



CLEVE HILL SOLAR PARK

ENVIRONMENTAL STATEMENT

VOLUME 1 - CHAPTERS

CHAPTER 11 - CULTURAL HERITAGE AND ARCHAEOLOGY

November 2018
Revision A

Document Reference: 6.1.11
APFP Regulation: 5(2)(a)

www.clevehillsolar.com



CLEVE HILL
SOLAR PARK

11 CULTURAL HERITAGE AND ARCHAEOLOGY

11.1 Introduction

1. This chapter of the Environmental Statement (ES) presents an assessment of the effects of the Development on cultural heritage and archaeological receptors. The assessment identifies and evaluates heritage assets within the site and a surrounding Study Area (defined in section 11.2.5.3 below) and assesses how the Development may potentially affect these heritage assets.
2. This chapter is supported by the following figures provided in the ES Volume 2:
 - Figure 11.1: Archaeological Records (within 1 km Study Area);
 - Figure 11.2: Designated Heritage Assets (within 1 km Study Area);
 - Figure 11.3: Designated Heritage Assets (within 5 km Study Area); and
 - Figure 11.4: Historic Landscape Characterisation.
3. This chapter is also supported by the following Technical Appendices provided in Volume 4:
 - Technical Appendix A11.1: Historic Environment Desk-Based Assessment (DBA);
 - Technical Appendix A11.2: Geoarchaeology Borehole Study and Watching Brief;
 - Technical Appendix A11.3: Additional Visualisations (requested by HE); and
 - Technical Appendix A11.4: Outline Written Scheme of Investigation.

11.1.1 Development Parameters Assessed

4. The Rochdale Envelope parameters for the Development have been considered with respect to the potential effects considered in this Chapter, and worst-case values/scenarios for this are captured by the candidate design, as set out in Chapter 5: Development Description. This chapter reports the assessment of effects associated with the candidate design, therefore.

11.1.2 Relevant Legislation and Guidance

5. There is a significant body of statute law dealing with the historic environment (primarily legislation). Heritage assets that are deemed to be of particular importance are given legal protection through the following national legislation:
 - The Ancient Monuments and Archaeological Areas Act 1979;
 - National Heritage Act 1983;
 - The Planning (Listed Buildings and Conservation Areas) Act 1990;
 - The Hedgerows Regulations 1997 (as amended 2002);
 - The Burial Act 1997; and
 - Treasure Act 1996.
6. The relevant national and local planning policy is set out within Chapter 6, including policies relating to cultural heritage and archaeology. This assessment is in accordance with current best practice and guidelines which comprise:
 - Standard and guidance for historic environment desk-based assessment (CIfA 2014);
 - Historic Environment Good Practice Advice in Planning Note 3 (Second Edition) 'The Setting of Heritage Assets' (Historic England 2017);
 - Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (Historic England 2008) (this document is currently being updated, consultation on the draft document closed 02.02.18);
 - Design Manual for Roads and Bridges (DMRB), Vol, 11, Section 3, Part 2: HA 208/07 Cultural Heritage (Highways Agency 2007);

- National Heritage Protection Plan (2011);
- Scheduled Monuments and Nationally Important Non-Scheduled Monuments (DCMS 2013);
- Kent Farmsteads Guidance (Kent County Council and English Heritage 2014);
- South East Historic Environment Research Framework (Kent County Council, forthcoming); and
- Planarch: Guiding Principles for Cultural Heritage in Environmental Impact Assessment (EIA) (Kent County Council 2006).

11.2 Assessment Methodology and Significance Criteria

11.2.1 Consultation

7. In December 2017, a scoping report detailing methodologies and preliminary baseline findings was issued to both statutory and non-statutory consultees. Meetings have been held with Historic England (HE) and Kent County Council (KCC), and consultation undertaken with the Conservation Officer for Swale Borough Council. A summary of their responses is given in Table 11.1a.
8. The Preliminary Environmental Information Report (PEIR) was completed in June 2018. A summary of key Section 42 consultation responses following consultation on the PEIR and which are either addressed in the assessment or have been taken into account during the design of the final layout are provided in Table 11.1b. Full details of consultation details are provided in the Consultation Report (DCO Document Reference 5.1) submitted as part of the Application.

Table 11.1a Consultation Responses (Scoping)

Consultee	Response	Action
Historic England	Provided general guidance on settings assessment in line with HE's national guidance. Provided data from Historic Environment Record (HER). Expressed concern that Listed Buildings be appropriately considered, including those listed at Grade II.	HER data has been used to inform the assessment of the potential for unknown archaeological remains to exist within the site, as set out in the DBA (Technical Appendix A11.1). Listed buildings are assessed in section 11.5.
Kent County Council	Provided data from Historic Environment Record. Expressed concern that sufficient consideration should be given to the potential for buried remains of palaeoenvironmental interest, and/or water-logged material might survive under alluvial deposits within former channels within the site. Requested that appropriate consideration be given to the WWII defensive system (including pill-boxes, decoy sites etc.) along the coastal zone of which the Development Site forms a part)	HER data has been used to inform the assessment of the potential for unknown archaeological remains to exist within the site, as set out in the DBA (Technical Appendix A11.1). A ge archaeological investigation has taken place to model sub-surface deposits and this is presented at Technical Appendix A11.2. Consideration of the WWII defensive system is provided throughout this chapter.
Swale Borough Council	Agreed the list of assets to be assessed and requested the consideration be given to the following additional assets: Goodnestone Conservation Area's listed buildings (Goodnestone Court - list entry 1107863, and Chest Tomb at St. Bartholomew's Church – list entry 1069145) Way Street Farmhouse (list entry 1069124) Meadow Farmhouse (list entry 1069117) Waterham Farmhouse (list entry 1338179) The Shipwrights Arms at Faversham (list entry 1240465) The group of listed buildings at the former Marsh Gunpowder Works (list entry nos. 1389581, 1389579, 1389583 and 1389582)	These additional assets have been considered in section 11.5.

Table 11.1b Key Consultation Responses (PEIR)

Consultee	Response	Action
Canterbury District Council	Noted that full assessment of potential impacts on heritage assets from longer views within the district and specifically the historic setting of Whitstable, was not presented in the PEIR	Although these receptors are outside the Study Area and considered highly unlikely to receive any adverse effects on their significance, consideration has been given to the historic setting of Whitstable in section 11.5.2.4 of the ES.
Graveney with Goodnestone Parish Council	Agreed strongly that the “setting” of heritage assets is an important planning consideration (PEIR pp 11-13) and that setting also includes intangible matters such as atmosphere and ambience: the latter are very strong features of the coastal marshes over much of the CHSP site. In this regard, the Parish Council recommend that CHSP have regard to the Conservation Area Appraisals for Graveney Church, Graveney Bridge and Goodnestone, prepared by Swale BC, which explain the wider landscape setting of these designated areas. These can be seen online at: https://www.swale.gov.uk/assets/Planning-Forms-and-Leaflets/Planning-General/Planning-Conservation/Graveney-Church-Graveney-Bridge-and-Goodnestone-conservation-areas.pdf	The assessment was undertaken taking into consideration the relevant Conservation Area Appraisals. The change to design, since PEIR, excluding panels in Field Y was in part due to concern raised with respect to Graveney Church. No other effect on heritage significance of Areas was found or assessed as likely to occur.
Graveney with Goodnestone Parish Council	Buildings which contribute to local heritage are not confined to the statutory listings. The role of these heritage assets to local character should also be given due consideration. Indeed, some of these were pointed out to the heritage consultant who seems to have chosen not to include them.	<p>These undesignated buildings may contribute to local character, but based on the objective criteria used for the assessment their significance is limited and not always dependent on the contribution made by their setting. They have not been included as no significant effect has been assessed as likely because they are not protected by statute, are considered of low/local importance, and using the matrix presented in the PEIR and ES, even a substantial change in setting may not lead to such a loss of overall significance that they are considered to receive an effect considered significant for purposes of the Regulations.</p> <p>Warm House is the building impliedly referred to in this response. This building was not identified by the statutory consultees such as Historic England as requiring assessment and so has not been considered in the PEIR and the site has not been visited. It is not nationally protected and does not appear on any local listing. Although assessment of this building was requested by the owner of Sparrow Court, the request was made too late for inclusion in the PEIR. Following the method set out in the PEIR it is considered that the Proposed Development will not cause such a change in setting that the contribution of that setting to the significance of the building is so reduced as to lower the significance of the building itself in terms that are significant for the Regulations. The building is of "low" sensitivity (local importance) and even if we allow an effect of "medium" magnitude expecting some reduction in the</p>

Consultee	Response	Action
		<p>contribution setting makes to significance and some resulting loss of heritage significance, the result is still "minor" and not significant in EIA terms. The building is surrounded by intensively farmed land to its south-west, south and south-east, with poly tunnels a prominent local feature. The presence of panels of the Proposed Development to the north will change the character of the more open rural aspect to its north and this will affect the relationship of the building to the former marshland with which it may have been historically linked. In response to the representation of this consultee, this has been included in the ES, section 11.5.2.4.</p>
Great Graveney	<p>Most of the responses from Great Graveney echoed those provided by Graveney and Goodnestone Parish Council and these and the relevant actions/response are not repeated here An additional comment regarding Sparrow Court was made in the representation, which states that:</p> <ul style="list-style-type: none"> · It was pointed out to the Heritage consultant that the hedges were not cut at the time of the assessment because of the abundance of birds nesting in it – at all other times there is an unhindered view from Sparrow Court to the church, Graveney Court and the Vicarage. What is the importance of stating in the report that “The Church and Graveney Court are considered to fall within this setting in views to the east, even if partially screened from direct view by the planting within the Sparrow Court’s gardens.”? 	<p>Although the content of this representation is not agreed, Field Y has now been removed in its entirety from the Proposed Development to address some concerns with the potential effect on the significance of these assets by ensuring they continue to have a direct visual linkage (where planting permits).</p>
Historic England	<p>Considered that the visual impact of such a large number of solar panels will impact on the significance the church derives from its setting because it would no longer be afforded a substantive rural setting; this would be compromised by seeing the panels in views towards the church from land to the north, west and south west and in a view of the church from its south in which the site can be seen to its rear. On these grounds HE assess the impact to the significance of the grade I listed church to be moderate, not minor as noted in Para 155 of the PEIR. HE think it right that the applicant explore whether a heritage gain, in the form of a contribution to the church to assist in securing its long-term future might be appropriate here to be taken account of in the weighing exercise carried out by the Planning Inspector. We would be pleased to discuss this further in due course.</p>	<p>Field Y has now been removed in entirety from the Proposed Development. This will help to reduce the perception of encroachment above the former marsh and help to allow the church to be seen in a rural context (in this direction). Other changes include a separation of panel block edges from the Proposed Development boundary, with screening proposed to soften the edges of the Development. Discussions are ongoing with the relevant Church authorities regarding what enhancement and gain can be achieved. Nevertheless, the Applicant has a difference of opinion regarding the level of effect. The Applicant does not think the church’s significance derives solely or even mainly from its location in a rural setting, and our assessment concludes that other elements that make up its heritage interest are not affected by the Proposed Development. The Applicant recognises that there is a change in wider setting, but this is only on one side of the Church (so that the rural setting is still readily appreciable to the east and south), and whilst there is a reduction in the contribution that this element of its setting makes to this aspect of</p>

Consultee	Response	Action
		<p>the Church's significance, we consider the overall effect to be "minor" in EIA terms, and to constitute "less than substantial harm". The decision not to promote infrastructure formerly proposed in Field Y ensures that the level of predicted effect is appropriately assessed as "minor".</p>
Historic England	<p>Agreed that the effects on the Graveney Conservation Area and other nearby listed buildings are likely to be lower than the effect on All Saints Church. Nonetheless HE noted that the effect on Sparrow Court, a grade II listed building south of the development site may be greater than minor given that the development will be very visible in long views towards the listed building from the east in which it can be seen and appreciated as a medieval building in a largely undeveloped rural setting. The ability to appreciate the listed building in a rural setting will be reasonably altered in this view by the introduction of a large number of solar panels to its north. HE also noted that the effect on Graveney Court is assessed as minor and while this building was clearly orientated towards the east (its rear west facing elevation is markedly informal in contrast to the principal west elevation), there are nevertheless long views from the west towards the building and adjacent church which would be altered by the introduction of the proposed development. HE therefore think the effect on this grade II listed building is capable of being more than minor and suggest this is considered again as part of the final Environmental Report.</p>	<p>Field Y has been removed in its entirety. This serves to prevent intrusion into direct visual linkages between the Church, Graveney Court and Sparrow Court. The wider separation of the Proposed Development from Graveney Court will help maintain its linkage to the wider rural landscape, albeit panels will continue to be visible across the wider former marshland. Similarly, longer views towards Sparrow Court will still contain panels but these will not be as close into the house nor in the foreground of views as seen from the Church and Graveney Hill. In any case, as with the Church, the significance of these assets does not rely solely on the former marshland and current rural setting. Their other heritage interests are not affected, hence the assessment that whilst there is some reduction in the contribution that setting makes to the significance of the assets (and to the ability to read/appreciate that element of their significance) as a result of the proposed Development, the overall effect on their significance is "minor" for purposes of the EIA regulations (in part because much of their historic, archaeological and architectural interest will still be readily appreciable and/or does not rely on longer distance visual contributions. The amendments to the scheme have been prompted in large part by the concerns raised in respect of these assets, and it is considered these changes go considerably to ensuring the predicted "minor" effect will in fact be "minor". This will be reflected in the EIA.</p>
Historic England	<p>In addition to designated heritage the development site also has potential for non-designated heritage assets of an archaeological nature. Archaeological evidence has been found on the site dating from the Neolithic onwards. There is a high potential for evidence dating to World War Two in particular. Previous investigations within the development site have revealed features and artefacts relating to the site's use during World War Two. The site formed part of the north Kent coast defences and part of the 'Starfish' bombing decoy. The development site also includes the site of the so-called last battle on British soil between a crashed German aircraft and a patrol from the London Irish Rifles in September 1940. These military defences and decoy systems included pillboxes, trench systems and controlled fires and lighting, and</p>	<p>One element of the WWII defensive system (the undesignated Pillbox) will be preserved in situ. Consultation has been undertaken with KCC regarding archaeological issues and under a requirement of the draft DCO, a draft Written Scheme of Investigation must be submitted for their approval prior to commencement of works to ensure archaeological matters are appropriately addressed (see draft appended as Technical Appendix A11.4). A reduction in the compound footprint and the decision not to promote panels in Field Y is proposed and this will reduce potential effects on the higher ground where archaeological remains may be more likely to be encountered. Enhancement is proposed in the form of information boards along footpaths through the Development to help make the historic development of the area including its WWII defences more appreciable to</p>

Consultee	Response	Action
	<p>although since decommissioned, remains can be seen on historic aerial photographs and may still exist as archaeological features. Therefore, non-designated heritage assets, particularly archaeological, should be assessed as part of this development proposal. The archaeological team at Kent County Council are the principal advisors for non-designated heritage assets of an archaeological nature and should be consulted regarding the potential impact of this development on any archaeology present. We note that the nature of the development might limit the need for deeper intrusions into the ground and that it is such works that are most likely to harm any buried archaeology. We support the approach being taken to predict locations where archaeological potential may be highest and for these to be considered further should the nature of the proposed construction create a potential for un-avoidable harm.</p>	<p>the public. Other enhancement options are in discussion.</p>
Kent County Council	<p>Agreed that full recording of the WWII pillbox be undertake. Requested that the recording should include a record of its current setting.</p>	<p>Proposals to record this asset are included in the Draft Written Scheme of Investigation presented at Technical Appendix A11.4</p>
Kent County Council	<p>Raised a concern over the level of consideration of the historic landscape character of the local area (as part of the setting of heritage assets within it). The development is of a very large scale and would significantly change the landscape. KCC would request that this should be assessed as a minor adverse effect.</p>	<p>KCC's advice is accepted and the potential for effects on historic landscape has been reconsidered and reassessed in the ES in line with that advice.</p>

11.2.2 Desk-based Assessment

9. A desk-based assessment was undertaken, utilising readily available documentary, cartographic and photographic evidence, to inform the baseline condition of the Core archaeological study area. The Desk-Based Assessment Report was completed in March 2018 and is provided in Technical Appendix A11.1.

11.2.3 Surveys/Site Visits

10. A site visit was undertaken in March 2018, to validate the desk-based assessment and to identify (and if appropriate, record) any previously unrecorded cultural heritage features within the study area. Specific designated cultural heritage assets within this area were visited to aid the assessment for potential indirect effects upon cultural heritage features. An additional visit was undertaken in May 2018 in response to consultation with HE, to inform assessment of specific listed buildings in the immediate vicinity of the site. An additional visit to the Church in Graveney was undertaken in September 2018 to assist in reconsideration of the potential indirect effects at this asset, following consultation.

11.2.4 Geoarchaeological Fieldwork

11. A geoarchaeological investigation has been undertaken on the site, consisting of the undertaking of purposive coring to allow modelling of the sub-surface deposit sequence across the site. This was done with the purpose of informing on the potential that peat or other deposits of palaeoenvironmental interest may survive beneath flood or other

estuarine/alluvial deposits, and to locate former channels and features where water-logged remains might survive. This work is presented in a report at Technical Appendix A11.2.

11.2.5 Assessment of Effects Methodology

11.2.5.1 Direct (physical) effects

12. The assessment of physical effects will consider direct effects upon features of cultural heritage interest, where sites or potential sites and any buried archaeological remains are in danger of being disturbed or destroyed. Physical effects are likely to occur during the construction and decommissioning phases of the Development and be permanent and irreversible.

11.2.5.2 Indirect (visual) effects

13. NPS EN-1 (paragraph 5.8.8) requires that applicants provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance. The assessment of indirect effects will therefore consider whether the significance of a heritage asset is (adversely) affected by a result of a reduction in the contribution to that significance made by the asset's setting resulting from changes to that setting caused by the proposed Development.
14. Paragraph 189 of the NPPF¹ notes that in determining applications local planning authorities should require an applicant to provide a description of the significance of any heritage assets affected and the contribution of their setting to that significance. In relation to this, the setting consists of the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral. Therefore, the importance of 'setting' is in what it contributes to the significance of an asset; simple intervisibility is not in and of itself considered to be harmful, and "setting" itself is not a designation (qv. Paragraph 9 of the 'The Setting of Heritage Assets'; Historic England 2017).
15. Setting can therefore be tangible, such as a defined boundary, or intangible, such as an atmosphere or ambience. Setting is not simply identified within a visual envelope but can include an archaeological or historic context, which may not be visually apparent. The main concern for visual effects on a cultural heritage setting is the potential for the Development to fragment the historic landscape, separate connectivity between historic sites and impinge on views to and from sites with important landscape settings.
16. Nevertheless, as noted above, for the purposes of this assessment and reflecting the requirements of EN-1 and the NPPF, setting is only one attribute contributing to the significance of a specific heritage asset. Whilst a change in setting may occur, the setting may make little or no contribution to the significance of an asset or a change in setting may not be considered to lead to any loss of significance to an asset.

11.2.5.3 Study Areas

17. The Core Archaeological Study Area (Core ASA, see Figure 11.1) represents the area within which direct effects on archaeological features (known or unknown) could occur as a result of the Development, namely those areas in which construction activity is proposed.

¹ HCLG (2018). National Planning Policy Framework (NPPF). Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [accessed on 22/10/2018]

18. A Principal Archaeological Study Area (see Figure 11.1) has been defined to allow consideration of heritage assets within a 1 km distance of the Core ASA to assist in informing on the potential for unknown remains to survive within the Core ASA, as well as to identify heritage assets beyond the Development boundary that might receive an effect on their significance through development within their setting and which may require assessment.
19. A Wider ASA (see Figure 11.3) was also defined, with a view to identifying designated assets in the wider area which might receive an effect on their significance through development within their setting, and which may require assessment. The extent of the Study Areas was based on professional judgement, and the appropriateness of the areas was agreed with the Statutory Consultees during consultation.
20. The archaeological and cultural heritage resource comprises a diverse range of archaeological remains, built heritage and historic landscapes. In order to aid the exposition of this chapter of the ES, the archaeological and cultural heritage resource has been split into three sub-sections; Archaeology, Built Heritage and Historic Landscape.
21. The principal archaeological study area (Principal ASA) established for the assessment of known and potential archaeological and cultural heritage receptors encompasses a 1 km radius around the Core ASA.
22. A wider archaeological study area (Wider ASA) encompassing a radius of 5 km around the Core ASA was defined in order to assess the potential effect of the Development on the setting of heritage assets. Within the Wider ASA a viewshed analysis technique was employed which established a Zone of Theoretical Visibility (ZTV) in order to provide a comprehensive assessment of the potential for any significant effects to occur to the setting of heritage assets. ZTVs for the Development candidate design are provided for part of Chapter 7: Landscape and Visual, as Figures 7.2 and 7.3 in Volume 2 (DCO Document Reference 6.2.7).
23. Note that additional assets have been included in the assessment, following receipt of responses to the PEIR. These include one asset outside of the Study Area (Whitstable and its "historic setting") and one non-designated asset within the Study Area (Warm House, included as in close proximity to the Development). These are presented at the end of section 11.5.2.4.

11.2.5.4 Data Sources

24. A number of publicly accessible sources of primary and synthesised information were consulted for the purposes of this assessment;
 - The Kent Historic Environment Record (KHER), comprising a database of all recorded archaeological sites, find spots, and archaeological events within the county;
 - The National Heritage List for England (NHLE), which is the only official and up to date database of all nationally designated heritage assets;
 - Aerial photographs and LIDAR survey data;
 - National heritage datasets including the Archaeological Data Service (ADS), Heritage Gateway, OASIS, PastScape, Images of England, and the National Record of the Historic Environment (NRHE) Excavation Index
 - Historic manuscripts, surveyed maps, and Ordnance Survey maps held at the Kent History and Library Centre; and
 - Relevant primary and secondary sources held at the Kent History and Library Centre and in Wessex Archaeology's own library. Both published and unpublished archaeological reports relating to excavations and observations in the area around the Core ASA were studied.

25. A full bibliography is provided in the DBA provided at Technical Appendix A11.1.

11.2.5.5 Assessment of Effects

26. This section details the method used to determine the significance of effects of construction phase, operational phase, and decommissioning phase associated with the Development project on archaeological and cultural heritage receptors. This process considered the following:

- The sensitivity of a receptor to an effect;
- The magnitude of effect; and
- The significance of effect upon receptors.

27. The EIA identifies and assesses potential direct and indirect effects upon the significance of both potential archaeological and cultural heritage receptors. Potential effects upon archaeological and cultural heritage receptors arising due to the Development can be adverse or beneficial; direct or indirect; temporary or permanent and cumulative.

28. The methodology employed in this chapter for determining the significance of effect of the Development project upon known and potential archaeological and cultural heritage receptors takes into account the staged process to assessment of settings set out in 'The Setting of Heritage Assets' (Historic England 2017).

11.2.6 Criteria for assessment of Significance

29. This assessment sets the sensitivity/value of an asset (*its significance*) as identified in the baseline, and this is considered against the likely magnitude of the effect of the Development to derive the significance of any potential effect.

30. The assessment of the sensitivity/value of identified archaeological receptors is necessarily a qualitative and subjective process, which relies upon the application of professional judgement. This is particularly the case where identified receptors have no current national or local designation.

31. This assessment considers the significance of any effects both in terms of the EIA terminology and in respect of the potential for loss of significance ("harm") to occur in terms of the NPPF as described in 11.2.5 above.

32. Where insufficient information is available in order to establish the potential significance of effect on a receptor, such as where the sensitivity of archaeological and cultural heritage receptors could not be determined on the basis of the available information, the descriptor 'unknown' has been assigned.

11.2.7 Sensitivity/Value of Receptors

33. Sensitivity, for the purposes of this assessment, has been linked directly with designation status, or importance, as shown in Table 11.2. However, following the guidance in EN-1 (paragraph 5.8.6) and the NPPF (paragraph 197) consideration has been given to non-designated heritage assets, including sites recorded in the Historic Environment Record, and the lack of formal designation does not automatically equate to low sensitivity.

Table 11.2 Sensitivity of Cultural Heritage Features

Level of Sensitivity	Designation Status
Very High	World Heritage Sites, which are internationally important.
High	Scheduled Monuments, Listed Buildings, Registered Battlefields, Registered Historic Parks and Gardens, and non-designated assets of equivalent significance which are considered to be nationally important.
Medium	Regionally important archaeological features and areas (as defined in the Historic Environment Record). Conservation Areas, which are considered regionally important.
Low	Sites and features noted as locally important in the Historic Environment Record. Other, non-designated features of cultural heritage significance.
Negligible	Badly preserved / damaged or very common archaeological features / buildings of little or no value at local or other scale.

11.2.8 Magnitude

34. Magnitude is a measure of the nature of the predicted effect. It has been broken down as shown in Table 11.3.
35. Direct effects are permanent, as the loss of or damage to archaeological receptors cannot be repaired, replaced or recreated. Indirect effects can occur through changes in setting (arising from visual intrusion, etc.) which may cause a reduction in the contribution that the setting makes to the significance of an asset, so that there is an effect (reduction) in the overall significance of the asset, or so that that significance can no longer be appreciated or experienced.

Table 11.3 Magnitude of Effect

Level of Magnitude	Definition
Very High	Total loss of or major alteration to a site, building or other feature (<i>e.g.</i> , destruction of archaeological feature, demolition of a building). Blocking or severance of key visual or other relationship. Disassociation of an asset from setting, or other major change in setting, so as to cause wholesale loss of significance for a heritage asset and completely prevent the significance of an asset from being appreciated and/or experienced.
High	Major physical damage to or significant alteration to a site, building or other feature. Extensive change (<i>e.g.</i> , loss of dominance, intrusion on key view or sightline) to the setting of a Scheduled Monument, Listed Building or other feature registered as nationally important, which may lead to a major reduction in the contribution of that setting to the significance of the asset so that the asset loses significance, and a major reduction in the ability to experience and/or appreciate that significance.
Medium	Damage or alteration to a site, building or other feature. Encroachment on an area considered to have a high archaeological potential. Change in setting (<i>e.g.</i> , intrusion on designed sight-lines and vistas) to monuments / buildings and other features, which may lead to a moderate reduction in the contribution of that setting to the significance of the heritage asset. Change/reduction in the ability to experience/appreciate that significance.
Low	Minor damage or alteration to a site, building or other feature. Encroachment on an area where it is considered that low archaeological potential exists. Minor change in setting (<i>e.g.</i> , above historic skylines or in designed vistas) of Monuments, Listed Buildings, sites and other features, which may lead to a small reduction in the contribution the setting makes to the significance of the heritage asset, and limited loss of significance. Limited change in or reduction of the ability to experience or appreciate the significance of an asset.
Negligible	No physical effect. Slight or no change in setting, with no or very limited change in the contribution that setting makes to the significance of the asset. No or minimal change in the ability to experience or appreciate the significance of the asset.

11.2.9 Significance of Effect

36. The significance of any potential effect can be arrived at by matching sensitivity against magnitude as shown in Table 11.4.

Table 11.4 Significance of Predicted Effects

Sensitivity of Receptor	Magnitude of Effect				
	Very High	High	Medium	Low	Negligible
Very High	Major	Major	Moderate	Moderate	Minor
High	Major	Major	Moderate	Minor	Not significant
Medium	Moderate	Moderate	Moderate	Minor	Not significant
Low	Moderate	Moderate	Minor	Not significant	Not significant
Negligible	Not significant	Not significant	Not significant	Not significant	Not significant

37. Potential effects that are assessed as “Moderate” or “Major” are both considered to be “significant” in terms of the EIA Regulations.

11.2.10 Assumptions and Limitations

38. Data used to compile this assessment consists of information derived from a variety of sources, only some of which have been directly examined for the purposes of this study. The assumption is made that this data, as well as that derived from other secondary sources, is reasonably accurate.
39. The Historic Environment Record is not a record of all surviving heritage assets, but a record of the discovery of a wide range of archaeological and historic components of the historic environment. The information held within it is not complete and does not preclude the subsequent discovery of further elements of the historic environment that are, at present, unknown.

11.3 Baseline Conditions

40. As noted above, this chapter is supported by a desk-based assessment (DBA) and a geoarchaeological report (presented as Technical Appendices A11.1 and A11.2 respectively). It is not proposed to repeat the detail within those documents, and the following represents a summary presented to provide context to the subsequent assessment.

11.3.1 Previous Studies within the Core ASA

41. A study was undertaken as part of works to construct grid connection cables and a substation for the London Array offshore wind farm which adjoins the Development. Three initial phases of intrusive investigation were carried out by Wessex Archaeology as part of the London Array Grid Connection within the Core ASA (WA143) in 2007. The first phase was an archaeological watching brief upon five geotechnical test pits, which did not reveal any archaeological features although a probable alluvial sequence associated with the former saltmarsh was observed (Wessex Archaeology 2007). Following this a strip, map and sample excavation over the temporary access road and foundation pits was carried out. Modern features were identified comprising a drainage ditch and sea defence bank. Alluvial deposits were recorded beneath the topsoil (Wessex Archaeology 2008a). The third phase comprised a watching brief on 16 geotechnical test pits. The lower lying test pits demonstrated an alluvial sequence

- associated with the former salt marsh with one producing evidence of an ancient shoreline. A small number of possible archaeological features were identified including a possible shell midden dating to the medieval period. Burnt and worked flint were collected from the topsoil (Wessex Archaeology 2008b).
42. A geophysical survey was also carried out for the London Array project over an area to the south of the works described above but this did not identify any features of probable archaeological origin (WA144; Archaeological Surveys Ltd 2008).
 43. Further work was undertaken for the London Array project by PCA in 2008 comprising an archaeological evaluation comprising 53 trenches which revealed ditches, pits and postholes containing Iron Age pottery in the north eastern part of the London Array site. A few features of unknown date as well as a gravel surface (possibly a causeway) were also identified, as well as Iron Age and medieval pottery sherds recovered from an alluvial layer (PCA 2008).
 44. Following this an archaeological watching brief was undertaken in the same area. This comprised the stripping of topsoil in the north eastern part of the Core ASA where features were found during the evaluation. No features were found in this area during the watching brief as the features were preserved beneath the subsoil however Roman pottery, brick, medieval pottery, a 17th century brick fragment and an 18th century crockal bell were recovered during the stripping across the whole site. Also recovered during the watching brief were 19 WWII German shells and the tailfin of a British WWII 9-inch mortar (PCA 2010).
 45. Additional archaeological investigations were undertaken in 2011 which involved the archaeological excavation of four trenches for the export cables and monitoring of the exploration works for unexploded ordnance. A deposit of sand thought to represent the alignment of the ancient swale foreshore was identified E-W across all four trenches which corresponded with the ancient shoreline identified within the Wessex Archaeology test pit (MBH10; Wessex Archaeology 2008). Two pieces of oak which appear to have been placed within a channel between earthen banks were interpreted to be part of a possible fish trap. The UXO survey identified two cut features that were perhaps part of the dummy harbour created for the bombing decoy. Several 20mm shells were also found during this phase of work (PCA 2011).
 46. A Historic Building Record of WWII structures was undertaken within the eastern part of the Core ASA, which comprised the recording of a pillbox and 'Starfish' bombing decoy operation post prior to their demolition (WA64 & WA69; PCA 2009).
 47. A geoarchaeological borehole survey was undertaken in February 2018 comprising 59 boreholes across the Core ASA. At the time of writing interim results were available. The boreholes did not identify any deposits that have high archaeological or palaeoenvironmental potential, however the organic mud deposits which may represent the preservation of the saltmarsh, could be deemed to have moderate potential. Channel fill sands identified could possibly represent abandoned tidal creeks and gravel deposits may indicate the presence of a buried Pleistocene terrace within transect 4 (ARCA 2018). No peat beds were identified during the works.

11.3.2 Archaeological and Historical Background

48. The following section provides a summary of the archaeological and historical development of the Core ASA (and the Wider ASA), compiled from the sources summarised above. Further detail is included within the desk-based assessment (Technical Appendix A11.1). Heritage assets recorded within the Principal ASA have been given a WA/LB prefix for ease of reference; these are shown on Figures 11.1 and 11.2. Excluding those discussed above, only a small number of archaeological investigations have been undertaken within the Principal ASA to date.

11.3.2.1 Prehistoric

49. The Stour basin Palaeolithic project aims to identify areas of Palaeolithic potential across north Kent. The majority of the Core ASA lies within the 'Swale estuarine/alluvial marshes' which has been assigned a low/moderate potential for Palaeolithic remains. The very edges of the southern and eastern part of the Core ASA lie within the 'Sittingbourne/Faversham brickearths, North Downs dip slope' character area. Palaeolithic potential for this area is expected to be moderate. To date no Palaeolithic finds have been recorded within the Principal ASA.
50. Flint implements recorded within the Principal ASA comprise a flint scatter 800 m to the south of the Core ASA (WA01) and a Neolithic tranchet axe recorded just within the southern boundary of the Core ASA during field walking (WA02). A Neolithic site is recorded 74 m to the west of the Core ASA boundary (WA03). Within the Core ASA seven sherds of Iron Age and Roman pottery were recorded from the 'Nagden Bump' a former earthwork which has since been removed (WA05).
51. The archaeological evaluation undertaken in 2009 revealed features of Iron Age date from four of the trenches located within the north eastern part of the London Array site. The features which contained Iron Age pottery sherds and were suggestive of possible settlement. A gravel surface of unknown date was identified as being a possible surface or causeway for activities such as fishing to take place at the shoreline in the northern part of the London Array site. The surface did not reveal any dating evidence. Other features of unknown date were also recorded including gullies and small pits/postholes. Iron Age and medieval pottery was recovered from a colluvial layer in two of the trenches in the eastern part of the London Array site (PCA 2008).
52. Peat deposits have been identified from aerial photographs and by eye by the Forgotten Front Line project thought to be part of a 'prehistoric forest'. Many flint implements have also been recovered from the foreshore of the Swale at low tide to the north of the Core ASA (Mark Harrison pers. comm. 16.02.18).

11.3.2.2 Romano-British

53. During fieldwalking in 1997, timber revetments were found exposed on the eastern bank of Faversham Creek. 17 fragments of Roman ceramic building material and 26 medieval tile fragments were retrieved from amongst the timber work (WA06).

11.3.2.3 Anglo-Saxon

54. A well preserved wooden boat dating to 895AD was found at the edge of a creek 870 m to the east of the Core ASA (WA07). Due to the size of the timbers it is likely that the boat was used for carrying heavy cargo and it is probable that the boat was a sea going trading ship constructed in south or east England.
55. The settlement at Graveney is recorded in the Domesday Book of 1086 so it is likely that a settlement existed here during the Anglo-Saxon period. The name Graveney is derived from the Old English meaning 'at the Graven river' and Hasted records in 1797 that it was known as Graven-ea in the Anglo-Saxon period (Hasted 1797 & Glover 1976).
56. Preserved pieces of oak branches were found during the excavation for the cable trenches for the London Array project. One of the timbers was radio carbon dated to AD430 (+30) and are thought to be part of a possible fish trap. The two parallel branches have been placed within a channel between two earthen banks. No other associated supporting structure was found although it was possible that this lay outside the excavation area or it could be that the fish trap was abandoned before it was finished. Timbers for fish traps were commonly placed on the inter-tidal marshland environment within naturally formed hollows (PCA 2011).

11.3.2.4 Medieval

57. Evidence for medieval settlement at Graveney can be seen through some of the surviving buildings in the area. All Saints Church dates to the 12th century and is a Grade I Listed Building located 500 m to the south of the Core ASA (LB01). Graveney Court (Grade II Listed; LB02) was built in 1420 by John Martyn and upon his death he was buried in the graveyard at All Saints Church. Sparrows Court (LB08) and Sandbanks Farmhouse (LB09) also date to the 15th century and are located within the Principal ASA; both are Grade II listed. Graveney Hill Farmhouse was formerly Grade II Listed and located 300 m to the south of the Core ASA. It was thought to have been constructed between 1400-1499 (WA08).
58. Geotechnical investigations undertaken within the eastern part of the Core ASA were monitored as part of a watching brief for the London Array cable route and substation. This revealed a possible shell midden of medieval date within one of the test pits. A sherd of Romano-British pottery (thought to be residual) and sherds of medieval pottery were retrieved (WA09; Wessex Archaeology 2008b). A watching brief undertaken in 2010 for the London Array recovered a number of sherds of medieval pottery from a redeposited topsoil deposit. Other sherds dating from between the Roman period to 1800 were also recovered (PCA 2010).
59. A mound of discarded boulders formerly used as ballast were identified to the west of the joint entrance to Faversham and Oare Creeks. The boulders are in an area known as 'the Hard' which is thought to also be the site of a medieval beacon (WA10).
60. A derelict boat of medieval to post-medieval date was recorded on the bed of Faversham Creek known locally as 'the cannon ball wreck' due to iron cannon balls retrieved from the wreck site (WA11). Timbers were found at Oare Creek thought to be part of a late medieval or post-medieval mill or drainage sluice (WA12).
61. The north Kent marshland was used extensively for salt production from at least the medieval period. The Domesday Book records four salt houses at Graveney, Whitstable, Faversham and Oare in 1086. These areas would have been periodically inundated by the sea. The seawater would have been partially evaporated by the sun as a first stage, and then the brine was stored and boiled within cisterns up to eight feet deep in some cases. In winter the cistern would have been covered with a tile roof sometimes called a brine house (Thompson 1956).
62. A group of six medieval salterns are located just over 1 km to the east of the Core ASA and have been designated scheduled monuments; they were originally part of a group of 11 (the other 5 were destroyed). The mounds themselves represent the middens of waste material however investigation into the other five mounds showed evidence of associated industrial features such as wicker or clay lined pits, evaporation kilns, lead boiling pans and the foundations of temporary wooden buildings. The investigations revealed that the salterns were in use from at least the end of the 11th century until 1325. Salt production ended when Seasalter was embanked in 1325 to keep out the encroaching sea and the area was used as pasture (Thompson 1956).
63. A number of salt mounds are recorded within the eastern part of the Core ASA and to the east of the Core ASA recorded on the KHER as being of unknown date. However, on modern Ordnance Survey maps some of the salt mounds to the east of the Core ASA are labelled 'medieval salt workings'.
64. It is possible that land reclamation took place during the medieval period, however to date no evidence of this has been positively identified within the Principal ASA. It is therefore possible that features relating to medieval utilisation of the marshland or land reclamation activities could exist within the Principal ASA.

11.3.2.5 Post-medieval and 19th century

65. Graveney continued as a rural settlement into the post-medieval period and 19th century. A number of surviving Listed Buildings are located within the Principal ASA comprising two 17th century barns (LB05 & LB11), Bridge House (LB06), Post Office (LB07) and The Shipwrights Arms (LB10). A number of post-medieval farmsteads are also recorded within the Principal ASA from historic maps (WA23-49).
66. A number of features relating to the agricultural use of the Core ASA have been recorded on the KHER. A sheepfold on Nagden Marsh (WA29) is recorded as an outfarm in a loose courtyard plan with one building on the side of the yard. The sheepfold is recorded as being completely demolished and no evidence of this could be seen on the site visit, but it is visible on Ordnance Survey maps dating from the 1870s to mid 20th century. A map produced in 1609 of the Manor of Faversham, is likely to have been produced to document the oyster fisheries between Faversham and Whitstable. Little detail is shown onshore however local landmarks are indicated. 'Nagden Hill' and 'Nagden House' are both labelled within the Core ASA (identified in the DBA in Technical Appendix A11.1 as "Nagden").
67. Kye Cottage was a loose courtyard plan farmstead (WA30) also recorded within the Core ASA identifiable on the 1842 tithe map and the 1870s Ordnance Survey map. By the start of the 20th century just a single building remained and the farmstead is no longer labelled perhaps suggesting it was out of use by this time. A sheepwash perhaps associated with Kye Cottage is also recorded within the Core ASA.
68. Another sheepfold is recorded within the eastern part of the Core ASA (WA37). This is recorded as an outfarm with a loose courtyard plan with a building to the side of the yard. Ordnance Survey maps of this area label a sheepwash and sheepfold however between 1938 and 1960 these were removed.
69. Two Farmsteads are recorded in the southern part of the Core ASA. The farmstead in the south eastern part of the Core ASA is shown on the tithe map of 1842 as having a farmhouse and garden and two associated farm buildings (WA40). By the 1870s an additional outbuilding had been added as well as a sheepfold to the west. By the late 19th century an orchard is shown to the west of the farmstead. By 1963 most of the farmstead had been demolished including the farmhouse and most of the agricultural buildings. Some ceramic building material was noted on the surface in this area during the site visit.
70. A farmstead was also recorded in the southern part of the Core ASA. As well as buildings and an enclosure shown on the OS map of the late 19th century labels for 'Old Brickkiln' and 'Old Quarry Pit' are shown which suggest that some quarrying activities and perhaps brickworks had previously taken place within the Core ASA. No evidence of any of the former buildings or quarrying/brickmaking activities could be identified on the site visit (WA41).
71. WA14 records a duck decoy pond on Nagden Marshes within the Core ASA. The 1842 tithe map shows the earliest detail of the duck decoy as a large square enclosure with central divisions. The most central area is most likely to be the decoy pond as this is named in the apportionment as 'swampy'. The surrounding parcels within the enclosure are named 'coy piece'; the word 'coy' likely derived from the Dutch word for cage. Later mapping from the 1870s and 1890s show the square enclosure as a watercourse which is likely to have been the case in the 1840s however may have been omitted from the map. The OS map from 1907 shows the swampy central area and it is this shape that can also be seen on the 2009 aerial photo.
72. A decoy house (WA21) is recorded to the east of the decoy pond. The 1798 draughtsman's map shows what is likely to be the decoy house and decoy pond on the same map although neither are labelled. The decoy house is shown as a small square

enclosure with an internal central square building and rectangular buildings both within and outside the north eastern corner of the enclosure. To the west is the larger square enclosure mentioned above but with a larger area of marshland/swampy area that is shown on the later tithe map. The 1801 Mudge map and 1821 Greenwood map both label a decoy house in this area which could represent WA21 however these don't include the detail of the pond located to the east of WA14. Earlier mapping from 1798 shows a square enclosure containing buildings which is likely to be the decoy house however this is not labelled. The 1798 draughtsman map also shows 'Nagden Salts' (identified in the DBA in Technical Appendix A11.1 as "Nagden") to extend within the northern part of the site.

73. A landing place at Faversham Creek is also recorded within the western part of the Core ASA. A post-medieval to modern decoy pond is recorded within the north eastern part of the Core ASA. A decoy pond at this location could not be identified on the historic maps or aerial photographs.
74. The Andrews, Drury and Herbert map of 1769 shows the site to lie over an area of marshland shown along the coast with roads or tracks leading from the east towards Ham in the west and north towards the coast. The Mudge map of 1801 shows more detail and shows the Core ASA to be divided into a large number of small rectangular parcels of land. A linear earthwork can be seen to traverse the Core ASA from the coast at Nagden Salts eastwards, this perhaps represents a flood defence or sea wall of some kind. Similar markings can be seen along the coast to the east and west of Nagden Salts. Greenwood's map of 1821 shows less detail in terms of the field layout however does appear to show a stream or ditch within the Core ASA running south from Nagden Salts.
75. The 1842 tithe map of Graveney shows the field divisions within the Core ASA and the apportionment records that the Core ASA was used for pasture at this time. By the 1870s some of these small fields had been amalgamated into larger fields particularly in the western part of the Core ASA. The boundaries remained largely unaltered by the second edition map of 1896.

11.3.2.6 Modern (AD 1900-Present day)

76. A number of heritage assets dating to WWII are recorded within the Core ASA and Principal ASA. The site of the 'Battle of Graveney Marsh' is recorded on the KHER as being at the Sportsman Pub on Seasalter Road to the east of the Core ASA (WA65). However, the battle is known to have taken place on the marsh after a German plane crashed on 27th September 1940. As a record of a crashed Junkers Bomber is recorded within the Core ASA at WA74, it is possible that this battle took place within the Core ASA boundary. The Battle was a skirmish between the German crew of the crashed Junkers 88 Bomber and soldiers from 1st Battalion London Irish Rifles who were billeted at the Sportsman Pub. The aircraft is recorded to have been damaged by anti-aircraft fire and Spitfires and as a result crash landed on Graveney Marsh. The German crew engaged in machine gun fire with the London Irish Rifles but subsequently surrendered. The plane was charged in advance with an explosive to destroy the aircraft if it crash-landed but Captain Cantopher was able to disarm the bomb and the aircraft is recorded to have been removed for study by the British Military. The battle represents the last battle on British soil between invaders and defenders (WA65).
77. Another crashed aircraft (a Hawker Hurricane) is recorded within the Principal ASA 500 m to the south of the Core ASA (WA73). The plane crashed on the 7th September 1940 near Sandbanks Farm.
78. A pillbox is recorded at the southern boundary of the Core ASA (WA75) and was identified during the Core ASA visit to be in good condition. The pillbox is Type 24 and formed part of the coastal defence of the area along with a number of other defences.

The pillbox is unusual in that it is either made from brick or at least clad in brick. This may indicate that the pillbox was built during a time of cement shortage during the war. The gun emplacements within the walls of the pillbox faced north towards the coast with the entrance to the south adjacent to the creek. Small rectangular gaps in the wall were seen at the base of the wall perhaps created for ventilation.

79. Historic building recording of military structures within and adjacent to the eastern part of the Core ASA was undertaken in 2009. A pillbox and 'Starfish' Decoy were recorded prior to their demolition within the Core ASA and another pillbox adjacent to the Core ASA was described due to its relationship with the structures, to be demolished. The Royal Navy 'Starfish' site is recorded at the edge of the Core ASA boundary at Cleve Farm (WA64) constructed in 1941 as a 'QL' decoy for the Royal Naval Dockyard at Sheerness. Starfish decoys operated by setting alight a series of controlled fires during an air raid to replicate a military or urban area that was targeted by bombs such as the Dockyard at Sheerness. The fires were often lit around a pond or tank of water to replicate a dockyard during a blackout. Cleve Marsh was selected in 1941 by the Royal Navy as the location for the 'Starfish' decoy site designed to divert enemy bombers from the Dockyard at Sheerness to Cleve Marsh using a series of controlled fires and lighting effects designed to simulate the target site at night. The archaeological recording included the Operation Post which was a semi-sunken structure from which the lighting effects were operated. The decoy lighting was aimed to replicate 'street lighting', 'leaky roof lights' and 'open doors'. Whilst the decoy fires area described as a 'basket fire', 'spluttering or boiling oil fire', 'grid fire', 'cordite flash' and 'dummy oil tank' (PCA 2009).
80. The pillbox close to the Operation Post was another Type 24 pillbox which was located at WA66. The pillbox was a concrete hexagonal structure with concrete loopholes for light machine guns and smaller loopholes for pistols on either side of the entrance. To the north of the operation post building two parallel anti-landing ditches can be seen upon aerial photographs dating to 1941 (PCA 2009).
81. Another pillbox is located just beyond the Core ASA boundary close to Nagden House, 33 m to the west of the Core ASA (WA67). This is recorded as a hexagonal pillbox, likely to have been constructed from reinforced concrete but clad internally and externally with common brick. The pillbox had a concrete roof and base and concrete lintels over the gun emplacements. As with the pillbox within the Core ASA its brick facing may indicate that it was constructed during one of the cement shortages in summer/autumn 1940. Another pillbox is recorded 100 m to the south of the Core ASA at Graveney Hill Farm (WA86).
82. A WWII castellated trench system is recorded on the KHER at WA89 and can be seen on aerial photographs from 1940. By 1960 only faint traces of the trenches can be seen as cropmarks as it was likely that this area had returned to agricultural use by this time (WA89). A WWII road block is recorded at Seasalter Road 500 m to the east of the Core ASA (WA88).
83. A number of mounds identified from current OS maps as being salt workings are first identifiable on 1946 aerial photos and as such have been attributed a modern date by the KHER (WA77-85 and WA98). Consultation of OS maps of this area shows that from 1963 raised areas labelled 'medieval salt workings' are marked at these locations so it is possible that the salt workings are much earlier than their modern status suggests. Similarly, WA100 located slightly further east is also recorded as salt working of modern date however this could not be identified on the OS map of 1963 as being 'medieval salt workings' (WA100).

11.3.2.7 Unknown date

84. A large number of the heritage assets recorded within the Principal ASA are of unknown date and these largely comprise cropmarks identified from aerial photographs which have not been intrusively investigated and earthworks such as the salt mounds described above.
85. Salt mounds recorded within the Core ASA from aerial photos are located at WA101, WA102, WA103 and WA111. WA101-103 are located relatively close together within the eastern part of the Core ASA and WA111 is located further north west within the Core ASA. The main focus of the salt mounds appears to be located to the east of the Core ASA with WA104-WA107 recorded between the eastern Core ASA boundary and Seasalter Road and WA108, WA109 and WA110 on the western side. These mounds are recorded as being of unknown date and also lie within the same area as those recorded of modern date described above (WA77-85, WA99 and WA100). WA78-WA85, WA98, WA100, WA104, WA105, WA107, WA108, WA109, WA110 and WA136 can be identified as mounds on the LiDAR survey data.
86. No evidence of WA101, WA103 or WA111 could be identified on the LiDAR data or upon the site visit; the crop in these fields was approximately 0.30-0.50 m high. The prominence of the mounds outside the boundary to the east on the LiDAR survey make it unlikely that the mounds exist extant at the Core ASA. It is more likely that due to the current agricultural use of the fields the mounds may have been affected by ploughing or were deliberately levelled when the Core ASA changed use. The salt mounds located within the Core ASA are not shown on the Ordnance Survey maps.
87. Two sheepfolds of unknown date have been recorded within the Core ASA (WA112 and WA113). The sheepfold at WA112 is visible on the OS maps from 1860s-70s until the 1970s. The sheepfold at WA113 is likely to be a duplicate record of the sheepfold recorded at WA37 positioned adjacent to WA113.
88. At the position of WA111 a series of small raised dimples arranged in rows can be seen on the 1960 aerial photo. The exact location of these is unclear however it is likely that these are of agricultural origin. A mound recorded at WA101 can be identified on the 1940 aerial photo as an extant feature however by the 1960 aerial photo this is shown to have been removed likely due to the change of use of the Core ASA to agriculture following flooding in 1953.
89. WA102 lies within the area that was investigated as part of the cable trenches for the London Array. It is unclear whether the trenches passed through the exact location of the mound however no remains associated with the mound were recorded during the works.
90. Within the Core ASA aerial photographs have identified a possible pit group at WA117. A rectilinear enclosure was identified at WA119. The former sea wall identified on photos dating to 1941, 1946 and 1998 at WA120. Linear cropmarks were identified from aerial photos taken in 2000 at WA134. A possible enclosure feature and linear feature are recorded within the Core ASA at WA135. A linear cropmark is recorded within the eastern part of the Core ASA at WA140 and a cropmark of a possible pit is recorded at WA141.

11.3.3 Built Heritage

91. There are no designated heritage assets within the Core ASA boundary. Designated Heritage assets within the 1 km Principal ASA comprise:
 - One Grade I Listed Building;
 - 10 Grade II Listed Buildings; and
 - Three Conservation Areas.

92. Designated Heritage Assets (including those listed above) within the 5 km Wider ASA comprise:
- 10 Grade I Listed Buildings;
 - 34 Grade II* Listed Buildings;
 - 534 Grade II Listed Buildings
 - 13 Scheduled Monuments;
 - One Grade II Registered Park and Garden; and
 - 15 Conservation Areas.
93. No World Heritage Sites or Registered Battlefields exist in either the Principal ASA (1 km) or the Wider ASA (5 km). A full list of designated heritage assets within the Principal ASA and the Wider ASA is provided within the Historic Environment Desk-Based Assessment (Technical Appendix A11.1).
94. The Core ASA contains one non-designated built heritage asset, WA75 Second World War Pillbox, located at the southern edge of the Core ASA.
95. Potential sensitive receptors to the Development are described briefly below.

11.3.3.1 Graveney Church Conservation Area and its assets

96. Graveney Church Conservation Area is located 440 m to the southeast of the Core ASA and contains Grade I listed Church of All Saints (LB01), Grade II listed Headstone to Thomas Barman (LB03), Grade II Listed Murtons Farmhouse (LB04) and Barn (LB05) and Grade II Listed Graveney Court (LB02). All Saints Church is a 12th century Norman church which has served the local community since this time. The church would have been a focal point in the landscape overlooking the marshland to the north. Some small-scale alterations were undertaken in the 14th and 15th centuries and some maintenance work was undertaken in the 18th and 19th centuries. A headstone to Thomas Barman within the churchyard is Grade II listed. Graveney Court lies to the north of the church and is set back from the main road, at the edge of the marshland. It is timber framed and dates to around 1420 with an adjoining farmyard to the north.
97. Murton's Farmhouse lies to the south of the church on the eastern side of Seasalter Road. Part of the building originates in the 16th century and the rest in the 18th century, constructed from brick. It has a large associated timber framed barn dating to the 17th century which has been converted into two dwellings.
98. Sparrow Court (LB08) and Sandbanks Farmhouse (LB09) are both located to the south of the Core ASA and to the west of Graveney but are not within the Graveney Church Conservation Area. Both of these are Grade II Listed. Sandbanks Farmhouse dates to the 15th century. It is timber framed and pebble dashed with a plain tiled roof. Sparrow Court is also a 15th century timber framed building.
99. Despite the conversion of the marshland to arable use, the flat expanse of land is considered to still exert an influence of the character and development of Graveney. The presence of the wild open spaces which extend up to the edge of the All Saints Churchyard are a strong reminder of how remote Graveney is and has been over time. The marshland landscape setting is considered to make a contribution to the setting of the Graveney Conservation Area. The scattered arrangement of the buildings and inconsistency in the range of materials is thought to reflect the harsher environment and bleak surroundings close to the marsh.

11.3.3.2 Graveney Bridge Conservation Area and its assets

100. Graveney Bridge Conservation Area is located in the southern part of Graveney along Seasalter Road and comprises Bridge House, Post Office, Bridge Cottage, Bridge Cottages, and Four Horse Shoes Inn all of which are Grade II Listed. Bridge House and Post Office lie in the northern part of the Conservation Area and date to the 18th

century. Bridge house is red stock brick and has a former stable which has now been converted into a dwelling. Post Office is constructed of brick now painted with a small more recent extension in front of the original building.

101. Graveney School was built by 1876 and is an attractive red brick building with gothic style windows and brickwork detailing which are characteristic of Victorian School buildings. Whilst this building is not listed it is considered to make a contribution to the street scene in this area.
102. In the southern part of the Conservation Area are two listed cottages, Culmers and Wheelwrights Cottages, which date to the 17th century but have been heavily refurbished. Adjacent to these is Bridge Cottage which is a two storey 17th century house. On the western side of Seasalter Road is Four Horse Shoes Inn an 18th century public house which is timber framed and clad in mathematical tiles.

11.3.3.3 Goodnestone Conservation Area and its assets

103. Goodnestone Conservation Area lies to the south of the Graveney Bridge Conservation Area. The Conservation Area covers four main areas Four Horseshoes Park in the north, Langdon Court Cottages and Langdon Court in the centre, Goodnestone Court further south and Poplar Hall in the extreme south. Due to the distance between the marshland to the north and Goodnestone the remoteness that is evident within the Graveney Church Conservation Area is not as evident in Goodnestone. The surrounding landscape is comprised of trees and hedgerows rather than open landscape. The rural character of Goodnestone is retained through the lack of footways and kerbs at the edge of Head Hill. Orchards are also prominent in the surrounding area and the surrounding typical Kentish countryside is considered to contribute to the character of the place.
104. Listed Buildings within the Conservation Area comprise Grade I Church of St Bartholomew, a Grade II listed chest tomb, and Grade II* Goodnestone Court.
105. St Bartholomew's church is a 12th century parish church in an isolated position away from the main road. It is constructed from brick and stone and retains much of its Norman character. A chest tomb located within the graveyard dedicated to George Stone is Grade II listed. The church lies adjacent to the Grade II* Goodnestone Court which is a 15th century house and a typical Kentish Yeomans farmhouse.
106. The Goodnestone Conservation Area also contains several groups of cottages and an oast house complex now converted into dwellings. Poplar Hall at the very south of the Conservation Area was built in the 20th century.

11.3.3.4 Faversham Town Centre Conservation Area

107. Faversham Town Centre Conservation Area is focussed upon the historic core of Faversham and contains three Grade I, 19 Grade II* and 271 Grade II Listed Buildings. The three Grade I buildings comprise the Parish Church of St Mary of Charity, Church of St Mary Magdalene and Faversham Abbey Minor Barn. The development of Faversham has been influenced by geographical and political factors. The historic town of Faversham grew up around its navigable creek contrary to other historic towns which relied on their position close to Watling Street/A2. The Abbey was founded close to the creek reinforcing this area as the focus of the town and it was not until the coming of the railway in the 19th century that development expanded to the A2.

11.3.3.5 Isle of Harty and its assets

108. The Church of St Thomas the Apostle also known as Harty church, lies at the southern extent of the Isle of Sheppey. This area was formerly known as the Isle of Harty as it was cut off from the remainder of Sheppey. The position of the church has become more isolated over time as Harty was previously used as an important crossing point of the swale until 1946. Since the crossing point has become disused the settlement at

Harty has diminished. The earliest part of the church is the nave which is thought to date to the 11th or 12th century. The north aisle and the chancel are thought to have been added in the 1200s.

109. The church is Grade II* listed as an example of a late 11th and 12th century parish church with additions in the 14th and 15th centuries and its interior medieval fittings. It was sympathetically restored in the 19th and 20th centuries. Its setting on the north bank of the Swale is also listed as a reason for its designation as well as it being one of the last survivals of the medieval settlement of Harty.
110. Grade II listed Park Farmhouse and Ferry House Inn are located to the west of Harty church. Park Farmhouse is a 16th century timber framed building refaced with painted brick. It is part of a loose courtyard plan farmstead with the farmhouse detached and within a central position. Ferry House Inn is a public house dating to the 18th century, the name suggests that it was associated with the ferry perhaps used by travellers as a stopping point before continuing their journey.

11.3.3.6 Waterham and nearby assets

111. Waterham Farmhouse, Meadow Farmhouse and Way Street Farmhouse are all Grade II listed Buildings located to the east of the Core ASA. Waterham Farm lies at the western extent of Waterham in a rural location. The farmhouse was constructed in the 15th and 17th centuries with later alterations in the 19th century. It is timber framed and tile hung on the first floor. The farmhouse is part of a loose courtyard plan farmstead with agricultural buildings on one side.
112. Meadow Farm is located to the east of Waterham Farm. Meadow Farmhouse is a 17th century farmhouse constructed from timber frame and rendered. Meadow Farmhouse previously lay within a regular L-plan courtyard farmstead of which only the farmhouse survives.
113. Way Street farmhouse lies south east of Waterham and adjacent to another farmstead Town Farm. Way Street Farmhouse dates to the 18th century but was remodelled in the 19th century. The farmhouse is adjacent to the road detached from the main L-plan regular courtyard farmstead, with agricultural buildings on three sides.

11.3.3.7 The Shipwrights Arms Public House

114. The Shipwrights Arms is a public house thought to date to the 18th century or earlier and lies in an isolated position on at the confluence between Faversham Creek and Oare Creek. The building is timber framed and weather boarded and part clad in painted brick. The structure was first built to serve the boat repair and mooring activities which it still fulfils today. Due to its isolated position within the marshland landscape the building is considered to have 'landscape value above what might be expected for a relatively modest building' (List Entry description 1240465).

11.3.3.8 Former Marsh Gunpowder Works

115. The Former Marsh Gunpowder works is comprised of six Grade II Listed Buildings, East Crystallising House, West Crystallising House, Refining House, Melting House, Earth House and Office Stores and House. The earth house was used for the storage of the unrefined Saltpetre imported from the East Indies. The unrefined saltpetre was taken to the melting house where it was boiled into a solution that was then crystallised in one of the crystallising houses. The crystallised saltpetre was then taken to the refining house where it was treated to improve its consistency and quality.
116. The Gunpowder works have a key place in the history of the Faversham gunpowder industry which are considered to be an important theme for the heritage of the Swale area. The Marsh Gunpowder Works were sited outside of Faversham in an isolated position due to an explosion at the Faversham Works in 1786. The Marsh Gunpowder

works played an important part in the improvement of British gunpowder leading up to and during the Napoleonic Wars. The surviving buildings are considered to be examples of the best-preserved buildings of this type which form a discrete and coherent group of late 18th-early 19th century industrial buildings for refining Saltpetre.

11.3.3.9 WWII Pillbox (WA75)

117. The WWII pillbox is located within the southern part of the Core ASA and was designed to defend the coastline along with a number of other defences in the area. The pillbox was constructed mainly of brick except for a concrete foundation and roof. More commonly pillboxes were built from concrete and the use of brick may indicate that the pillbox was built during one of the periodic cement shortages that restricted the use of concrete for defensive structures. The Pillbox is type 24 for which the design specification was issued by the Directorate for Fortifications and Works in the early summer of 1940.
118. The setting of the pillbox is comprised of the coastal area to the north onto which the gun emplacements face. The purpose of the pillbox was to defend this area along with the associated defensive structures in the surrounding area. The pillbox is positioned close to the tree line boundary to camouflage the pillbox within the hedgerow and close to the creek to make access to the pillbox more difficult for enemy attack.
119. The flat low-lying nature of the marshland and visibility towards the coast contribute to the setting of the pillbox as visibility of oncoming enemy attack would have been key to the success of the defence of the area. The pillbox derives its evidential and architectural value as an example of a Type 24 pillbox in good condition. Its construction from brick rather than concrete makes it slightly rarer and suggests that it was built in the time of cement shortage. The pillbox has historic value as part of the defence of Britain during WWII. The pillbox has limited communal value as it is in an isolated position within private farmland. It is also well camouflaged and is not immediately obvious upon approach to the structure.

11.3.4 Historic Landscape Character

120. Much of the western part of the Core ASA is characterised as 'Reclaimed Marsh-irregular enclosures' which are areas of marshland which have been drained and enclosed. These areas utilise existing irregular drainage channels. The site visit determined that the area characterised as irregular enclosures by the KHER were bounded by drainage ditches. Historic map regression shows that many of the existing boundaries have remained in place since at least 1872, however previously the fields were further subdivided. The former marshland character type is evident through the existing drainage ditches which surround the fields.
121. Part of the southern section of the Core ASA is characterised as 'small regular enclosures' originally land which was enclosed from marsh. Boundaries are typically drainage channels and this type is probably the oldest of the types in this category (reclaimed marsh), often medieval in age. Historic map regression shows that in 1872 the boundaries within this area were much more irregular, however by 1963 the boundary at the western edge of the Core ASA which had previously been wavy had been straightened and another boundary within the eastern part of this area which had been wavy had been removed. This may have corresponded with a move from pasture to arable land for which a simplified layout would have been preferable for the use of farm machinery within the fields.
122. The western part of the Core ASA is characterised as 'rectilinear enclosures'; at present this area consists of square and rectangular fields with straight regular boundaries. Historic map regression shows that this area was previously a mixture of straight and wavy boundaries which by the beginning of the 20th century had been largely

straightened. The site visit established that the existing boundaries of the Core ASA in this area comprised drainage ditches. The south eastern part of the Core ASA is bound in part by a low hedge, however this is an incomplete boundary and in places just comprises the grass verge adjacent to the road. Parts of the southern boundary of the Core ASA comprise mature tree lines rather than the drainage ditches which divide the Core ASA internally.

11.3.5 Summary of Archaeological Potential and Identified Sensitive Receptors

11.3.5.1 Archaeological Remains

123. The potential for encountering archaeological remains is informed by the known and recorded historic environment resource as well as a consideration of where previous impacts may have damaged or removed remains. Recorded heritage assets within the Core ASA as well as potential for unknown archaeological remains are listed in Table 11.5 as potentially sensitive receptors to the Development.

Table 11.5 Potential Sensitive Receptors – Archaeological remains

WA no.	Name	Period	Significance (Value)
N/A	Former field boundaries and drainage ditches identified from historic maps	Post-medieval to Modern	Low
N/A	Other unknown archaeological remains- perhaps a continuation of remains associated with the London Array Investigations and/or deeply buried prehistoric deposits	Unknown	Unknown
WA14	Decoy Pond on Nagden Marshes, Graveney	Post-medieval	Low
WA17	Landing Place in Faversham Creek, near Faversham	Post-medieval	Low
WA21	Decoy House, Nagden Marshes	Post-medieval	Low
WA29	Sheepfold on Nagden Marsh	Post-medieval	Low
WA30	Kye Cottage	Post-medieval	Low
WA31	Sheepwash south east of Kye Cottage	Post-medieval	Low
WA37	Sheepfold on Cleve Marshes	Post-medieval	Low
WA38	Outfarm on Nettle Hill	Post-medieval	Low
WA40	Farmstead south west of Graveney Hill Farm	Post-medieval	Low
WA41	Farmstead south of Graveney Hill Farm	Post-medieval	Low
WA59	Decoy Pond	Post-medieval to Modern	Low
WA64	Sheerness Starfish, Graveney Hill Second World War bombing decoy site	Modern	Moderate
WA74	Crash Site of Junker JU 88A-1	Modern	High
WA89	Castellated trench system in Graveney Parish	Modern	Low
WA101	Mound	Unknown	Unknown
WA102	Mound	Unknown	Unknown
WA103	2 Mounds	Unknown	Unknown
WA111	Saltmounds (?)	Unknown	Unknown
WA112	Sheepfold	Unknown	Low
WA113	Sheepfold	Unknown	Low
WA117	Pit group	Unknown	Unknown

WA no.	Name	Period	Significance (Value)
WA119	Rectilinear enclosure	Unknown	Unknown
WA120	Former Sea Wall	Unknown	Unknown
WA134	Linear Cropmarks, Graveney	Unknown	Unknown
WA135	Possible enclosure feature, Faversham	Unknown	Unknown
	Linear Feature, Faversham	Unknown	Unknown
WA140	Linear Cropmark	Unknown	Unknown
WA141	Single point cropmark, possibly pit?	Unknown	Unknown

124. Previous impacts across the Core ASA are likely to have been restricted to ploughing after the Core ASA had been changed to agricultural use. Depending upon the depth of the ploughing and the depth of potential archaeological features this has the potential to have affected below ground remains within the Core ASA however archaeological features were preserved and identified during the London Array investigations unaffected by ploughing activities. After flooding in 1953 it is thought that the ground may have been remediated however confirmation of remediation and depth of this activity is unconfirmed. Localised impacts may have arisen from the installation of the Starfish Bombing Decoy which may have affected predating archaeological remains, however remains of the decoy are also significant in their own right.
125. The geoarchaeological study (see Technical Appendix A11.2) models the sub-surface deposit sequence based on coring data. It characterises the site as a whole as being typically of low sensitivity (*i.e.*, there is low potential for remains of palaeoenvironmental interest to survive and limited potential for the preservation of water-logged remains and peats). Where noted, peats and other sensitive deposits were found below alluvial flood deposits and along former creeks/channels where these passed through the Core ASA. It is noted that this work was based on transects and represents a sample of the Core ASA, and consequently, there may remain currently unknown areas of sensitive deposits.
126. Other associated sensitive receptors outside of the Core ASA are the archaeological remains associated with the scheduled monuments on Seasalter Level consisting of a group of six medieval salterns north and north east of Monkshill Farm, are located between 1-1.9 km to the east of the Core ASA (List Entry nos. 1012968, 1012969, 1012970, 1012971, 1012972, and 1012973). In addition to this the scheduled monument of Medieval Moated site at Sayes Court located 1.8 km to the north of the Core ASA (List Entry 1012178). These assets have been identified as sensitive receptors to the Development in terms of potential for them to lose significance due to a reduction in the contribution that their settings make, as a result of development within that setting.

11.3.5.2 Built Heritage

127. The Built Heritage assets shown in Table 11.6 have been identified as potential sensitive receptors to the Development due to the potential effects of the Development upon the setting of the assets and the contribution that the setting makes to the significance of the assets.

Table 11.6 Potential Sensitive Receptors-Built Heritage

LB no. and List Entry no.	Name	Grade	Significance (Value)	Distance from Core ASA
-	Graveney Church Conservation Area (including LB01, LB02, LB03, LB04 & LB05)	-	Moderate	440 m
LB01 (1069110)	Church of All Saints	Grade I	High	510 m
LB03 (1069109)	Headstone to Thomas Barman in churchyard south east of Church of All Saints	Grade II	Moderate	530 m
LB04 (1344023)	Murtons Farmhouse	Grade II	Moderate	700 m
LB05 (1069107)	Barn 30m south of Murtons Farmhouse	Grade II	Moderate	725 m
LB02 (1069108)	Graveney Court	Grade II	Moderate	465 m
LB08 (1069143)	Sparrow Court	Grade II	Moderate	250 m
LB09 (1119654)	Sandbanks Farmhouse	Grade II	Moderate	590 m
-	Graveney Bridge Conservation Area (including five Grade II Listed Buildings)	Grade I Grade II* Grade II	Moderate	845 m
1107863 1069144 1069145	Goodnestone Conservation Area (including a Grade I, Grade II* and Grade II Listed Building)	Grade I Grade II* Grade II	Moderate	1.07 km
-	Faversham Town Centre Conservation Area and its assets	Grade I Grade II* Grade II	Moderate	980 m
1258076	Church of St Thomas the Apostle, Harty	Grade II*	High	1.8 km
1258074	Park Farmhouse	Grade II	Moderate	1.9 km
1258222	Ferry House Inn	Grade II	Moderate	1.7 km
1338179	Waterham Farmhouse	Grade II	Moderate	1.7 km
1069117	Meadow Farmhouse	Grade II	Moderate	2 km
1069124	Way Street Farmhouse	Grade II	Moderate	1.7 km
1240465	Shipwrights Arms at Faversham	Grade II	Moderate	216 m
1389579 1389580 1389581 1389582 1389583 1389584	Group of Listed Buildings at former Marsh Gunpowder Works	Grade II	Moderate	1.1 km
WA75	Second World War Pillbox	Undesignated	Low	Within Core ASA

128. There are not expected to be any Direct Effects to any Built Heritage assets within the Core ASA, Principal ASA (1 km) or Wider ASA (5 km).

11.3.5.3 Historic Landscape Character

129. The Core ASA is comprised of three Historic Landscape Character types subdivided from the Broad Type; Reclaimed Marsh. The subdivisions comprise irregular enclosures, small regular enclosures and rectilinear enclosures. The drainage ditches within the Core ASA are examples of the marshland reclamation and are themselves heritage

assets. The Historic Landscape Character types within the Core ASA are considered to be of low significance and will be sensitive receptors to the Development.

11.4 Development Design Mitigation

130. A number of changes have been made to the Development proposals as a result of the responses received to the PEIR; the most relevant for this heritage assessment is the decision not to promote infrastructure (including panels) in Field Y (shown in Figure 5.2), which means that no development on the slopes of Cleve Hill is proposed.

11.4.1 Archaeological Remains

131. To date, archaeological works have only taken place within the eastern part of the Core ASA for the London Array development. Archaeological remains in this area were preserved by record for the London Array development. As no archaeological works have taken place across the remainder of the Core ASA, archaeological considerations could not be incorporated into the design due to a lack of information. Further archaeological assessment of the Core ASA may reveal areas where archaeological remains survive. If significant remains are found these could be preserved *in situ* by adjusting the Development design and removing below ground effects from these areas.
132. The eastern part of the Core ASA, to the north of Cleve Hill Substation and the area to the south of Cleve Hill, will be the bird habitat mitigation area, and therefore not be developed for solar panels. As no development will take place within these areas buried archaeological remains within these areas will be unaffected by the proposed development. The following Heritage Assets recorded on the KHER that lie within the Core ASA will therefore be preserved *in situ*; sheepfold on Cleve Marshes (WA37), outfarm on Nettle Hill (WA38), Farmstead south of Graveney Hill Farm (WA41), Decoy pond (WA59), mound (WA101), mound (WA102), 2 mounds (WA103), Sheepfold (WA113), former sea wall (WA120), linear cropmark (WA140), cropmark (WA141) and the very eastern extent of the area covered by the Starfish bombing decoy.

11.4.2 Built Heritage

133. The design proposals involve the retention of the WWII Pillbox located in the southern part of the Core ASA so therefore this will not receive any direct effects as part of the Development.
134. The eastern extent of the Core ASA to the north of the Cleve Hill Substation has been excluded from solar array panels as part of the Development design. This will limit the visibility of the solar array from the heritage assets to the east of the Core ASA. In addition to this the slopes within the Core ASA on Cleve Hill within the south eastern part of the Core ASA have also been excluded from the area of the solar array and provision of screening in the form of planting has been incorporated into the design in this area. The exclusion of Cleve Hill from the Development and screening at the edge of the solar array in this area will reduce the visibility of the solar farm from Graveney. It is anticipated that the proposed planting will start to become effective over 5 to 10 years. Further details can be found in the Landscape and Biodiversity Management plan presented at Appendix A5.2 of this ES.
135. The nature of the solar array Development means that the Development is likely to have a temporary (albeit long term) lifespan. The Development will be decommissioned after this time and the Core ASA will return to its former agricultural use. It is expected that indirect effects of the Development upon the settings of heritage assets will be fully reversible after decommissioning.

11.4.3 Historic Landscape Character (HLC)

136. The internal boundaries which divide the Core ASA are to be retained as part of the Development proposals. This will aid the preservation of the Historic Landscape Character of the Core ASA.
137. The exclusion of the area to the north of the Cleve Hill Substation and to the south of Cleve Hill are both within the HLC type rectilinear enclosures. The exclusion of these areas from Development will amount to approximately half of the area of this character type that is included within the Core ASA. The exclusion of these areas will help to preserve the Historic Landscape character of these areas.
138. The exclusion of Cleve Hill from the Development design will also aid the understanding of the Historic Landscape through the clear distinction between the low-lying marshland and the higher settled ground at Cleve Hill and Graveney. The focus of the Development within the former marshland would draw a distinction between the two areas in terms of character.

11.5 Assessment of Likely Effects

11.5.1 Construction Phase

11.5.1.1 Direct Effects

139. Any adverse effects to buried archaeological features would be permanent and irreversible in nature and even where the area of intrusive groundworks may be relatively small, the magnitude of the impact on an archaeological asset may be major. The construction phase of the Development has the potential to result in direct, permanent adverse effects on archaeological remains within the Core ASA. Activities associated with the Development which would have below ground effects would comprise:
- Installation of the driven module mounting structures;
 - Excavation associated with the foundations for Transformers;
 - Excavation associated with cabling;
 - Excavation associated with the installation of fencing and security measures;
 - Excavation for access tracks; and
 - Excavation for foundations for an energy storage facility, substation and control building.
140. A worst-case scenario has been used to assess the effects of below ground works upon buried heritage assets. At the time of writing no additional surveys had been undertaken to confirm the presence or absence of the heritage assets that have been recorded by the KHER within the Core ASA so for the purposes of this EIA the assumption has been made that the remains of the recorded heritage assets do exist within the Core ASA. Therefore, for the purposes of this EIA the assumption has been made that a **major** significance of effect would occur in the areas for the proposed panels, compound, planting and services.
141. Buried heritage assets such as the former field boundaries, sheepfolds, sheepwashes, decoy pond and house, Key cottage, Farmsteads of post-medieval to modern date, and WWII castellated trenches are considered to be of low value. Assessment based upon the worst-case scenario the low value assets are expected to incur a major effect. This would result in a “**minor to moderate**” significance of effect.
142. The starfish decoy was part of the nationwide defence of Britain from invasion during WWII and for this reason is considered to be of moderate value. Part of the eastern area of the starfish bombing decoy has been excluded from the solar array area and as such this area is not expected to be affected and any below ground remains not

previously identified through the London Array work within this area will be preserved in situ. The remainder of the starfish decoy which does form part of the solar array area would be subject to a high magnitude effect upon a heritage asset of moderate value resulting in a “**moderate to major**” significance of effect.

143. The crash Site of the Junker JU 88A is unlikely to have been a war grave as the crew are recorded to have survived, however it does represent the last battle on British soil and is protected military remains under the Protection of Military Remains Act and for this reason is considered to be of high value. It is recorded that the crashed plane was taken away for study however due to a lack of investigation within the Core ASA the presence or absence of the crashed plane within the Core ASA is unconfirmed. There is some suggestion that parts of the undercarriage may have remained in the site. If remains of the crashed aircraft do exist within the Core ASA, they would be considered to be of high value and would incur an effect of high magnitude as a result of the Development. Assessment has identified that this would result in an effect of “**major**” significance (if present).
144. Remains of unknown date such as cropmarks, sheepfolds, and earthwork mounds are recorded within the Core ASA on the KHER, due to their unconfirmed presence and date they are considered to be of unknown value. Due to a lack of archaeological investigation within the Core ASA, it is possible that additional archaeological remains of unknown date may exist within the Core ASA. At present, any such remains are of unknown date and significance. These remains could include deeply buried prehistoric deposits and/or a continuation of the remains found within the London Array investigations. As a worst case, it can be assumed that effect of “high” magnitude would occur. Depending on type, age, extent fragility etc, any remains may be of “low” to “high” (if of schedulable quality) sensitivity, and consequently effects would be assessed as between “**Minor to Major**” significance (should archaeological remains survive and be present at depths where they would be impacted by the Development).
145. Recorded assets that are within the area that is to be excluded from the Development will not incur any direct effects during the construction phase as part of the Development proposals. These heritage assets comprise sheepfold on Cleve Marshes (WA37), outfarm on Nettle Hill (WA38), Farmstead south of Graveney Hill Farm (WA41), Decoy pond (WA59), mound (WA101), mound (WA102), 2 mounds (WA103), Sheepfold (WA113), former sea wall (WA120), linear cropmark (WA140), cropmark (WA141) and the very eastern extent of the area covered by the Starfish bombing decoy.

11.1.1.2 Built Heritage-Direct Effects

146. The WWII Pillbox is the only built heritage asset located within the Core ASA. This is considered to be of low value (as it is not designated), albeit it retains archaeological and historic significance and contributes to an understanding of the wider defence strategies employed along the coast. This building is to be retained as part of the Development and as such no direct effects to this built heritage asset are anticipated as a result of the Development. As no change will occur to the asset as a result of the Development the significance of the effect will be **not significant**.

11.1.1.3 Indirect Effects

147. Whilst there would be indirect effects in terms noise and visual intrusion arising from the presence of cranes, vehicles, flashing lights etc. within the site and accessing the site, most of these effects are considered temporary and short term, limited to working hours and for the duration of the construction programme.
148. Specific indirect effects on the settings of heritage assets within the Core ASA and study area are considered below in relation to the final built form of the Development.

11.5.2 Operational Phase

11.5.2.1 Archaeological remains-Direct Effects

149. Assessment has identified that there are not expected to be any additional effects during the operational phase as there are no anticipated below ground works during this phase.

11.5.2.2 Archaeological remains – Indirect Effects

150. Indirect effects to archaeological remains are caused changes in setting which may reduce the contribution of that setting to the overall significance of the monument. Two scheduled monuments were identified as being sensitive receptors to the Development in terms of indirect effects to their settings. Indirect effects are considered temporary (albeit long-term) lasting only for the consented life of the Development and fully reversible on decommissioning.

- Salt Mounds SM

151. The six designated salt mounds located to the east of the Core ASA are of high sensitivity due to their scheduled monument status. The Core ASA forms part of the wider setting of the monuments as the Core ASA is also situated upon the area used for salt making and salt mounds are recorded to have been located within the Core ASA. However, since the salt mounds within the Core ASA are no longer visible and may survive only as below ground remains part of this relationship has been lost. In addition to this, as the Core ASA is no longer marshland the connection between the salt mounds and the Core ASA is not easily understood. The salt mounds do not rely on any intentional visibility as part of their significance, which is largely derived from their archaeological value. As the Core ASA is not part of the immediate setting and only part of the wider former landscape setting, the ability to experience or appreciate their significance is not affected. The magnitude of the effect of the Development during the construction phase upon the setting of the monument is considered to be negligible (and no harm is considered to occur), and any resulting effect is assessed as **not significant**.

- Sayes Court SM

152. Sayes Court is a medieval moated monument located to the north of the Core ASA on the Isle of Sheppey, which is of high sensitivity due to its scheduled monument designation. The scheduled monument is enclosed by trees and as such its setting is restricted to its immediate area and its association with the adjacent Grade II* St Thomas of the Apostle Church. The effect of the Development proposals upon the moated manor are expected to be Negligible. Therefore, no effect (or harm) is predicted to occur to the significance of this asset; for EIA purposes the effect is **not significant**.

11.5.2.3 Built Heritage-Indirect Effects

153. Indirect effects to Built Heritage assets are caused through the potential for the significance of heritage assets to be changed (diminished or otherwise harmed) through a loss of the contribution that their settings make to that contribution, as a result of development within that setting. Indirect effects are considered temporary (albeit long-term) lasting only for the consented life of the Development and fully reversible on decommissioning.

- Graveney Conservation Area

154. The Graveney Church Conservation Area contains Grade I Listed Church of All Saints, Grade II Listed Headstone to Thomas Barman, Murtons Farmhouse and associated Barn both Grade II listed, and Graveney Court also Grade II Listed. The Conservation Area is

- considered to be of moderate sensitivity. The nearest point of the Conservation Area is located approximately 430 m to the southeast of the Core ASA boundary.
155. The marshland landscape is considered to have influenced and still influences the development of Graveney and is a reminder of how remote this part of the settlement is and has been. The Development across the remaining part of this marshland landscape will affect how the setting of the north part of the conservation area, in terms of views out of the Area to the north and northeast. However, the majority of the Area lies slightly down-slope from the higher ground where the Church and Graveney Court are situated and will not be intervisible with the Development, nor will the Development be visible on the main (road) approaches to the Area.
156. The magnitude of any effect is considered to be “low” and this confined largely to the northern end of the Area. Therefore, the Area is assessed as receiving only a **minor** effect upon its significance, and across the majority of its area, its character and appearance will be unchanged.
- Church of All Saints
157. The Grade I Listed Church of All Saints is located within the northern end of the Graveney Conservation Area in a relatively elevated position. Some of the significance of the church is derived from its landscape setting which is a reminder of the remoteness of the church at the edge of the marshland, however its significance is principally derived from its archaeological and historic value, as well as the architectural value apparent in its fabric which is best appreciated in close proximity to the asset, in addition to having communal value. The church is partially screened by trees to its north, and it possesses only a low tower, so that other than by virtue of its position on elevated grounds, it does not form a major landmark, although it can be seen at distance from the west and east, and in some views from the sea wall to the north (see for example Viewpoint 3 within Chapter 7: Landscape and Visual Impact Assessment). A representative view from the edge of the footpath immediately west of the Church is presented as Viewpoint 8.
158. The Development is focussed upon the lower lying ground and some screening does exist at the edges of the churchyard which is expected to screen some of the panels from the churchyard. The Grade I listed building is of high sensitivity, and the Development will be noticeable in (glimpsed) views to the north from the Church and from Churchyard (where screening by vegetation along the northern edge of the churchyard permits), and in views on some approaches to the Church along public footpaths to the west, introducing new modern elements into those views (albeit at distance and in the context of other modern development in the wider landscape, such as pylons, etc.). The Development will not be visible together with the Church in approaches to the Church along Graveney Lane from the south and south-west, nor as one accesses the Churchyard via the lichgate.
159. The decision to not promote infrastructure formerly proposed in Field Y to the north of the Church will have the effect of further separating the Church (and adjacent settlement) on higher ground from the lower former marshland to the north. This will increase visual separation, and help to limit the presence of the Development in views of the Church to the east along public footpaths (see the visualisations presented in Technical Appendix A11.3). This will assist in helping to retain an understanding of the Church within a rural environment (which is still readily apparent to the south and east).
160. However, whilst there is some reduction in the contribution that the current setting makes to the significance of the church, this is limited to longer visual relationships and views over the former marshland. The ability to appreciate the archaeological and architectural value of the church will be undiminished. Taking the above into account,

the change in the contribution that setting makes is considered to be subject to a reduction, but this leads to a limited reduction in the significance of the asset overall, as much of the interest for which it is significance will be unaffected. This effect is considered to be “low” in magnitude, upon an asset of “High” sensitivity. The overall effect is therefore assessed as **minor** (and the changes to the Development ensure that this assessment of significance is appropriate); this is not significant for purposes of the EIA Regulations.

- Headstone to Thomas Barman

161. The Grade II listed headstone is of high sensitivity by virtue of its designation, but its setting is considered to be entirely related to the churchyard. This intimate setting is not considered to be changed by the Development (which does not lie within this setting). The magnitude of any effect is therefore considered to be “negligible” and the potential effect on the significance of the headstone is assessed as **not significant**.

- Graveney Court

162. This Grade II Listed Building adjacent to Graveney Church at the edge of the marshland is considered to be of high sensitivity. The building is significant in its age (being medieval in its core), historic and archaeological value, and its setting is related to the farm of which it is part, as well as its relation to the church and the higher ground upon which it sits. Whilst its principal elevation faces south so that initial approaches to it do not include the marshland and Development to the north, the rear of the house faces north, and by virtue of its elevated position commands a wide view over the former marshland (and hence the Development). This former marshland aspect (and the currently largely rural setting) is considered to fall within the setting of the building, which was located to take advantage of this higher ground.

163. The decision not to promote panels in Field Y in response to consultation following issue of the PEIR, serves to help in maintaining some distance between the building and the Development, helping to retain some of the rural setting in closer proximity to the Court. The panels will be present in longer views to the north from the house but will no longer encroach up the side of Graveney Hill, or into direct line of vision between this asset and the listed Sparrow Court to its west.

164. The Development will not affect the ability to experience and appreciate the architectural value of the house, which is best appreciated in close proximity, nor its relationship to the Church and conservation area to the south and southwest. Nevertheless, the Development will be within the wider setting of the building changing this aspect from a remote and rural aspect (albeit along with other modern elements) to one more modern and perhaps industrial in character. This change in setting is considered to cause some reduction in the contribution of the setting to the significance of the asset overall, and some limited loss of significance as a result. The effects are considered to be “low” in magnitude. The overall effect upon the significance of the asset is assessed as **minor** and not significant in EIA terms.

- Murtons Farmhouse and Barn

165. Murtons Farmhouse and its associated Barn are both Grade II listed and are located 700 m and 725 m from the Core ASA, to the south, and within the Graveney Conservation Area. They are considered to be of high sensitivity by virtue of their designation. They are significant primarily for their architectural, historic and archaeological interest (these best appreciated in close proximity), as well as historic associated with the linear development that makes up Graveney. Their settings are related primarily to the road and to the adjacent farmland, as well as to the Church to their north.

166. The Assessment has identified that they are unlikely to have any significant intervisibility with the Development. It is not considered that the Development will cause any significant change in their settings, or to the contribution their settings make to this significance. The effect is considered to be “negligible” in magnitude, leading to an effect assessed as **not significant** overall.
- Sparrow Court.
167. Sparrow Court is located 250 m to the south of the Core ASA and is Grade II listed and of high sensitivity by virtue of its designation. Its significance derives primarily from its architectural interest, and it has archaeological and historic interest from its association with the other older buildings within the wider Graveney Settlement (specifically Graveney Court farm and the Church), which are visible on the elevated ground to the east). The house is situated on land slightly higher than the former marshland to its north, but does not appear to have been originally designed with specific views in mind (although an association with the Church and Graveney Court may have been intended, as both can be plainly seen from within the immediate setting of Sparrow Court). Its immediate setting is defined as the land plot on which it stands along with the buildings within the landholding, and adjacent dwellings to its south; as a former farmstead, its wider setting does encompass the surrounding farmland, including the former marshland to the east and north. The Church and Graveney Court are considered to fall within this setting in views to the east, even if partially screened from direct view by the planting within the Sparrow Court’s gardens.
168. The panels of the Development will change the wider setting of Sparrow Court in respect of its setting within a largely rural environment, and to that extent will reduce the contribution that setting makes to the significance of the asset. The panels previously proposed in Field Y have now been removed as a result of consultation responses made to the PEIR, so that the Development will no longer appear in direct line of site between Sparrow Court and the Church and Graveney Court, so that the linkage between these historic assets is retained.
169. The ability to appreciate the architectural interest in the house and its relationship to the gardens, and buildings that form its immediate setting is largely unchanged. However, the introduction of panels into the setting to the north and northeast of the house is considered to cause a reduction in the contribution that the (currently rural) setting makes to the significance of the asset; and the asset itself suffers limited loss of significance. This effect considered to be “low” in magnitude. The overall effect on the significance of the building is therefore assessed as **minor** in significance.
- Sandbanks Farmhouse
170. Sandbanks Farmhouse is also Grade II listed and is located 590 m from the Core ASA boundary. The building is significant for its architectural value, as well as historic interest. Its setting is defined by the surrounding working farmstead to which it belongs, along with its associated buildings. It has a wider setting related to the former marshland, but it is largely visually divorced from that by the intervening farm buildings and screening from vegetation. Whilst the Core ASA lies within the wider setting of Sandbanks Farmhouse, it does not fall within the immediate setting. As a result, it is not considered that there will be any loss in the contribution that the setting makes to the significance of this asset, nor any change in how the building’s significance is experienced and appreciated. The potential effect is of “negligible” magnitude and the overall effect considered **not significant**.
- Graveney Bridge Conservation Area
171. The Graveney Bridge Conservation Area lies 845 m to the south of the Core ASA and includes five Grade II Listed Buildings all of which are considered to be of moderate significance. Due to distance and topography the Core ASA is considered to make only

a small contribution to the significance of these assets as part of their wider landscape setting. The ZTV model (ZTVs for the Development candidate design are provided for part of Chapter 7: Landscape and Visual, as Figures 7.2 and 7.3 in Volume 2, DCO Document Reference 6.2.7) indicates that only the northern part of the Conservation Area will share intervisibility with the Core ASA and as the Listed Buildings are located towards the central and southern parts of the Conservation Area, no intervisibility is expected between the Development and these assets. Realistically any visibility is considered to be unlikely. Given this, no reduction in the contribution that the current setting of these assets is anticipated to occur, and no loss of significance (or harm) is predicted. The magnitude of effect upon these receptors is expected to be “negligible” and the overall effect assessed as **not significant**.

- Goodnestone Conservation Area

172. Goodnestone Conservation Area lies 1 km to the south of the Core ASA and contains a Grade I listed church, Grade II* listed Goodnestone Court and a Grade II listed chest tomb. The conservation area as a whole is considered to be of moderate significance and the marshland landscape which the Core ASA comprises is only considered to make a small contribution to its wider landscape setting. In addition to this the ZTV has identified that only the western section of the Core ASA may be visible from the very southern part of the Conservation Area (not including the Listed Buildings). Realistically any visibility is considered to be unlikely. Given this, no reduction in the contribution that the current setting of these assets is anticipated to occur, and no loss of significance (or harm) is predicted. The magnitude of effect upon these receptors is expected to be “negligible” and the overall effect assessed as **not significant**.

- Faversham Conservation Area and asset group

173. Faversham Conservation Area lies at its closest point 980 m to the southwest of the Core ASA and contains three Grade I, 19 Grade II* and 271 Grade II Listed Buildings. Due to the large number of Grade I and Grade II* buildings this conservation area is considered to be of high significance. As the conservation area is focussed upon the town centre of Faversham it is not thought to derive its significance from the Core ASA. In addition to this the ZTV has identified that the Core ASA may only be visible from the northern part of the Conservation Area. Realistically, any visibility of the Development is considered to be unlikely. Given this, no reduction in the contribution that the current setting of these assets is anticipated to occur, and no loss of significance (or harm) is predicted. The magnitude of effect upon these receptors is expected to be “negligible” and the overall effect assessed as **not significant**.

- Church of St Thomas the Apostle, Harty

174. The Church of St Thomas the Apostle, Harty, is Grade II* Listed and is considered to be of high sensitivity. It is significant for its architectural, historic and archaeological interest as well as its communal and aesthetic value. Its immediate setting is considered to be defined by its place within the churchyard, as well as its relation to the buildings and spaces of the nearby settlement and community which it serves. The position of the church on the edge of the Swale and its landscape value makes a contribution to the significance of the asset. The Isle of Harty also has a relationship with the mainland through the ferry which connected Harty to the mainland. The Core ASA is considered to be within the wider setting of the Grade II* listed church, however it is expected that the current sea wall located to the north of the Core ASA will help to screen some of the Development from view. It is the prominence of the church in views towards it that are considered significant here, rather than views from it to the wider landscape. Even in this case, the relationship of the Swale and the tidal zones, as well as the marshes, sea wall and farmland beyond are all still appreciable in such views. At 1.8 km from the Church to the nearest point of the Core ASA boundary, the Development (at least largely screened as it will be behind the sea wall) is not

- considered to cause a significant change in how the wider landscape is read from the Church. It is noted that modern elements including power generation infrastructure are already features in the wider landscape, and will appear substantially larger than the Development when viewed from Harty. Viewpoint 14 in Chapter 7: LVIA is taken from the southern edge of the churchyard, with visualisations shown in Volume 3 of the ES.
175. The presence of the Development is not considered to cause any reduction in the contribution that the setting makes to the significance of this asset. The interests from which the Church derives its significance are largely best appreciated in the immediate vicinity in any case. Any effect is considered “negligible” in magnitude, and the overall effect on the Church’s significance is assessed as **not significant**.
- Park Farmhouse and Ferry House Inn
176. Two Grade II Listed Buildings are located to the west of the church at Harty and comprise the Park Farmhouse and Ferry House Inn which are both considered to be of high sensitivity by virtue of their national designation. They are significant primarily for their architectural and historic value, and their settings are determined by their presence within the farmstead and surrounding fields in the case of the former and adjacent to the river with association with the ferry in the case of the latter. Whilst the Core ASA may be visible within the wider landscape setting of these buildings and it is expected that the current sea wall located to the north of the Core ASA will help to screen some of the Development from view. Views from the Park Farmhouse will be over a long distance of 1.9 km and 1.7 km from Ferry House Inn. Despite the presence of the Development in wider views and at distance, it will not reduce the contribution that the settings make to the significance of these assets, nor to harm or diminish the significance of these assets overall. Any effect is considered “negligible” in magnitude, and the resulting effect assessed as **not significant**.
- Waterham Farm and
 - Meadow Farm
177. The Grade II Listed Buildings at Waterham comprise Waterham Farmhouse and Meadow Farmhouse which are both of moderate significance and are located 1.7 km and 2 km from the Core ASA respectively. Way Street Farmhouse is another Grade II listed Building located 1.7 km to the south east of the Core ASA. The Core ASA is not thought to contribute to the setting or significance of these buildings and in addition to this the ZTV model doesn’t identify intervisibility between this area and the Core ASA. As there is no potential for a reduction in the contribution of the current setting of these assets to their significance (an effect of “negligible” magnitude) there is not potential for harm to their significance; the overall effect at both assets is therefore assessed as **not significant**.
- Shipwright’s Arms
178. This Grade II listed building is located at the confluence of the Faversham Creek and Oare Creek located to 216 m to the east of the Core ASA and is considered to be of high sensitivity by virtue of its designation. Its significance derives from its architectural and historic interest. Its setting is dominated by its Creekside location, and association with the slips and yards adjacent, which it serves. Its position within the marshland landscape makes a contribution to the setting and significance of the asset. However, the development, even where visible above the intervening sea wall, will not impair the ability to experience or appreciate those interests for which the asset is significant. Any incidental visibility of the Development will not diminish the contribution of the setting to the significance of the asset and is considered to be an effect of “negligible” magnitude; as no harm to or reduction in significance is identified to this asset, the overall effect is assessed as **not significant**. Viewpoint 12 described in Chapter 7:

LVIA is taken from the Saxon Shore Way immediately adjacent to the Shipwright's Arms.

- Marsh Gunpowder Works

179. The Former Marsh Gunpowder works comprise a group of six Grade II listed buildings which are located 1.2 km to the south west of the nearest point on the Core ASA boundary and are considered to be of high sensitivity by virtue of their designation. The works are situated between Faversham and Ham marshes and this relationship defines their wider setting. The immediate setting is considered to comprise the interrelationship between the buildings, structures and spaces within the gunpowder works themselves. They are significant for their architectural and historic interests as exemplars of this type of manufacturing facility and for their contribution to the defence industry of Britain in the 18th and 19th centuries. The Development does not lie within the setting as identified and even if visible, would not affect the ability to experience and appreciate those interests for which these assets are significant. Any effect is considered to be "negligible" in magnitude, and as no harm is assessed to occur to the significance of the asset group, the overall effect is **not significant**.

- Type 24 Pillbox

180. The undesignated WWII pillbox is of low sensitivity by virtue of its non-designated status. However, it has been identified as a sensitive receptor in terms of the effects upon its setting due to the proximity of the panels to the asset. Its significance lies in its architectural and historic interests, as evidence for the wider local defence network. The primary setting of the asset is its field of fire and view across the marshland and its location was specifically sited to command this view. The fields to the immediate north of the pillbox are therefore considered to fall within its setting. The introduction of the Development will fundamentally alter this setting, and it is considered this will reduce the contribution that the setting makes to the significance of the asset to such that its significance is harmed (in the NPPF context) as a result. The magnitude of the impact is considered "high" and the resulting effect on the asset (of "low" sensitivity) is assessed as **moderate**. This is significant for purposes of the EIA regulations.

- Whitstable

181. In response to the PEIR, Canterbury City Council requested consideration of longer views from the Canterbury district, and specifically mentioned the historic setting of Whitstable. Although outside of the Study Area, an assessment is provided in respect to Whitstable and this is considered appropriate in respect of longer views within the Canterbury District.

182. The harbour in Whitstable (and the historic core of the town) lies over 5 km from the nearest part of the Development and the settlement of Seasalter lies between Whitstable and the Development. The limited height of the panels and principal infrastructure indicates there is no potential for any significant intervisibility between Whitstable and the Development. Even where the tallest elements of the Development may be visible at any distance (such as the substation) from the edge of Whitstable, these will be seen as distant elements in the context of the existing London Array Onshore Connector infrastructure. The position and evolution of the town as a working harbour and seaside resort will still be readily appreciable. A representative View Point from Whitstable Harbour is presented as Figure 7.25 in Volume 3 (Part 1; DCO Document Reference 6.3.1).

183. No effect is therefore assessed to occur to the historic setting of the Town, and the contribution made by the setting to the significance of the historic town and those heritage assets within it is undiminished. No effect is predicted to occur and no harm is found.

- Warm House

184. Assessment of this non-designated building has been included as a result of response received during consultation and in respect of the PEIR. The building is part of a farmstead dating to the Nineteenth Century and lies immediately to the south of the western part of the Development. It is surrounded by intensively farmed land to its southwest, south and southeast, with poly tunnels a prominent local feature. The presence of panels of the Development to the north will change the character of the more open rural aspect to its north and this will affect the relationship of the building to the former marshland with which it may have been historically linked. The building is of "low" sensitivity (local importance) and even if we attribute an effect of "medium" magnitude (expecting some reduction in the contribution the currently largely rural setting makes to significance and some resulting loss of heritage significance), the result is still **minor** and not significant for the EIA Regulations.

11.5.2.4 Historic Landscape Character

185. The Historic Landscape Character of the Core ASA is characterised as Reclaimed Marsh-irregular enclosures, reclaimed marsh-rectilinear enclosures and reclaimed marsh-small rectilinear enclosures. These character types are evident within the Core ASA through the use of drainage channels as boundaries. The historic legibility of the historic landscape character can be seen through the preservation of the marshland drainage channels within the Core ASA, but some of the sub-divisions from Nineteenth Century have been lost as a result of farming intensification from the second half of the Twentieth Century and onwards. Whilst the development will change the character within the boundary from largely rural to an industrial/modern generation environment, the historic origin of the area as reclaimed marsh will still be legible, in part due to retention of the sea wall defences as well as the drainage channels and ditches within the site. Habitat enhancement in the eastern section (but within Swale Borough) of the Development (where no panels are proposed) may have the effect of recreating former wetland and restore some of the areas former marshland character. The decision not to promote infrastructure previously proposed in Field Y will further limit the impact, so that the Development is confined to the lower land, reflecting the topography of the former marshland, and will not encroach on to the higher and drier land on Graveney Hill. Nevertheless, the overall the effect on historic landscape character is considered to be **minor** in significance, and fully reversible on decommissioning.

11.5.3 Decommissioning Phase

11.5.3.1 Archaeological remains-Direct Effects

186. Unless new landtake is required, it is not anticipated that decommissioning will result in any additional direct effect upon the archaeological resource.

11.5.3.2 Archaeological remains-Indirect Effects

187. The removal of the solar array from the Core ASA will restore the current setting of these assets (assuming no other changes in the interim).

11.5.3.3 Built Heritage-Direct Effects

188. There are not expected to be any additional direct effects to the WWII Pillbox within the Core ASA during the decommissioning phase of the Development. No additional effect is predicted.

11.5.3.4 Built Heritage-Indirect Effects

189. The removal of the solar array from the Core ASA would restore the current setting of assets (assuming no other changes in the interim). No additional effect is predicted.

11.5.3.5 Historic Landscape Character-Indirect Effects

190. The removal of the solar array from the Core ASA as a result of the decommissioning phase would restore the current recorded landscape character at least within the Development boundary. No additional effect is predicted.

11.6 Mitigation Measures and Residual Effects

11.6.1 Construction Phase

11.6.1.1 Archaeological Remains – Direct Effects

191. Direct effects to archaeological remains during the construction phase could be mitigated through a programme of archaeological works which would preserve archaeological remains by record.
192. It is proposed that a programme of archaeological investigation be undertaken within the electrical compound location. The scope, extent and detail will be agreed with KCC in the form of a Written Scheme of Investigation (a draft is provided as Technical Appendix A11.4). The purpose is to afford an opportunity to identify and record any buried archaeological remains in this area, which is the largest specific piece of ground disturbance within the Development. This area is also closest to where archaeological remains were recorded during archaeological works for the adjacent onshore connection works substation. Implementation of an appropriate scheme of archaeological investigation would lead to preservation by record. Whilst there would still be a loss of the archaeological remains, the fact they have been recorded would reduce any predicted effects to “**minor**” in significance.
193. It is proposed that a detailed record is made of the type 24 pill box (WA75) both exterior and interior prior to use as a bat roost. This will ensure that there is a baseline against which to monitor and manage the condition of this asset.
194. If remains of high significance are discovered within the Core ASA then preservation in situ could be applied to the design to avoid any harm to archaeological remains of high significance. If remains are preserved in situ this would result in a residual effect that is “**not significant**”.

11.6.1.2 Archaeological Remains - Indirect Effects

195. No mitigation has been identified for the indirect effects to archaeological remains as such the residual effect will remain as a “**minor**” residual effect.

11.6.1.3 Built Heritage - Direct Effects

196. As no direct effects to built heritage assets is anticipated as part of the Development, no mitigation measures are suggested. The residual effect will remain as “**not significant**”.

11.6.1.4 Built Heritage - Indirect Effects

197. No mitigation beyond that already incorporated into the Development design can be suggested for indirect effects to the setting and significance of built heritage assets. Residual effects will remain as stated for the construction phase.

11.6.1.5 Historic Landscape Character-Direct Effects

198. A neutral indirect effect was identified to the Historic Landscape Character during the construction phase and as such no mitigation measures are suggested, therefore residual effects will remain as “**minor**”.

11.6.1.6 Historic Landscape Character-Indirect Effects

199. A negligible indirect effect was identified to Historic Landscape character during the construction phase and as such no mitigation measures are suggested, therefore residual effects will remain as “**minor**”.

11.6.1.7 Historic Landscape Character-Indirect Effects

200. Assessment has identified that there is expected to be an adverse indirect effect to the Historic Landscape Character of the Core ASA through the Construction of the Development, primarily due to the large size of the Core ASA and the change that would be incurred to each of the historic landscape character types. No specific mitigation is proposed or considered practical (due to the extent of the Proposed Development) and so the assessed “**minor**” significant effect will remain.

11.6.2 Operational Phase

11.6.2.1 Archaeological Remains - Direct Effects

201. No additional effects are predicted to occur during the operational phase and as such no mitigation measures are suggested. Residual effects will remain as for the construction phase.

11.6.2.2 Archaeological Remains - Indirect Effects

202. No mitigation measures beyond those already incorporated into the design for indirect effects to archaeological remains during the operational phase are suggested. Therefore, the residual effect will remain the same as is stated for the construction phase.

11.6.2.3 Built Heritage - Direct Effects

203. Assessment has identified that there are not expected to be any direct effects upon built heritage during the operational phase therefore no mitigation measures are suggested.

11.6.2.4 Built Heritage - Indirect Effects

204. No mitigation measures beyond that already incorporated into the Development design can be suggested for indirect effects to the settings and therefore significance of built heritage. Residual effects will remain as stated for the construction phase.

11.6.2.5 Historic Landscape Character - Direct Effects

205. Assessment has identified that there are not expected to be any additional direct effects to the Historic Landscape Character during the operational phase, as such no mitigation measures are suggested.

11.6.2.6 Historic Landscape Character - Indirect Effects

206. Assessment has identified that there are not expected to be any additional indirect effects to the Historic Landscape Character during the operational phase to the Historic Landscape Character during the operational phase, as such no mitigation measures are suggested.

11.6.2.7 Historic Landscape Character - Indirect Effects

207. Assessment has identified that there are not expected to be any additional indirect effects to the Historic Landscape Character during the operational phase to the Historic Landscape Character during the operational phase, and no mitigation is proposed.

11.6.3 Decommissioning Phase

11.6.3.1 Archaeological Remains - Direct Effects

208. No effect is predicted as a result of the decommissioning phase, and no residual effect anticipated. Should additional land-take or intrusion into previously undisturbed areas be required, any effect can be mitigated by the implementation of an appropriate scheme of archaeological work, leading to preservation of any remains by record. The residual effect in this eventuality is assessed as “**minor**” in significance (a record will have been made, but physical loss will occur).

11.6.3.2 Archaeological Remains - Indirect Effects

209. The removal of the solar array from the Core ASA would negate the previous effects caused during the construction and operational phases of the Development restoring (all other thing being equal) the previously obtaining situation. As such no mitigation measures are suggested and no significant effect is assessed.

11.6.3.3 Built Heritage - Direct Effects

210. There are not expected to be any additional direct effects to the WWII Pillbox within the Core ASA during the decommissioning phase of the Development. As such no mitigation measures are suggested and no significant effect is assessed.

11.6.3.4 Built Heritage - Indirect Effects

211. The removal of the solar array from the Core ASA would negate the previous effects caused during the construction and operational phases of the Development restoring (all other thing being equal) the previously obtaining situation. As such no mitigation measures are suggested and no significant effect is assessed.

11.6.3.5 Historic Landscape Character - Direct Effects

212. The removal of the solar array from the Core ASA would negate the previous effects caused during the construction and operational phases of the Development restoring (all other thing being equal) the previously obtaining situation. As such no mitigation measures are suggested and no significant effect is assessed.

11.6.3.6 Historic Landscape Character - Indirect Effects

213. The removal of the solar array from the Core ASA would negate the previous effects caused during the construction and operational phases of the Development restoring (all other thing being equal) the previously obtaining situation. As such no mitigation measures are suggested and no significant effect is assessed.

11.7 Cumulative Effects Assessment

11.7.1 Introduction

214. The cumulative effects assessment identifies the significant effects of the Development that have the potential to overlap with similar effects arising as a result of other projects or activities. Cumulative effects are defined as those that result from additive impacts caused by other past, present and reasonably foreseeable actions together with the plan, programme and project itself and in-combination impacts that arise from the reaction between impacts of the development plan and programme of the project on different aspects of the environment.
215. Cumulative effects may therefore occur to archaeological and cultural heritage receptors that have the potential to be incrementally impacted by other existing consented and/or proposed developments or activities. These impacts may be seen individually as minor but collectively as significant.

216. Potential cumulative effects incorporated into the assessment include direct effects upon archaeological and cultural heritage receptors and indirect effects. In cases where there is spatial or temporal overlap with the Development and other such developments, cumulative direct effects may occur with respect to the setting of archaeological or cultural heritage receptors. All effects have been identified and assessed in terms of significance and magnitude using the same methodology outlined above where sufficient information is available in order to make an informed assessment.

11.7.2 Assessment of Effects

217. This section provides a brief outline of some of the potential cumulative effects that may arise during the construction and operation of the Development owing to interactions with other developments in the area.
218. Sensitive receptors to the Development have been identified up to 2 km from the Core ASA boundary, however heritage assets within the wider area were considered up to 5 km from the Core ASA. Therefore, the Zone of Influence for the assessment of cumulative effects has been considered within 5 km surrounding the Core ASA. Developments within this area are shown in Table 11.7.

Table 11.7 Developments Preliminarily Reviewed for Cumulative Impact Assessment

Reference	Name and Description	Potential Cumulative Effects
SW/14/0257	Land at Oare Gravel Works, Ham Road, Faversham, Kent Residential development of 330 dwellings including the conversion of the Listed Buildings of the former Gunpowder Works and associated undesignated buildings	Effects to below ground archaeological remains mitigated through a condition for archaeological evaluation works followed by preservation in situ if important remains are uncovered or further mitigation Condition for Historic Building Recording to preserve the Gunpowder Works buildings by record. The buildings will be restored and conserved as part of the development No significant cumulative effects expected
15/505437/FULL 17/503317/FULL	Abbey Fields Farm Abbeyfields Faversham Kent Solar Farm Development. 2017 application to extend operation period to 40 years	Effects to archaeological remains mitigated through a condition for archaeological watching brief to preserve archaeological remains by record. No significant visual effects to surrounding designated heritage assets. No significant cumulative effects expected
16/504575/OUT	Land to The East of Ham Road Faversham Kent ME13 7ER Residential development of 30 units close to Oare Gunpowder works in particular Grade II listed former gate house and former proof house	Development has the potential to affect below ground archaeological remains within the footprint of the development Development could contribute to effects upon the setting of heritage assets. No significant cumulative effects expected
16/508643/FULL	Land North of Graveney Road Faversham Kent ME13 8UJ	Effects to archaeological remains mitigated through a condition for programme of archaeological work, archaeological evaluation in the first instance. Development could contribute to effects upon the setting of heritage assets No significant cumulative effects expected

Reference	Name and Description	Potential Cumulative Effects
14/502729/OUT 17/502604/REM	Ospringe Brickworks Sumpter Way Faversham Kent ME13 7NT	Effects to archaeological remains mitigated through condition for archaeological evaluation followed by watching brief and historic building record of brickworks structures. Remains preserved by record. No significant cumulative effects expected
17/506603/REM 15/504264/OUT	Land at Perry Court London Road Faversham Kent ME13 8YA	Effects to archaeological remains mitigated through geophysical survey, trial trenching and strip map and sample excavation. No significant cumulative effects expected
SW/13/1567 / 16/506644/REM	Land Opposite Greenways Brogdale Road Faversham Kent ME13 8YA	No consideration of cultural heritage within the application and no conditions relating to archaeology No significant cumulative effects expected
15/504264/OUT	Land at Perry Court London Road Faversham Kent ME13 8YA	Historic England requested consideration of Faversham CA and GII Perry court Malthouse and oasthouse Recommendation for programme of archaeological work comprising geophysical survey and trial trenching No significant cumulative effects expected
16/508602/OUT	Land at Preston Fields Salters Lane, Faversham, Kent, ME13 8YD	Advice upon the application from the archaeological advisor requests a condition for a programme of archaeological work comprising geophysics and evaluation. Potential for the Preston Fields development to impact upon Grade II Listed Orchard Cottages and Faversham Town Centre Conservation Area. sensitive design and screening recommended No significant cumulative effects are expected.
KCC/SW/0090/20 18	Land at Oare Gravel Works, Ham Road, Faversham, Kent, ME13 7TS	Redevelopment of an existing waste management facility and inclusion of additional land into a waste management use (part retrospective). Situated approximately 1.1 km south-west. This application refers to an existing operation (albeit seeking some extension) and is effectively part of the baseline. This development will not visually affect the same built heritage receptors for which any significant effect is expected from the Proposed Development. The two developments will not affect archaeologically linked features, although occupying similar creek/river side locations. It is anticipated that archaeology (where affected, and where not already removed by the existing operations) could be addressed by condition As with SW/14/0257, no significant cumulative effect anticipated.

11.7.2.1 Archaeological Remains - Direct Effects

219. The cumulative direct effects upon archaeological remains as a result of the above developments will result in on-going damage to and potential removal of buried archaeological remains both identified and unidentified. Although these developments

will not affect features specifically linked with those within the Proposed Development, there is a cumulative effect upon the archaeological resource of the area. The majority of the above schemes have archaeological conditions in place to ensure that potential archaeological remains are preserved by record or where possible preserved in situ. This potential loss of the wider archaeological resource will therefore be mitigated and the overall cumulative effect upon the archaeological resource will be a minor adverse effect.

11.7.2.2 Archaeological Remains - Indirect Effects

220. Additional cumulative effects to the Scheduled Monuments of Sayes Court and the six medieval salterns located to the east of the Core ASA are not expected to occur as a result of the Development and the cumulative schemes beyond those described above. Due to the location of the cumulative schemes concentrated within the Faversham area to the southwest of the Core ASA no further effects are expected to occur as these schemes lie outside the setting of the Sayes Court and the medieval salterns. As such there are expected to be no further cumulative effects to these monuments as a result of the implementation of the schemes and the Development.

11.7.2.3 Built Heritage - Direct Effects

221. The WWII pillbox within the Core ASA is not expected to incur any additional direct effects as a result of the implementation of the cumulative schemes in conjunction with the Development.

11.7.2.4 Built Heritage - Indirect Effects

222. The cumulative schemes are located within the Faversham area and therefore Faversham Conservation Area and its heritage assets as well as the heritage assets located at the Gunpowder works and Shipwrights public house may be sensitive receptors to cumulative effects from the Development in conjunction with the cumulative schemes. The cumulative schemes have been assessed individually with regard to their effects upon the setting of heritage assets and none have been identified as causing harm as a result of the schemes. As the Development itself is only expected to have a negligible effect upon Faversham Conservation Area and a moderate effect upon the Shipwrights public house, no additional effects are expected to occur as a result of these schemes.
223. The proposed development at the Gunpowder works involves the restoration of the Listed Buildings which were falling into disrepair. Assessment of effects to the setting of these buildings identified a beneficial effect to these buildings as a result of their restoration and reuse to ensure their long-term survival. Since the implementation of the Development within the Core ASA is expected to result in a negligible effect, no cumulative effects have been identified as a result of the two schemes together.

11.7.2.5 Historic Landscape Character - Direct Effects

224. The majority of the above schemes relate to residential development with the exception of a solar farm development. The construction of the cumulative schemes will alter the Historic Landscape Character of these sites however since none of the cumulative schemes share the same HLC type as the Development there is not expected to be any additional effects to the Historic Landscape Character types within the Core ASA as a result of the implementation of the cumulative schemes and the Development together.

11.7.2.6 Historic Landscape Character-Indirect Effects

225. The implementation of the cumulative schemes is not expected to affect the setting of the Historic Landscape Character types within the Core ASA as each of the cumulative schemes lie outside the setting of the Historic Landscape Character site.

11.8 Summary of Likely Effects

11.8.1 Archaeological Remains - Direct Effects

226. Any adverse effects to buried archaeological features would be permanent and irreversible in nature and even where the area of intrusive groundworks may be relatively small, the magnitude would be major. A programme of archaeological work would ensure that archaeological remains are preserved by record or upon the discovery of important archaeological remains, preserved in situ. This would mitigate the direct effects to archaeological remains as a result of the Development. A minor adverse effect is not considered to be significant in EIA terms.

11.8.2 Archaeological Remains - Indirect Effects

227. The assessment of indirect effects to the settings of the Scheduled Monuments of Sayes Court and the six medieval salterns are expected to be **"not significant"** as a result of the Development. There is no development within the very eastern part of the Core ASA and this would provide a buffer between the Development and the six medieval salterns. Any indirect effects upon the settings of the Scheduled Monuments would be temporary (albeit long term) and fully reversible after the decommissioning of the Development.

11.8.3 Built Heritage - Direct Effects

228. This assessment has identified that the Development is not expected to result in any direct effects to any built heritage assets.

11.8.4 Built Heritage - Indirect Effects

229. Assessment of the impacts of the Development has identified only one potentially significant effect (assessed as "moderate"); this is upon the significance of the undesignated Type 24 pillbox on the southern edge of the Development, arising from a fundamental change in its setting and a consequent loss of significance. Effects assessed as "minor" (not significant) have been predicted upon the Grade I listed Church of All Saints, Graveney Court (Grade II), Sparrow Court (Grade II) as well as upon Graveney Conservation Area and the non-designated Warm House.

230. Any indirect effects to Built Heritage assets will be fully reversible after the decommissioning of the Development.

11.8.5 Historic Landscape Character-Direct Effects

231. Assessment of direct effects to the Historic Landscape character have identified a minor adverse effect to the historic landscape character as a result of the Development during the construction, operational and decommissioning phases. This is not considered to be a significant effect in EIA terms.

11.8.6 Historic Landscape Character-Indirect Effects

232. Assessment of indirect effects to the Historic Landscape Character within the Development (and immediately adjacent to it) have identified a minor adverse effect to the historic landscape character as a result of the Development during the construction, operational and decommissioning phases. This is not considered to be a significant effect in EIA terms.

11.9 Statement of Significance

11.9.1 Archaeological Remains

233. Where archaeological remains may have been damaged or destroyed by the construction of the Development, an appropriate record will be made, leading to their “preservation by record”. If remains of high significance are encountered during further investigations it is anticipated that the Development design could be altered to preserve these remains in situ, and/or further agreed investigation can be carried out leading to preservation by record. The scope and extent of any archaeological work will be set out in the form of a Written Scheme of Investigation to be approved by Kent County Council under the development consent order prior to commencement of works on the Development. A draft Scheme which will form the basis of this scheme is presented as Technical Appendix A11.4. Following the implementation of the agreed Scheme, any predicted effect upon the archaeological resource will thereby be considered to have been reduced to “minor” in significance.

11.9.2 Built Heritage

234. The WWII Pillbox located within the Core ASA is not expected to incur any direct effects as a result of the Development as the pillbox will be preserved in situ. There will however be a significant indirect effect resulting from a fundamental change in its setting and a consequent reduction in the contribution of the setting leading to a loss of significance (“harm” in NPPF terms) for this undesignated asset. However, this indirect effect will be fully reversible after the decommissioning of the Development.

235. It is intended to use the Pillbox as a bat roost as part of the ecological mitigation proposals (see section 11.6.1.1 above). This will require limited works to secure openings etc., but which will not affect the structure of the asset other than where boxes/boards etc. are required to be fixed to that structure. Whilst a record of the pillbox (including its setting) will have been made prior to this and to assist in the long-term management and conservation of this asset, it is anticipated that the roost may remain in use beyond the period for which consent is being sought. Nevertheless, any proposed works can be fully reversed with any boarding/boxes being removed.

236. Effects of “minor” significance have been identified from a loss of significance at The Church of All Saints in Graveney (Grade I), Graveney Court Farm (grade II) and Sparrow Court (Grade II) and Graveney Conservation Area. These effects are not considered to be significant effects in EIA and constitute “less than substantial harm” in terms of the NPPF. In addition to this, any effect upon significance arising from a reduction in the contribution that the setting makes for these assets will be reversible after the decommissioning of the Development.

11.9.3 Historic Landscape Character

237. The Historic Landscape Character of the Core ASA will be temporarily altered as a result of the Development. This is expected to result in a minor effect during the construction and operational phases. The Development design has incorporated measures to mitigate effects to the Historic Landscape Character such as the preservation of drainage ditches and the exclusion of Cleve Hill from the Development, which will create a distinction between the lower lying marshland and the higher settled ground at Cleve Hill and Graveney. Due to the nature of the Development with a lifespan of 40 years, both direct and indirect effects to the Historic Landscape Character will be temporary and reversible after the decommissioning of the Development.