The magnitude of impact is assessed as Negligible.

Assessment of effects

The visual effects from this viewpoint are assessed as **Negligible**.

6.4.12 Viewpoint 16: view from the south-east across agricultural fields in *Ickham*.

The viewpoint is located at PRoW CB181 to the south of Seaton. The view westwards is towards Wickhambreaux. In the background, the top of the roof of Wickhambreaux Mill is visible. The topography and established trees and hedgerows form a significant boundary enclosing The Little Stour valley. There are some gaps in the hedgerow allowing glimpses to the meadows/grazing fields below. The view northwards is towards The Quaives is screened by tall hedges and evergreens.

Receptor sensitivity

Receptors will be walkers on the PRoW 181. Sensitivity will be **High**.

Magnitude of impact

The existing established hedgerow and trees along field boundaries in the background is likely to completely screen the Site.

The magnitude of impact is assessed as Negligible.

Assessment of effects

The visual effects of the proposed development on receptors at this viewpoint are assessed as **Negligible.**

6.4.13 Viewpoint 17: view from the east across agricultural fields in *Ickham.*

The viewpoint is located at PRoW CB181 to the south of Seaton. The view westwards is towards Wickhambreaux. In the background, the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. The topography and established trees and hedgerows form a significant boundary enclosing The Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields below. The view southwards is towards St John's Church in Ickham.

Receptor sensitivity

Walkers on the PRoW CB181 will have a **High** sensitivity to changes in views and visual amenity .

Magnitude of impact

The Site within this view has been subject to landscape enhancements including tree planting and management to enhance/thicken the riparian tree belt. A low berm has also been formed, seeded with a tall growing drought resistant herbal grazing ley which will limit the available glimpses of the proposed solar array.

The magnitude of change in the view associated with the proposed solar panels is likely to be **Low-adverse to**Negligible as there are limited landscape changes. It is assessed that there will be limited views of the array in the short-term during winter, however due to the planted pines and yew these glimpses will be meditated in the mediumterm. There will be very limited views of the array in summer. The impact of the undergrounding of the HV overhead lines and removal of the electrical infrastructure from the Site is of limited impact from this viewpoint.

Assessment of effects

The visual effect on High sensitivity receptors is likely to be **Minor adverse** in the short-term and **Moderate to Major beneficial** in the medium-term as the landscape enhancements mature and contribute to improved visual amenity.

6.4.14 Viewpoint 18: view from the east across agricultural fields in *Ickham.*

The viewpoint is located at PRoW CB181 to the east of Seaton. The view westwards is towards Wickhambreaux and Seaton. In the background the top of the roof of Wickhambreaux Mill is visible. Established trees, hedges and hedgerows form a significant boundary enclosing the Little Stour valley with some gaps allowing glimpses to the meadows/grazing fields. The view southwards is towards St John's Church.

Receptor sensitivity

Walkers on the PRoW CB181 will have a **High** sensitivity to changes in views and visual amenity.

Magnitude of impact

The Site within this view has been subject to landscape enhancements including tree planting and management to enhance/thicken the riparian tree belt. Additionally a low berm with a high growing drought resistant herbal grazing ley has been created which will limit glimpses to the proposed solar array. The glimpsed black non-reflective panels will blend into the landscape background from this viewing distance.

The magnitude of change in the view is likely to be **Low-adverse to Negligible** as there are limited landscape changes. It is assessed that there will be limited views of the proposed solar array in the short-term, particularly during winter, but the planted pines and yew will restrict the glimpses in the medium-term. There are likely to be no views of the array in summer.

Assessment of effects

The visual effect on High sensitivity receptors is likely to be **Minor adverse to Negligible** in the short-term and **Moderate to Major beneficial** in the medium term as the landscape enhancements mature and contribute to improved visual amenity.

6.4.15 **Viewpoint 19:** view from the east across agricultural fields in lckham.

The viewpoint is located at corner of Bay Lane and Seaton Road to the east of Seaton. The view westwards is towards Wickhambreaux and Seaton. In the background the top of the roof of Wickhambreaux Mill and the tower of St Andrew's Church are visible. The topography and established trees, hedges and hedgerows form a significant boundary enclosing The Little Stour valley.

Receptor sensitivity

Receptors at this corner will include drivers and walkers on the Bay Lane who would have **Low and High** sensitivity respectively to changes in views.

Magnitude of impact

The existing established hedgerow and trees along field boundaries in the background and topography are likely to completely screen the Site.

The magnitude of impact is assessed as Negligible.

Assessment of effects

The visual effects of the proposed development on receptors at this viewpoint are assessed as **Negligible**.

Landscape Receptor	Receptor Sensitivity	Magnitude of Impact	Landscape Effect - short and long term
Landscape features	Low	Negligible	Negligible to Moderate beneficial
Site LLCA - Orchard Area	Low	Negligible	Negligible to Major beneficial
Site LLCA - Haying Field	Low to Medium	Negligible	Negligible to Major beneficial
Site LLCA - Grazing Field	Low	Low adverse	Low adverse to Major beneficial
Site LLCA - Riparian Wildlife Belt	Medium	Negligible	Negligible to Major beneficial
lckham, Wickhambreaux & Seaton Conservation Area	Medium to High	Very low adverse to Negligible	Minor adverse to Negligible to Major beneficial
District LCA - F5	Medium to High	Very low adverse to Negligible	Minor adverse to Negligible to Major beneficial
NCA 113	Low to Medium	Negligible	Negligible
Kent County Character Area - The Stour Valley	Low to Medium	Negligible	Negligible

Summary Table of Landscape Effects

Viewpoint	Receptor Sensitivity	Magnitude of Change	Landscape Effect - short and long term
1	Medium	Negligible	Negligible
2	Medium to High	Low adverse to Negligible	Moderate to Major beneficial
3	Medium to High	Low adverse to Negligible	Negligible to Moderate to Major beneficial
4	Medium to High	Negligible to Major beneficial	Negligible to Moderate to Major beneficial
5	High	Negligible to Major beneficial	Negligible to Moderate to Major beneficial
6	High	Negligible to Major beneficial	Negligible to Moderate to Major beneficial
7	Medium to High	Negligible to Major beneficial	Negligible to Moderate to Major beneficial
8	High	Negligible to Major beneficial	Negligible to Moderate to Major beneficial
9	High	Negligible to Major beneficial	Negligible to Moderate to Major beneficial
10	High	Low adverse to Negligible to Moderate to Major Beneficial	Minor adverse to Negligible to Moderate to Major beneficial
11	High	Low adverse to Negligible	Minor adverse to Negligible to Moderate to Major beneficial
12	High	Negligible	Negligible
13	High	Negligible	Negligible
14	Low to High	Negligible	Negligible
15	Low to High	Negligible	Negligible
16	High	Negligible	Negligible
17	High	Low adverse to Negligible	Minor adverse to Negligible to Moderate to Major beneficial
18	High	Low adverse to Negligible	Minor adverse to Negligible to Moderate to Major beneficial
19	Low to High	Negligible	Negligible

Summary Table of Visual Effects

Section 7: Summary and conclusions

7. Summary

- 7.1 This LVIA presents the results of a landscape and visual impact assessment for the proposed solar array at Waterfields Meadow, Wickhambreaux.
- 7.2 The Site is not located in any designated landscapes, but in a cultural heritage site, the IWSCA, and so the effects of the proposed array on its setting is assessed.
- Valley, a gently rolling countryside, which lies on an alluvium base carrying a Grade 3b agricultural land classification. The Site is located in base of the valley with The Little Stour meandering through a largely flat topography, established trees and high hedges with the settlements that provide visual enclosure. The church spire in Ickham punctuates the skyline due to the flat landscape.
- 7.4 The Site has been agricultural land with a short interlude where it formed part of the first Canterbury golf course established in the early 1900s. The land is presently used as low intensity sheep pasture and for haying. Two PRoW CB184 major and minor cross the Site from Wickhambreaux to Seaton.
- 7.4.1 The development consists of approximately a 120 panel solar array positioned for optimal power efficiency as recommended in Paragraph 25 of the Renewable & Low Carbon Energy PPG 'the importance of siting systems in situation where they can collect the most energy from the sun'. The location also needed to take into account the visibility from the principal rooms of neighbouring properties. These two major positioning factors required that the proposed solar array would be located within the 5m HV overhead line and post exclusion zone. UK Power Networks were approached to underground the HV overhead lines to accommodate the solar array and agreement has been reached.
- 7.5 The Waterfields Meadow Landscape Strategy Plan shows the proposed solar array located at the north-western corner of the Dew Pond Meadow adjacent to the PRoW CB184 major and a tall hedgerow. All trees within the Site and along the Site boundaries have been retained including the new tree belt, hedgerows, dew pond, ditches and grasslands. No trees on the Site are protected by TPOs.

7.6 Summary of Landscape Effects

- 7.6.1 The likely effects of the development on landscape character include the direct effects on the landscape features and local landscape character areas within the Site, the setting of the IWSCA, the district character areas, including and surrounding the Site, the landscape effects on the North Kent Plain NCA and the Kent County Landscape Assessment.
- 7.6.2 The effects on landscape features are assessed as Negligible as all trees and grasslands within the Site are retained. The effects of the development on existing landscape features has been assessed as Negligible in the short-term due to the competing elements of detractor removals and the addition of the proposed array. It is however likely to be beneficial in the medium to long-term due to proposed planting and ongoing long-term landscape management on the Site.
- 7.6.3 The effect on the local landscape character of the Site is assessed as Negligible, in the south-west and south-east of the Site which has medium to low landscape sensitivity, Low adverse on sections of the western boundary and the north-west of the Site in the short-term, but beneficial due to newly planted hedging maturing in the medium-term. The short-term effects on landscape character across the entire Site have the potential to be Moderate to Major beneficial as the result of undergrounding HV overhead lines and the removal of associated electrical infrastructure.
- 7.6.4 The effects on the landscape character of LCA F5 Stour Valley, in which the Site is located and which is attributed Medium to High sensitivity, is assessed as Very low adverse in the short-term, to negligible in the long-term with the potential for Moderate to Major beneficial effects in the immediate short-term due to the removal of detractors.
- 7.6.5 The landscape effect on the North Kent Plain National Character Area (NCA 113) is assessed as Negligible.

7.6.6 Paragraph 6.6 of the Heritage Statement states that "The significance of IWSCA will be preserved as outlined above, for the purpose of the decision maker's duty under Section 72(1) of the Act. There will be no harm to any designated heritage assets (including listed buildings) or locally listed buildings and paragraphs 201-203 of the NPPF are not engaged."

Section 7: Summary and conclusions

7.7 Summary of Visual Effects

- 7.7.1 The Site is relatively contained through a combination of topography, established trees, and tall hedges at settlements, as well as hedgerows. These combine to limit the visual envelope to a relatively small area which is defined by hedgerows and trees to north and west. The Site is partially visible from the south on the PRoW CB180. The landscape structure of hedgerows and trees further compartmentalises the Site and restricts views within it, and growth the hedgerows and trees will further restrict those views.
- 7.7.2 All arboricultural features that are responsible for the existing enclosure and screening of the Site will be retained within the landscape structure.
- 7.7.3 Visual receptors were only identified on publicly accessible land.
- 7.7.4 The visual effects vary across the Site and are assessed as Minor adverse in the medium-term during winter for walkers using the existing PRoW CB184 major at the western section of the land, which are viewpoints 2 and 3. Viewpoints 10 and 11 are likely to experience Minor adverse effects in the medium-term due to changes in visual amenity as a result of the proposed solar array development. At Viewpoints 17 and 18 walkers are likely to experience Minor adverse effects on visual amenity in the medium-term during winter. However, in the long-term and the visual effects will be Negligible due to screen planting, and reversible nature of a ground mounted solar array, which is normally regarded as a temporary structure.
- 7.7.5 Receptors along the western section of Seaton Road, which may include walkers as well as drivers may also experience Minor adverse effects as a result of the proposed solar array at the western access point to the Site in the medium-term during winter.
- 7.7.6 There are Negligible effects from viewpoints along the northern and eastern section of Seaton Road, Baye Lane, Wickham Lane and St John's Church as the site is generally not visible due to existing hedgerows and topography.

- 7.7.7 The Minor short-term visual effects should be seen in the context of a changing landscape and the undergrounding of all of the HV overhead lines and removal of all other electrical infrastructure, which is spread over the whole of the Site, which will result in removal of a significant visual detractor improving the amenity of the whole of the Site. In addition existing vegetation will grow and help to further to integrate the localised array. Any negative effects associated with the proposed solar array will be reversible, whereas the removal of the HV overhead power network will be permanent. The low-lying, black silhouette of the proposed solar array will be visible from some viewpoints, but would not be incongruous in the landscape, akin to rows of silage bales wrapped in black plastic or standing water when viewed from a distance.
- 7.7.8 Overall no further visual amenity mitigation is required over and above that embodied in the Waterfields Meadow landscape strategy plan, and this proposal complies with the Canterbury Local Plan 2017, Policy DBE2 Renewable Energy, that requires the position of a solar array, to avoid or minimise impacts on visual amenity with no significant impact on the landscape setting, biodiversity or heritage assets, and that the solar array is not located on 'best and most versatile' agricultural land.

Section 8: References

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