

THURROCK FLEXIBLE GENERATION PLANT

DCO EXAMINATION REF: EN010092

PROCEDURAL DEADLINE C – FURTHER INFORMATION

Environmental Statement: Historic Environment Settings Analysis

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EXECUTIVE SUMMARY

This supplemental report has been prepared in response to the directions and relevant representations made following the Development Consent Order (DCO) submission for the Thurrock Flexible Generation Plant ('the Proposed Development', ref: EN010092) comprising:

- The Planning Inspectorate (PINS): letter dated 2nd November 2020
- Historic England: Relevant Representation, ref. PL00490033, received August 2020
- Historic England: letter, dated 12th November 2020
- Thurrock Council: supplement to Relevant Representation, received 04 September 2020.

This report is intended to supplement the technical baseline reports and Environmental Statement (ES) chapter submitted as part of the DCO application and to address the comments raised in the documents noted above, and those resulting from additional consultation with various stakeholders since the DCO application was made.

The comments raised through the relevant representations have been considered, and a further Historic Environment Settings Assessment has been undertaken, which has also cross-referenced the relevant photomontages and wireframes already produced as part of the Landscape and Visual Impact Assessment (LVIA) submitted as part of the DCO application.

This assessment has been produced with reference to the non-statutory guidance *The Setting of Heritage Assets* published by Historic England in 2017 (Historic Environment Good Practice Advice in Planning Note 3 (Second Edition), 'GPA3'), adhering to the recommended five-stage approach.

The scope of this report is limited to an assessment of the settings of known built heritage and designated archaeological features identified as being sensitive receptors to the proposed development, and an assessment of impacts from the proposed development to the importance of these assets to derive a significance of effect (in EIA terms) resulting from the construction, operation and decommissioning of the proposed development. Impacts to the non-designated archaeological resource are to be assessed separately following the results of additional field survey work.

In terms of relevant designated heritage assets, there are no World Heritage sites, Scheduled Monuments, Registered Parks and Gardens, Registered Historic Battlefields or Historic Wreck sites identified within the Order Limits.

The assessment has taken a proportionate approach, as per GPA3 guidance, and applied professional judgement, using accepted definitions and terminology for assessing the significance of effect of the proposed development on the historic environment resource.

The effects of the proposed development on the settings of the heritage assets identified as sensitive receptors during the five-stage assessment are summarised in tabular form in Appendix 1.

There are identified effects arising from the proposed development and all but one is considered to be no greater than minor adverse. There is considered to be a moderate adverse effect on the setting of the West Tilbury Conservation Area, which is deemed significant in EIA terms.

This supplemental report and revised settings assessment supersede the conclusions of ES Chapter 7: Historic Environment. In the course of preparing this supplementary report, an erratum was identified in the reporting of the assessment of one heritage asset (Tilbury Fort) in Chapter 7, which has been corrected by this report – see Appendix 1.

No new effects or effects of greater significance have been identified and the conclusions of Chapter 7 therefore remain unchanged by this further assessment.

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1 INTRODUCTION AND SCOPE OF STUDY

Introduction

- 1.1 Thurrock Power, a subsidiary of Statera Energy, is proposing to develop a flexible electricity generation and storage plant comprising a gas-fired electricity generating station and a battery storage facility on land to the north of Tilbury substation, Thurrock, Essex, located at NGR 566194, 176616.
- 1.2 This supplemental report has been prepared in response to the directions by the Examining Authority (ExA) and Relevant Representations made following the development consent order (DCO) submission for the Thurrock Flexible Generation Plant ('the Proposed Development', ref: EN010092), comprising:
- PINs (as ExA): letter dated 2nd November 2020
 - Historic England: letter, dated 18th August 2020
 - Historic England: letter, dated 12th November 2020
 - Thurrock Council: document received September 2020.
- 1.3 This report is intended to supplement the Environmental Statement (ES) submitted as part of the DCO application, in order to address the comments raised in the documents noted above, and those resulting from additional consultation with various stakeholders since the DCO application was made.
- 1.4 In their Relevant Representation, Historic England ('HE') stated that in their view, with regard to onshore historic environment, *inter alia* the ES did not fully address the impact upon the significance of heritage assets from a development within their setting.
- 1.5 The ExA issued a s89 procedural decision letter on 2nd November 2020, taking the advice of HE, and requiring the Applicant to undertake 'further field surveys to fully characterise the historic environment baseline'. The ExA states, "*the baseline should include the setting of heritage assets and below ground archaeological deposits, including their extent and significance, and following this, the assessment of significant effects should be updated to assess against the new baseline conditions*".
- 1.6 In their more detailed letter dated 12th November 2020 HE reiterated their view, and raised their concern that the ES did not provide a specific section, in terms of visual resources, on the historic environment (either in Vol. 3 Chap. 6 or Chap. 7), to assess the visual impact of the proposed development on the setting of designated heritage assets. They also raised an issue with the key viewpoints, and visual resources, that have been presented in the ES and recommended that further assessment work was carried out to ensure the historic environment baseline is fully characterised.
- 1.7 Although not referred to be the ExA, Relevant Representations were made by Thurrock Council in response to the DCO submission, which stated, *inter alia*, that the historic environment assessment was not considered robust enough, as well as lacking in information such as visualisations from key heritage assets. In the view of the Council's Historic Environment advisor, the settings for the relevant heritage assets including in section 4.1 of the ES were not considered in enough detail and not assessed in line with HE guidance.
- 1.8 All of the comments raised through the letters and Relevant Representations have been considered, and a further Historic Environment Settings Assessment has therefore been undertaken, which has also cross-referenced the relevant photomontages and wireframes already produced as part of the Landscape and Visual Impact Assessment (LVIA) submitted as part of the DCO application. Some additional photomontages have also been produced where this was considered to be helpful.

Scope

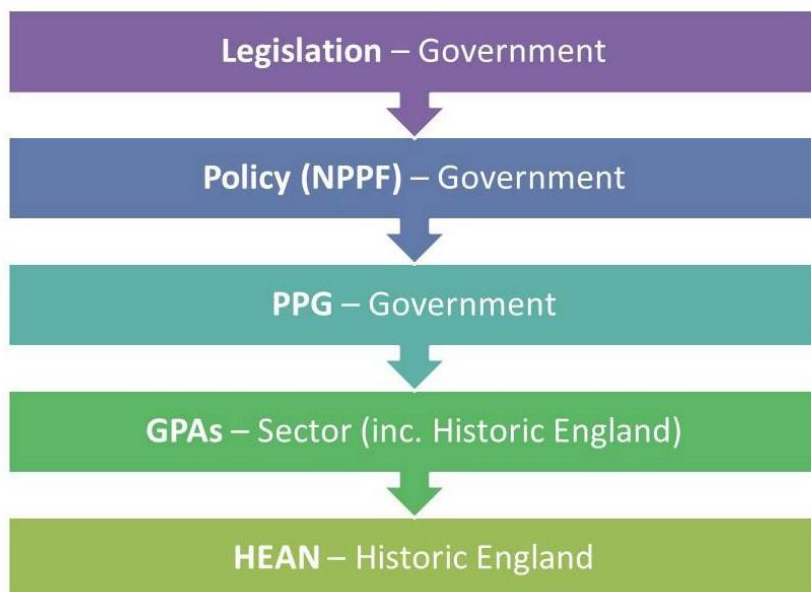
- 1.9 This Settings Assessment focuses solely on providing a specific and more detailed assessment of the visual impact of the proposed development on the settings of known above-ground onshore heritage assets identified as potential sensitive receptors to the scheme, in order to address the concerns raised by HE and Thurrock Council and provide the further information requested by the ExA by Procedural Deadline C. It is intended to be read as a stand-alone document to supplement the information already presented within the DCO application documents.
- 1.10 The relevant legislative, policy and guidance context is set out in **Section 2** and the methodology applied for the assessment is set out in **Section 3**.
- 1.11 **Section 4** of this report presents the results of the five-stage approach to the assessment of the settings of heritage assets, undertaken in line with the non-statutory guidance published by HE (2017), and set out in **Section 3**.
- 1.12 **Section 5** presents an updated summary assessment of significant effects in tabular form in terms of the impacts from the Proposed Development on the setting(s) of individual above-ground onshore heritage assets and designated archaeological assets only.
- 1.13 It is important to note that setting is not a heritage asset, nor a heritage designation, and that its importance lies in what it contributes to the significance of the heritage asset, or the ability to appreciate that significance. Its extent is not fixed, and its assessment is a matter of professional judgement.

Compliance

- 1.14 In accordance with the directions issued by PINS on 2nd November 2020 the baseline conditions across the Proposed Development will be updated with the results of this assessment, and also the results of additional field survey work (geophysical survey, ongoing at the time of writing).
- 1.15 The results of both elements of additional assessment will be incorporated within an overarching document, which updates the baseline and the significance of effects for submission to the ExA before Procedural Deadline C, 14th December 2020.
- 1.16 This assessment has been produced with reference to the non-statutory guidance *The Setting of Heritage Assets* published by Historic England in 2017 (Historic Environment Good Practice Advice in Planning Note 3 (Second Edition), GPA3), adhering to the recommended five-stage approach.
- 1.17 This assessment has also been prepared in accordance with relevant legislation, policy and guidance on archaeology, historic buildings, landscape and planning, and in accordance with the '*Standard and Guidance for Historic Environment Desk-Based Assessment*' (Chartered Institute for Archaeologists (CIfA), January 2017, updated October 2020) and the '*Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment*' (CIfA, December 2014, updated October 2020).

2 LEGISLATION, PLANNING POLICY AND GUIDANCE

- 2.1 There is primary and secondary legislation, supported by guidance, which provide the basis for decision-making within the planning system.
- 2.2 The *Planning Act 2008* sets out the framework for the planning process for Nationally Significant Infrastructure Projects (NSIPs). NSIPs require a Development Consent Order (DCO) application that is determined by UK Government. On 1st April 2012, under the [Localism Act 2011](#), the Planning Inspectorate became the government agency responsible for operating the planning process for NSIPs.
- 2.3 Planning policy for fossil fuel generation NSIPs is contained in the Overarching National Policy Statement (NPS) for Energy (EN-1; DECC, 2011a) and the NPS for Fossil Fuel Electricity Generating Infrastructure (EN-2, DECC, 2011b).
- 2.4 As stated in NPS EN-1 “*Applicants should 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 level of detail should be proportionate to the importance of the heritage assets and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset.*”(para. 5.8.8).
- 2.5 The policies relevant to the historic environment as stated in NPS EN-1 reflect the considerations stipulated in the NPPF and within the legislative framework applicable to the historic environment.
- 2.6 In respect of the historic environment, there is national legislation, planning policy and guidance relating to the protection of, and development on, or near, important archaeological sites, historic landscapes or historical buildings within planning regulations as defined under the provisions of the *Town and Country Planning Act 1990*. In addition, local authorities are responsible for the protection of the historic environment within the planning system.
- 2.7 The planning system comprises a number of different elements, both local and national: legislative frameworks provide statutory protection to the historic environment, while planning policy and other guidance provides non-statutory advice concerning how the historic environment should be addressed within the planning process. The hierarchy of the planning system at a national level is shown in the infographic below.



- 2.8 The purpose of the planning system is to contribute to the achievement of sustainable development, through social, economic and environmental objectives as set out by UK Government.

- 2.9 In March 2012, the government published the *National Planning Policy Framework* (NPPF), and it was last updated in June 2019. The NPPF is supported by the National Planning Practice Guidance (NPPG), which was published 10th April 2014 and last updated 23rd July 2019 (<https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment>).
- 2.10 The NPPF and NPPG are additionally supported by four non-statutory Good Practice Advice (GPA) documents published by Historic England:
- GPA 1: The Historic Environment in Local Plans (March 2015);
 - GPA 2: Managing Significance in Decision-Taking in the Historic Environment (March 2015).
 - GPA 3: The Setting of Heritage Assets (second edition, December 2017); and,
 - GPA 4: Enabling Development and Heritage Assets (June 2020).
- 2.11 In addition, Historic England have produced various Advice Notes (HEANs), of which Note 12: *Statements of Heritage Significance* (published October 2019) is relevant.

Legislation relevant to the historic environment

- 2.12 Statutory protection for archaeology, including Scheduled Monuments, is contained in the *Ancient Monuments and Archaeological Areas Act 1979*, amended by the National Heritage Act 1983 and 2002, and updated in April 2014.
- 2.13 For other components of the historic environment, the *Planning (Listed Buildings and Conservation Areas) Act* (1990) and the *Town and Country Planning Act* (1990) provides statutory protection to listed buildings and their settings, and presents measures to designate and preserve the character and appearance of Conservation Areas.
- 2.14 Section 66 of the *Planning (Listed Buildings and Conservation Areas) Act 1990* imposes a general duty as respects listed buildings in the exercise of planning functions. Subsection (1) provides that:
- “In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.”*
- 2.15 The setting of a Conservation Area is not enshrined in legislation and therefore does not attract the weight of statutory protection, and should be assessed in respect of relevant national and local planning policies.
- 2.16 Historic England (formerly English Heritage) is enabled by the Historic Buildings and Ancient Monuments Act 1953 (as amended) to maintain a register of historic parks, gardens and battlefield sites which appear to HE to be of special historic interest. Registration in this way makes the effect of proposed development on these types of sites and their settings a material consideration.
- 2.17 Under the *Hedgerow Regulations 1997*, as amended by The Hedgerows (England) (Amendment) Regulations 2002, hedgerows are deemed to be historically Important if they are over 30 years old and either: incorporate, or are associated with, a Scheduled archaeological feature or site; mark the Boundary of a pre-1600 estate or manor recorded at the relevant date in a Sites and Monuments Record [now more commonly known as Historic Environment Records, maintained by local authorities]; or forms an integral part of a pre-1845 field system. However, this does not mean that historic hedgerows which are deemed ‘Important’ are designated heritage assets.

National Planning Policy

- 2.18 Section 16 of the NPPF, entitled ‘Conserving and enhancing the historic environment’ provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:

- Delivery of sustainable development;
 - Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
 - Conservation of England's heritage assets in a manner appropriate to their significance; and
 - Recognition that heritage makes to our knowledge and understanding of the past.
- 2.19 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 189 states that planning decisions should be based on the significance of the heritage asset and that level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 2.20 *Heritage Assets* are defined in Annex 2 of the NPPF as: a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.
- 2.21 Annex 2 also defines *Archaeological Interest* as a heritage asset which holds or potentially could hold evidence of past human activity worthy of expert investigation at some point.
- 2.22 A *Nationally Important Designated Heritage Asset* comprises a: World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.
- 2.23 *Significance* is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
- 2.24 *Setting* is defined as: 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.
- 2.25 In short, government policy provides a framework which:
- Protects nationally important designated Heritage Assets;
 - Protects the settings of such designations;
 - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions;
 - Provides for the excavation and investigation of sites not significant enough to merit in-situ preservation.

National Planning Practice Guidance

- 2.26 The National Planning Practice Guidance (NPPG) has been published by the Government in order to aid the application of the NPPF.
- 2.27 The NPPG reiterates that the conservation of heritage assets in a manner appropriate to their significance is a core planning principle, requiring a flexible and thoughtful approach. Furthermore, it highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation. The guidance states that if complete, or partial loss of a heritage asset is justified, the aim should then be to capture and record the evidence of the asset's significance and make the interpretation publicly available.
- 2.28 Key elements of the guidance relate to assessing harm. An important consideration should be whether the proposed works adversely affect a key element of the heritage asset's special

architectural or historic interest. Additionally, it is the degree of harm, rather than the scale of development, that is to be assessed. The level of 'substantial harm' is considered to be a high bar that may not arise in many cases. Essentially, whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the NPPF.

- 2.29 Harm may arise from works to the asset or from development within its setting. Setting is defined as the surroundings in which an asset is experienced and may be more extensive than the curtilage. A thorough assessment of the impact of proposals upon setting needs to take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.

Conservation Principles, Policies and Guidance (English Heritage, April 2008)

- 2.30 Conservation Principles outlines Historic England's approach to the sustainable management of the historic environment. While primarily intended to ensure consistency in Historic England's own advice and guidance, the document is recommended to LPAs to ensure that all decisions about change affecting the historic environment are informed and sustainable. The document sets out six high-level principles:

- The historic environment is a shared resource
- Everyone should be able to participate in sustaining the historic environment
- Understanding the significance of places is vital
- Significant places should be managed to sustain their values
- Decisions about change must be reasonable, transparent and consistent
- Documenting and learning from decisions is essential.

- 2.31 The guidance describes a range of heritage values which enables the significance of assets to be established systematically, with the four main heritage values being: evidential value; historical value; aesthetic value; and communal value.

- 2.32 On 10th November 2017 HE consulted on their revised Conservation Principles, which was being updated to reflect the language used in the NPPF and legislation. Consultation closed on 2nd February 2018, but a revised version has yet to be published. However, in this draft document, 'Significance' was given a suggested definition of "The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting."

Overview: Historic Environment Good Practice Advice in Planning

- 2.33 The PPS5 Practice Guide was withdrawn in March 2015 and replaced with three Good Practice Advice in Planning Notes (GPAs) published by Historic England. GPA 3: The Setting of Heritage Assets replaces guidance published in 2011. These are complemented by the Historic England Advice Notes in Planning (HEANs) and other technical guidance.

GPA1: The Historic Environment in Local Plans (March 2015)

- 2.34 This document provides information to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the NPPF and NPPG.

- 2.35 The advice in this document, in accordance with the NPPF, emphasises that all information requirements and assessment work in support of plan-making and heritage protection needs to be proportionate to the significance of the heritage assets affected and the impact on the significance of those heritage assets, and recognises the primacy of the NPPF and NPPG.

GPA2: Managing Significance in Decision-Taking in the Historic Environment (March 2015)

- 2.36 This document provides advice on numerous ways in which decision making in the historic environment could be undertaken, emphasising that the first step for all applicants is to understand the significance of any affected heritage asset and the contribution of its setting to that significance. In line with the NPPF and NPPG, the document states that early engagement and expert advice in considering and assessing the significance of heritage assets is encouraged. The advice suggests a structured, staged approach to the assembly and analysis of relevant information:
- Understand the significance of the affected assets;
 - Understand the impact of the proposal on that significance;
 - Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
 - Look for opportunities to better reveal or enhance significance;
 - Justify any harmful impacts in terms of the sustainable development objective of conserving significance balanced with the need for change; and
 - Offset negative impacts to significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

GPA3: The Setting of Heritage Assets (Second Edition; December 2017)

- 2.37 This advice note focuses on the management of change within the setting of heritage assets. This document replaces GPA3: The Setting of Heritage Assets (March 2017) and Seeing History in the View (English Heritage, 2011) in order to aid practitioners with the implementation of national legislation, policies and guidance relating to the setting of heritage assets found in the 1990 Act, the NPPF and PPG. The guidance is largely a continuation of the philosophy and approach of the 2011 and 2015 documents and does not present a divergence in either the definition of setting or the way in which it should be assessed.
- 2.38 As with the NPPF the document defines setting as ‘the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve’. Setting is also described as being a separate term to curtilage, character and context. The guidance emphasises that setting is not a heritage asset, nor a heritage designation, and that its importance lies in what it contributes to the significance of the heritage asset, or the ability to appreciate that significance. It also states that elements of setting may make a positive, negative or neutral contribution to the significance of the heritage asset, including below-ground archaeological remains.
- 2.39 While setting is largely a visual term, with views considered to be an important consideration in any assessment of the contribution that setting makes to the significance of an asset, and thus the way in which an asset is experienced, setting also encompasses other environmental factors including noise, vibration and odour. Historical and cultural associations may also form part of the asset’s setting, which can inform or enhance the significance of a heritage asset.
- 2.40 This document provides guidance on practical and proportionate decision making with regards to the management of change within the setting of heritage assets. It is stated that the protection of the setting of a heritage asset need not prevent change and that decisions relating to such issues need to be based on the nature, extent and level of the significance of a heritage asset, further weighing up the potential public benefits associated with the proposals. It is further stated that changes within the setting of a heritage asset may have positive or neutral effects.
- 2.41 The document also states that the contribution made to the significance of heritage assets by their settings will vary depending on the nature of the heritage asset and its setting, and that different

heritage assets may have different abilities to accommodate change without harming their significance. Setting should, therefore, be assessed on a case-by-case basis.

2.42 Historic England recommends using a series of detailed steps in order to assess the potential effects of a proposed development on significance of a heritage asset. The 5-step process is as follows:

- Identify which heritage assets and their settings are affected;
- Assess the degree to which these settings and views make a contribution to the significance of a heritage asset(s) or allow significance to be appreciated;
- Assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it;
- Explore ways to maximise enhancement and avoid or minimise harm; and
- Make and document the decision and monitor outcomes.

HEAN 12 Statements of Heritage Significance: Analysing Significance in Heritage Assets (October 2019)

2.43 The purpose of this HEAN is to provide information on the analysis and assessment of heritage significance in line with the NPPF to assist owners, applicants, local planning authorities (LPAs), planning and other consultants, and other interested parties in implementing historic environment legislation, the policy in the NPPF and the related guidance given in the Planning Practice Guidance (PPG).

2.44 In this document, HE states that “Alternative approaches may be acceptable, provided they are demonstrably compliant with legislation and national policy.”

2.45 The advice in this document, in accordance with the NPPF, emphasises that the level of detail in support of applications for planning permission and listed building consent should be no more than is necessary to reach an informed decision, and that activities to conserve the asset(s) need to be proportionate to the significance of the heritage asset(s) affected and the impact on that significance. At the same time those carrying out this work need enough information to understand the issues (NPPF, paragraphs 43-44 and 189).

Local Planning Policy

2.46 The development plan for the proposal site comprises policies from the Thurrock Local Development Framework, adopted in 2011. Relevant policies are set out in the ES and not revisited here.

3 ASSESSMENT METHODOLOGY

Introduction

- 3.1 In accordance with the requirements of national planning policy, and in particular NPS EN-1 (section 5.8), the NPPF (para 189) and national guidance (NPPG; GPA1, GPA2 and GPA3), an applicant should describe the significance of any heritage assets affected by the proposed development, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should be consulted and the heritage assets assessed using appropriate expertise where necessary.
- 3.2 There is no single accepted or standard guidance for the assessment of the likely effects of development on the historic environment resource. Although developed for use on trunk road schemes, the former Design Manual for Roads and Bridges (DMRB) (Highways Agency 2007) sets out a detailed methodology for considering the historic environment which, to date, represents the most comprehensive published guidance and has been used to inform this assessment.
- 3.3 The importance/sensitivity of some heritage assets is formally recognised through designation (Scheduling of a monument, or the Listing of a built structure). The following terminology has been adopted within this assessment for classifying and discussing the historic environment:
- A Heritage Asset is a building, monument, site, place, area or landscape identified as meriting consideration in planning decisions because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing) (NPPF, Annex 2 Glossary).
 - The Setting of a heritage asset is 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 importance of an asset, may affect the ability to appreciate that importance or may be neutral (NPPF, Annex 2 Glossary).
 - Importance (sensitivity) is used in place of 'Significance' (for heritage policy): this substitution of terms is used to avoid confusion with established EIA terminology. 'Significance' for heritage policy is defined in the NPPF (Annex 2, Glossary), as the value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
 - Value is used in reference to the components of a heritage asset that determines its importance, as described in **Table 3.1**.
 - Significance is used when referring to the significance of effect resulting from impacts of the proposed development on the importance of heritage assets.
- 3.4 Conservation Principles (English Heritage, 2008) introduced the concept of values when weighing the significance of heritage assets with reference to the following value criteria (bracketed terms indicate corresponding values identified in NPPF):
- Evidential (Archaeological) value. Deriving from the potential of a place to yield evidence about past human activity (worthy of expert investigation at some point).
 - Historical value. Deriving from the ways in which past people, events and aspects of life can be connected through a place to the present. It tends to be illustrative or associative (An interest in past lives and events, including prehistoric. Heritage assets can illustrate or be associated with them and provide a material record of our nation's history).
 - Aesthetic (Architectural and Artistic) value. Deriving from the ways in which people draw sensory and intellectual stimulation from a place. (These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the

way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skill, like sculpture).

- **Communal** value. Deriving from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory. Communal values are closely bound up with historical (particularly associative) and aesthetic values, but tend to have additional and specific aspects. (Heritage assets can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity).

3.5 The overall importance of heritage assets is expressed on a 6-point scale of: Very High, High, Medium, Low, Negligible and Unknown, using the criteria presented in **Table 3.1** taken from the assessment guides in the former DMRB (HA 2007) and ICOMOS 2010.

Table 3-1 Criteria used to determine the importance (sensitivity) of heritage assets.

Heritage Importance (sensitivity)	Criteria
Very High	<i>Heritage assets of international importance. World Heritage Sites and the individual attributes that convey their Outstanding Universal Value. Areas associated with intangible historic activities as evidenced by the register and areas with associations with particular innovations, scientific developments, movements or individuals of global importance.</i>
High	<i>Heritage assets of national importance. Scheduled Monuments, Listed Buildings (Grade I, II*), Registered Historic Parks and Gardens (Grade I, II*), Registered Battlefields, Protected Wrecks, Protected Military Remains. Also includes unscheduled sites and monuments of schedulable quality and/or importance discovered through the course of evaluation or mitigation. Designated and undesignated historic landscapes of outstanding interest, or high quality and importance and of demonstrable national value Well-preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factors. Palaeogeographic features with a demonstrable high potential to include artefactual and/or palaeoenvironmental material, possibly as part of a prehistoric site or landscape. Undesignated sites of wrecked ships and aircraft that are demonstrably of equivalent archaeological importance to those already designated.</i>
Medium	<i>Heritage assets of regional importance. Conservation Areas, Grade II Listed Buildings and Registered Historic Parks and Gardens Historic townscapes and landscapes with reasonable coherence, time-depth and other critical factor(s). Unlisted assets that can be shown to have exceptional qualities or historic association. Designated special historic landscapes. Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional value. Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factors. Prehistoric deposits with moderate potential to contribute to an understanding of the palaeoenvironment. Undesignated wrecks of ships or aircraft that have moderate potential based on a formal assessment of their importance in terms of build, use, loss, survival and investigation.</i>
Low	<i>Heritage Assets with importance to local interest groups or that contributes to local research objectives.</i>

Heritage Importance (sensitivity)	Criteria
	<p><i>Locally Listed Buildings and Sites of Importance within a district level. Robust undesignated assets compromised by poor preservation and/or poor contextual associations.</i></p> <p><i>Robust undesignated historic landscapes. Historic landscapes with importance to local interest groups. Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.</i></p> <p><i>Prehistoric deposits with low potential to contribute to an understanding of the palaeoenvironment.</i></p> <p><i>Undesignated wrecks of ships or aircraft that have low potential based on a formal assessment of their importance in terms of build, use, loss, survival and investigation.</i></p>
Negligible	<p><i>Assets with little or no archaeological or historical interest due to poor preservation or survival. Landscapes with little or no significant historical interest.</i></p>
Unknown	<p><i>The importance of asset has not been ascertained from available evidence.</i></p>

Assessing the setting(s) of heritage assets

- 3.6 The Historic England guidance GPA3 advocates a systematic and staged approach to the assessment of the implications of development in terms of their effects on the settings of heritage assets.
- 3.7 **Stage 1** of the approach is ‘identifying the heritage assets affected and their settings’. This initial step was carried out by undertaking documentary research, assessing data sourced from the HER and national heritage datasets, and by undertaking a field visit to the Site and its wider surrounds.
- 3.8 **Stage 2** requires consideration of ‘whether, how and to what degree these settings make a contribution to the significance of the heritage asset(s)’. The guidance states that this stage of the assessment should first address the key attributes of the heritage asset itself and then consider:
- 1) the physical surroundings of the asset, including its relationship with other heritage assets;
 - 2) the way the asset is appreciated; and
 - 3) the asset’s associations and patterns of use.
- 3.9 Elements of a setting may make a positive or negative contribution to the value of a heritage asset, may affect the ability to appreciate that value, or may be neutral. The criteria for grading the contribution made by the setting to the importance of a heritage asset is set out in **Table 3.2** (based on the assessment guides in the former DMRB (HA 2007)).
- 3.10 **Stage 3** involves assessing the effect of the proposed development on the importance¹ of the asset(s). This stage of the assessment addresses the key attributes of the proposed development, such as its:
- 1) Location and siting;
 - 2) Form and appearance;
 - 3) Additional effects; and
 - 4) Permanence.
- 3.11 **Stage 4** of the guidance should explore opportunities for ‘maximising enhancement and minimising harm’, while **Stage 5** is to ‘make and document the decision and monitor outcomes’.

¹ Importance is used in place of ‘significance’ (as used in heritage policy) to avoid confusion with EIA terminology

Table 3-2: Criteria for grading the contribution of setting to the importance of heritage assets

Contribution of Setting to Heritage Importance (sensitivity)	Criteria
High	<i>A setting which possesses key attributes that make a strong positive contribution to the understanding and/or appreciation of the values that embodies its importance</i>
Medium	<i>A setting which possesses some key attributes that make a positive contribution to the understanding and/or appreciation of the values that embodies its importance</i>
Low	<i>A setting which possesses some attributes that make some/little positive contribution to the understanding and/or appreciation of the values that embodies its importance.</i>

- 3.12 As a result of the application of the staged approach, heritage assets are either ‘scoped in’ or ‘scoped out’ of further assessment. Where it has been identified that the setting of the heritage asset is such that there is no potential for its setting, and therefore the importance of the asset, to be affected by the presence of the proposed scheme, the asset is not considered further in the assessment.
- 3.13 The assessment of views, which often play a key part in assessing the perceived settings of heritage assets, was undertaken in accordance with the Landscape Institute’s *Guidelines for Landscape and Visual Impact Assessment* (Third Edition, 2013, GLVIA3).
- 3.14 The assessment of the magnitude of change (impact) is the identification of the degree of change arising from the proposed scheme. The assignment of a magnitude of impact is a matter of professional judgement. Effects may be adverse, neutral or beneficial.
- 3.15 The magnitude of change (impact) on heritage assets has been assigned a value of Major, Moderate, Minor, Negligible and No Change, which can be either adverse or beneficial, as shown in **Table 3.3**, based on the assessment guides in DMRB (HA 2007).
- 3.16 The Stage 3 assessment of effect results from a consideration of the importance/potential of the asset, the contribution of its setting to that importance, and the degree of impact upon it as a result of the proposed scheme. Expressed as a simple equation:

$$\text{Heritage Importance} \times \text{Impact (of development)} = \text{Effect}$$
- 3.17 The interaction of the magnitude of change (impact) and the importance of the heritage asset results in the significance of effect, which is expressed as Substantial, Major, Moderate, Minor, Negligible, or No Change. The effect can be adverse, beneficial or neutral.
- 3.18 The matrix used for the assessment of the significance of effect is shown in **Table 3-4**.
- 3.19 For the purpose of this report, the intention of the environmental impact assessment (EIA) is to identify likely significant effects, although there is no published guidance on what level of effect is considered significant. As such, the methodology for this assessment has taken the view that any effects with a significance level of minor or less are considered to be **not significant** in EIA terms. It is not the purpose of EIA to identify all effects.
- 3.20 The assessment applies the ‘Rochdale’ envelope, which assesses the significance of effect based on the ‘worst-case’ scenario of the scheme, i.e. the design which causes the greatest magnitude of change. This is to ensure effects of greater adverse significance are not predicted to arise should any other development scenario within the proposed development design envelope be taken forward in the final design scheme.
- 3.21 Where the matrix provides a split in the level of effects, e.g. minor or moderate, the assessor has exercised professional judgement in determining which of the levels is most appropriate.
- 3.22 The approach detailed here to assessing impacts, receptor sensitivity and significance of effect is consistent with that used for the assessment work already undertaken in Chapter 7 of the ES. The methodology has been presented again here for ease of reading this supplementary document and

was followed afresh for each heritage asset in this supplementary document so the assessment approach is consistent.

Table 3-3 Criteria for determining the magnitude of change (impact)

Magnitude of Change (Impact)	Setting	
	Adverse	Beneficial
Major	A comprehensive and fundamental change to the key positive attributes of a heritage asset's setting, such that the setting is substantially or totally altered.	Large scale or major improvement to the setting of a heritage asset; extensive restoration or enhancement; major improvement of attribute quality
Moderate	A considerable change to the key positive attributes of a heritage asset's setting such that its contribution to the importance of the asset is appreciably reduced.	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality
Minor	A limited change to the key positive attributes of a heritage asset's setting resulting in a slight but discernible reduction to its contribution to the asset's importance.	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring
Negligible	A very slight change to the key positive attributes of a heritage asset's setting such that the change is barely distinguishable	Very minor benefit to, or positive addition of one or more characteristics, features or elements
No change	No loss or alteration or characteristics, features or elements; no observable impact in either direction	No loss or alteration or characteristics, features or elements; no observable impact in either direction

Table 3-4 Matrix used for the assessment of the significance of an effect

	Magnitude of impact					
		No change	Negligible	Minor	Moderate	Major
Sensitivity of receptor	Negligible	No change	Negligible	Negligible or minor	Negligible or minor	Minor
	Low	No change	Negligible or minor	Negligible or minor	Minor	Minor or moderate
	Medium	No change	Negligible or minor	Minor	Moderate	Moderate or major
	High	No change	Minor	Minor or moderate	Moderate or major	Major or substantial
	Very high	No change	Minor	Moderate or major	Major or substantial	Substantial
		No change				

3.23 It is important to note that there is no such thing as an impact or effect on the setting of a heritage asset: the impact is on the importance of the asset as a result of a change within its setting. Moreover, the setting of a designated heritage asset is not part of the designation. As GPA3 states (2017, para.9, p.4), "Setting is not itself a heritage asset, nor a heritage designation...its importance lies in what it contributes to the significance of the heritage asset or to the ability to appreciate that significance."

3.24 It is also important to not make a direct correlation between EIA and NPPF processes in assessing impacts from a proposed development. The role of EIA is to identify likely significant effects, which can arise from Low, Medium, High or Very High impacts, and depends on the value/importance of the heritage asset. The NPPF looks at harm to, or loss of, the heritage significance of an asset, asking if the harm is substantial, or less than substantial, and sets up tests depending on the

value/importance of the asset. Substantial harm is a particularly high test. There is no direct correlation between the results and terminology of the NPPF process and those of the EIA process, and no published guidance on this issue.

4 HERITAGE SETTINGS ASSESSMENT

Stage 1

- 4.1 In terms of relevant designated heritage assets, as defined in **Section 2**, no World Heritage sites, Scheduled Monuments, Registered Parks and Gardens, Registered Historic Battlefields or Historic Wreck sites are identified within the Order Limits.
- 4.2 In order to identify the designated heritage assets and their settings outside of the Order Limits which may be impacted by the proposed development, a Zone of Theoretical Visibility (ZTV) was produced. A 5km buffer was then applied from the centre of Zone A (the main development site of the flexible generation plant) and both local and national heritage data sets were queried to produce a database of sites which might require a settings assessment.
- 4.3 The results of this initially returned:
- 11 Scheduled Monuments;
 - 206 Listed Buildings, comprising three Grade I, 16 Grade II* and 187 Grade II listed buildings;
 - One Registered Park and Garden (Grade II* Gravesend Cemetery); and,
 - Eight Conservation Areas.
- 4.4 These are shown on **Figure 1**.
- 4.5 Scrutiny of the ZTV and an initial site visit (including a wider landscape photographic survey) allowed a number of these heritage assets to be scoped out of any further assessment, due to distance from the proposed development, intervening built form/topography, and the assets not considered to share a meaningful relationship with the Order Limits (no visual connection, or the site not being within their setting, or not making a contribution to their importance/legibility/understanding as heritage assets). Those assets scoped out included the scheduled monuments at Orsett (causewayed enclosure/Anglo-Saxon cemetery); the East Tilbury Battery; Aspdin's Kiln; and Dene Holes in Hangman's Wood, and the Grade I listed St Katherine's Church at East Tilbury.
- 4.6 The one registered park/garden, Gravesend Cemetery, was also scoped out, as were the majority of other designated assets (Conservation Areas and listed buildings) within the urbanised areas of Gravesend. Elsewhere on the Kent side of the River Thames, the Grade I listed Church of St Mary and the Conservation Area at Church Street, Higham, located c.5.5km to the southeast of Zone A were also scoped out, as well as the Scheduled Cliffe Explosives Works located c.5.3km to the northeast of Zone A.
- 4.7 Following a review of the initial scheme design, it was decided that a 3km distance limit should be applied with regard to the assessment of the settings of designated heritage assets. This was identified as an appropriate distance beyond which any impact arising from a change within the setting of an asset (as a result of this proposed development design) was considered very unlikely to result in a significant level of effect. The exception to this would be where the setting of an asset includes a designed view directed towards the proposed development location: no such assets were identified. However, the Scheduled Monument at Cliffe Fort (located c.4km due east of Zone A) was scoped in for further assessment due to its intervisibility with the proposed development and interrelationships with Coalhouse Fort and other defences along Gravesend Reach.
- 4.8 As a result, the number of heritage assets taken forward for further analysis was further reduced to:
- Seven Scheduled Monuments;
 - 113 Listed Buildings, comprising two Grade I, 12 Grade II* and 99 Grade II listed buildings; and,
 - Two Conservation Areas (East Tilbury; West Tilbury (Parts 1 and 2)).

- 4.9 The seven Scheduled Monuments, comprise:
- Tilbury Fort, c.1km to the southwest of Zone A; linked to
 - Coalhouse Fort, c.2.35km to the east, by the Two Forts Way; as well as
 - Cliffe Fort, c. 4km to the east of Zone A;
 - Bowaters Farm anti-aircraft battery, c.1.28km to the east-northeast of Zone A;
 - Earthworks near St James' Church at West Tilbury, c.820m to the north of Zone A.
 - New Tavern Fort, c.2.2km to the south-southwest of Zone A (on the other side of the River Thames at Gravesend); and
 - Gravesend Blockhouse.
- 4.10 There are 71 listed buildings within 3km Study Area on the north side of the River Thames, the bulk of which are located to the north and northeast within the Conservation Areas of West Tilbury (Parts 1 and 2) and East Tilbury. Those outwith the Conservation Areas include the Grade I Church of St Katherine and Grade II Old Rectory close to Coalhouse Fort to the east of the Site; the Grade II* Officers' Barracks at Tilbury Fort and Grade II Worlds End Inn adjacent to Tilbury Fort to the southwest of Zone A; the Grade II* Riverside Station and floating landing stage at Tilbury Docks; Grade II Gun Hill Farmhouse, Biggin Farmhouse and Sunspan between c.1km and 1.5km to the north-northwest of Zone A; and the Grade I listed Church of St Mary, Grade II listed Chadwell House and Sleepers Farmhouse in the heart of Chadwell St Mary, c.2.3km to the northwest of Zone A.
- 4.11 On the south side of the River Thames, at Gravesend, there are also a number of listed buildings within the 3km buffer of the development site. These are largely clustered within the historic core of the town, which comprises several, largely interlocking, Conservation Areas. The majority of the 42 listed buildings on the Kent side of the Thames are Grade II listed; although five are Grade II* listed (the Town Hall; the Town Pier; the Church of St George; Milton Chantry/New Tavern Fort; and 79, High Street).
- 4.12 The settings of non-designated heritage assets were also considered, and included where considered to be relevant and proportionate. In general terms, this comprised a blanket settings assessment for the known and potential archaeological remains; historic landscape; and palaeoenvironmental deposits, based on the ZTV. However, these have been largely assessed for direct physical impacts which are more significant (in EIA terms) in effect than perceived impacts to their heritage importance through development occurring within their settings.
- 4.13 At the time of writing, neither Thurrock Council nor Gravesham Borough Council had formally adopted lists of non-designated 'Locally Listed Buildings'.
- 4.14 A further site visit and walkover survey was undertaken. Verified photographs (both summer and winter) were taken from various viewpoints as part of the Landscape and Visual Impact Assessment (LVIA) including some designated heritage assets and public footpaths, in order to create a selection of wireframes and photomontages for the ES and DCO submission. These are shown on **Figure 2**. Verified photographs from three viewpoints from within Tilbury Fort were also taken.
- 4.15 Further heritage assets were then scoped out, based on the results of the second walkover survey, and the application of a proportionate approach, to create a 'scoped in' list to take forward to GPA3 Stage 2 assessment. Those assets scoped in for further Stage 2 assessment are tabulated in **Appendix 1**.
- 4.16 Those assets scoped out included the five Conservation Areas within Gravesend, as their settings and importance derived from their immediate surrounds and historic context. The majority of the listed buildings within these Conservation Areas and within Gravesend were also scoped out for the same reason.
- 4.17 Similarly, all the individual Grade II listed assets within the East Tilbury Conservation Area were scoped out for individual assessment (as to take forward all 11 buildings which are listed because

of their connection with the Bata factory would not be proportionate) but the Conservation Area was scoped in to assess any impact to the importance of the Bata complex at a collective level.

- 4.18 Other designated assets scoped out included: the various Grade II listed buildings at the centre of the West Tilbury Conservation Area (Kings Head Public House (list entry number 1111633), The Bakery (list entry number 1111634), Granary to northeast of Manor Farmhouse (list entry number 1146758), Post House (list entry number 1308454), Well House (list entry number 1308840), Manor Farmhouse (list entry number 1337089) and The Cottages (list entry number 1337090), each listed at Grade II, which all front onto the village green, and have no visual or meaningful relationship with the site, and where 'no impact' to setting is predicted. Marshall's Cottages (list entry number 1337058) listed at Grade II* is located in the northern part of the conservation area and will also not be impacted by the proposed development. Similarly, adjacent to the scheduled monument at Coal House Fort are two listed buildings, the Church of St Catherine, listed at Grade I (list entry number 1337129) and the Old Rectory, listed at Grade II (list entry number 1111553). However, these buildings were scoped out of further assessment as the proposed development site does not make a contribution to their settings or importance, given intervening built form and topography.
- 4.19 The assets scoped in to take forward for GPA Stage 2 assessment therefore comprise:
- Seven Scheduled Monuments;
 - 15 Listed Buildings, comprising one Grade I, 3 Grade II* and 11 Grade II listed buildings; and,
 - Two Conservation Areas (East Tilbury; West Tilbury (Parts 1 and 2)).
- 4.20 New Tavern Fort is both a Scheduled Monument and a Grade II* listed building, and so the impact to the setting of the asset has been assessed only once, rather than being double-counted.

Stage 2

- 4.21 Stage 2 requires an assessment of the degree to which the settings and views of the identified sensitive receptors make a contribution to the importance of the heritage asset(s) or allow significance to be appreciated.
- 4.22 This requires the identification of the key attributes of the heritage asset itself and then consider the physical surroundings of the asset, including its relationship with other heritage assets; the asset's intangible associations with its surroundings, and patterns of use; the contribution made by noises, smells etc to importance; and the way views allow the importance of the asset to be appreciated, and assesses the contribution made by the element of the setting which comprises the Proposed Development.
- 4.23 The setting out of 'what matters and why' and the contribution that the flexible generation plant in its main development site (referred to as Zone A) makes to the setting and importance of the heritage asset is presented in a tabular form in **Appendix 1**.

Stage 3

- 4.24 Stage 3 assesses the effects of the proposed development, whether beneficial or harmful, on the importance, or the ability to appreciate the importance, of a heritage asset. In general, the assessment should address the attributes of the proposed development in terms of its siting, location, form, appearance, wider effects and permanence.
- 4.25 This requires, for example, a consideration of the proposed development in terms of its proximity to an asset identified during Stages 1 and 2 to be scoped in for further assessment. Stage 3 considers the position and nature of the proposed development in relation to key views to, from and across the scoped in heritage assets; its physical dominance or prominence, visual permeability, scale and massing, materials used, competition with, or distraction from, the heritage assets; how the development changes the skyline, general character, land use, public amenity; and assessed within the context of the anticipated lifetime of the proposed development and its reversibility.

4.26 The current site conditions and the design of the proposed development are summarised below, against which the Stage 3 assessment has been made.

Site Conditions

4.27 The main development site for the generating plant and battery storage facility (Zone A) currently comprises open fields crossed by drainage ditches and three overhead power lines with steel lattice electricity pylons. Land for access routes (including a causeway for barge deliveries during construction) and connections to the gas and electricity grid within the Order Limits comprises farmland, previously developed industrial sites, and the north bank of the River Thames.

4.28 The gas connection compound (Zone D) would be located within an agricultural field south of Station Road, bounded by mature hedgerow and farm buildings.

Proposed Development

4.29 In overview, the proposed development comprises the construction and operation of:

- reciprocating gas engines with rated electrical output totalling 600 MW;
- batteries with rated electrical output of 150 MW and storage capacity of up to 600 MWh;
- gas and electricity connections;
- creation of temporary and permanent private access routes for construction haul and access in operation, including a causeway for delivery of abnormal indivisible loads by barge; and
- designation of exchange Common Land and habitat creation or enhancement for protected species translocation and biodiversity gain.

4.30 The main development site of the flexible generation plant in Zone A is constrained by the existing overhead power lines; the ecological value of the existing ditches to the site boundary; the flat topography of the site and surrounding landscape, meaning that any tall structures may be visible both close to the site and further away; the location of the site in relation to the Tilbury Substation; and, the available site area and adjacent land uses.

4.31 The gas connection compound in Zone D comprises a maximum 50x50m compound containing structures that may be up to 5m in height, including a perimeter security fence, screening planting, and access track to the public highway.

4.32 The Design Principles for the proposed development are detailed in application document **A8.4**.

4.33 The rationale for the siting and arrangement of Zone A was to locate the development as close as possible to the existing Tilbury Substation to the south of the site to minimise the grid connection distance and minimise impact in the Green Belt by being as close as possible to the existing built-up industrial development immediately west of the site.

4.34 The Illustrative Cross Section Plans (Application document **A2.8**) show indicative elevations for the gas reciprocating engine houses, stacks and battery storage houses or containers. Buildings forms are proposed to be simple, with pitched roofs and considered façade treatment. It is proposed to minimise the visual mass of the buildings throughout the site by means of horizontal tonal colour banding.

4.35 The concept design of the buildings as set out in Application document **A8.4** has been used to produce illustrative photomontages of the development set in its landscape and visual context, which are shown in the Environmental Statement, Volume 3, Chapter 6: Landscape and Visual Resources. As noted in that chapter, visual and landscape impacts of the proposed development with this type of façade treatment applied would be reduced compared to the worst-case design envelope that has been assessed for the EIA.

Stage 3 assessment

- 4.36 The site conditions and proposed concept design have been judged in accordance with the Assessment Methodology set out in **Section 3**, to arrive at a magnitude of change (impact) and to assess this in EIA terms, as presented in tabular form in **Appendix 1**.

5 SUMMARY AND CONCLUSIONS

- 5.1 The settings of above-ground built heritage assets and scheduled monuments within a 5km radius of the proposed development Zone A that are considered to be sensitive receptors to the proposed development have been assessed. The impact of the proposed development on the importance of those assets has then been assessed.
- 5.2 The assessment has been undertaken using GPA3 guidance and taking a proportionate approach to applying a methodology for scoping in and scoping out assets.
- 5.3 Sensitive receptors to the proposed development are tabulated in **Appendix 1**.
- 5.4 There are identified effects arising from the proposed development and all but one are considered to be no greater than minor adverse (not significant). However, there is considered to be a moderate adverse effect on the setting of the West Tilbury Conservation Area, which is deemed significant in EIA terms.
- 5.5 This supplemental report and revised settings assessment supersede the conclusions of ES Chapter 7: Historic Environment
- 5.6 The visual impact of the proposed development will be ameliorated where possible through detailed design principles, external treatments and landscaping proposals.

6 SOURCES CONSULTED

General

British Library

Historic Environment Record (provided by Essex and Kent County Councils)

The National Archive

Internet

British Geological Survey – <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>

British History Online – <http://www.british-history.ac.uk/>

Domesday Online – <http://www.domesdaybook.co.uk/>

Historic England: The National Heritage List for England – <http://www.historicengland.org.uk/listing/the-list/>

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7 PLATES



Plate 1 View from West Tilbury Earthworks looking southwest towards Tilbury Port



Plate 2 View south-southwest from West Tilbury Earthworks to Tilbury Fort

Photos taken October 2020



Plate 3 View from West Tilbury Earthworks looking south-southeast towards Tilbury2 and Zone A



Plate 4 View from NW Bastion at Tilbury Fort towards St James' Church and Earthworks

Photos taken October 2020



Plate 5 View north-northeast from NE Bastion at Tilbury Fort to West Tilbury and Zone A



Plate 6 Remains of HAA battery at Bowater Farm



Plate 7 View east from Guard House across the parade ground to the Officers' Barracks



Plate 8 View east-northeast from the Guard House to the Gunpowder Magazines and Officers' Barracks



Plate 9 West Tilbury Hall from the scheduled earthworks



Plate 10 West Tilbury Barn



Plate 11 Principal north-northwest elevation of the Sunspan house

8 APPENDIX 1

STEP 1: Assets affected	Designation	Importance	Description (key attributes of the asset)	Setting of the asset	Step 2: Contribution of setting to importance	Step 3: Impact of proposal	Visual representation	Stage 3: Significance of Effect	NPPF Assessment
			<i>What matters and why...</i>	<i>What is the setting?</i>		<i>Magnitude of impact in EIA terms</i>	<i>Cross reference to LVIA figures</i>	<i>in EIA terms</i>	<i>in NPPF terms</i>
West Tilbury Earthworks	Scheduled Monument	High	<p>The scheduled monument comprises earthworks south and west of St James' Church, located at the edge of the escarpment overlooking the levels towards the river, and covering the neck of a promontory. It is likely that the extant earthworks are of early medieval date and are associated with the Saxon manor at West Tilbury.</p> <p>The earthworks are thought to possibly be the remnants of Bishop Cedda's palace and may also be associated with the camp at which Elizabeth I reviewed her troops before the Armada, which makes an association with the scheduled Henrican Tilbury Fort c.2.3km to the SSW. The earthworks West Tilbury lie within part one of the West Tilbury Conservation Area and also within an area of wider cropmarks and activity at Gun Hill which dates from the prehistoric period. There is a group value from their immediate relationship to St James Church and West Tilbury Hall. Cooper Shaw Road runs at the bottom of the slope and connects West Tilbury to Gun Hill, and to Tilbury Fort via Fort Road.</p>	<p>The wider setting of the scheduled monument comprises the marshland to the south, and extensive views out across the Thames. There is also a wider connection to Tilbury Fort, although this is hard to see within the current landscape. The earthworks are located on the ridge and south-facing slope of the higher ground which is a distinguishing feature of the landscape and the focus for settlement. The immediate setting of the earthworks comprises their relationship to the Grade II* listed Church of St James and West Tilbury Hall. Their wider setting comprises their relationship with the Thames and reclaimed land, and Tilbury Fort. This wider setting has been industrialised, with the development of Tilbury Port, Tilbury2; the former power station and substation (with pylons), wind turbines and various other 'warehouse' style buildings. The Scheduled Monument is also bisected from its wider setting by the electrified railway.</p>	<p>The proposed development site contributes to the wider setting of this monument, but is considered to make a low contribution to the overall significance of the asset, which derives its significance (in heritage policy terms) primarily from its evidential and archaeological value, and other contextual associations, of which the proposed development site forms only a small part. The proposed development site does not interrupt or change the existing line of sight to Tilbury Fort nor the legibility/ability to appreciate the asset from the site itself or the majority of its setting. There will be a discernible but minor change resulting from the proposed development.</p>	Minor Adverse	LVIA Fig. 3.9, taken from viewpoint 6 downslope at junction of Cooper Shaw Road with Fort Road and Gun Hill Road; Fig 3.10 taken from viewpoint 7; See also Settings Report Plates 1-3	Minor Adverse (not significant)	Less than substantial harm

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			<i>What matters and why...</i>	<i>What is the setting?</i>		<i>Magnitude of impact in EIA terms</i>	<i>Cross reference to LVIA figures</i>	<i>in EIA terms</i>	<i>in NPPF terms</i>
Tilbury Fort	Scheduled Monument	High	<p>Considered to be England's most spectacular surviving example of a late 17th century coastal fort, the designated assets comprise the buried remains of a blockhouse constructed during the reign of Henry VIII in 1539, superseded and overlain by the far larger and more complex 17th century and later fort and battery, the whole containing structures and remains dating from the second quarter of the 16th century onwards. Tilbury Fort was designed at a time when artillery had become the dominant feature of warfare and was built with massive low earthworks, which were more resilient to the shock of bombardment when compared to stone fortifications. The system of bastions and complicated outworks defending the batteries from the rear are principally a Dutch design, and extremely rare in England. The layout and construction of the Fort was geared to the optimum siting of artillery at the forward batteries, which in conjunction with the batteries on the opposing bank of the Thames at Gravesend, could create a field of fire spanning the estuary, and providing defence of both the river and the city of London.</p>	<p>Historically Tilbury Fort was surrounded by open marshland and the complex system of moats protected the fort from landward attack. Today, Tilbury Fort is largely experienced within a prominent industrial setting to both its east and west, with only partial survival of its former historic landscape setting to the north which has been compromised by the railway and modern urban development of Tilbury, although some elements of open landscape remain, including longer views over to the higher ground and settlement at West Tilbury. The River Thames and surrounding defensive forts on both the north and south side of the river, including Gravesend Blockhouse, New Tavern Fort, Shornmead Fort, Coalhouse Fort and Cliffe Fort, share a historic functional and visual connection with Tilbury Fort, and thus form part of its setting and contribute to its significance.</p>	<p>It is considered that there will be a limited change effected to the key positive attributes that contribute to the setting of the scheduled monument, and that the key elements and attributes of the site which embody its significance and value will experience only limited, not considerable change. The ability to appreciate and understand Tilbury Fort, and its legibility and archaeological/historical value, will only be slightly reduced in overall terms, although the change will be discernible. The views across to West Tilbury are not impacted, and have already been degraded by the insertion of modern elements such as street lighting and the electrification of the railway. The visual link to Coalhouse Fort has been interrupted by the intervening built form at Tilbury2. Given the wide-ranging built and industrial landscape in the wider area, and that the most significant parts of the setting of the Fort are its riverside and southerly and eastern aspects across and along Gravesend Reach, the magnitude of impact from the proposed development is assessed as minor. The proposed built form at Zone A does not further interrupt the links to Coalhouse Fort.</p>	Minor Adverse	<p>See Photomontages 10872 - HER-01, 02, 03. These were taken from the Chapel, the NE bastion and the NW bastion, October 2020. See also Settings Report Plates 4</p>	Minor Adverse (not significant) [Note 2]	Less than substantial harm

² An erratum has been identified in paragraph 4.2.3 and Table 5.1 in Chapter 7: Historic Environment of the ES, in which a 'moderate adverse' effect was reported on the setting of Tilbury Fort during the operational and maintenance phase of the proposed development. This should have been 'minor adverse', consistent with the assessment in paragraph 4.1.58. The conclusion of Chapter 7, in paragraphs 5.1.2 and 5.1.3 was correct in reporting a 'moderate adverse' effect only for the West Tilbury Conservation Area, with all other receptors predicted to experience 'minor adverse' or less effects.

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			<i>What matters and why...</i>	<i>What is the setting?</i>	<i>Magnitude of impact in EIA terms</i>	<i>Cross reference to LVIA figures</i>	<i>in EIA terms</i>	<i>in NPPF terms</i>	
Gravesend Blockhouse	Scheduled Monument	High	The scheduled monument comprises the standing and buried remains of a mid-16th century artillery blockhouse, part of a chain of coastal defences built along this stretch of the River Thames by Henry VIII. The gun lines were remodelled in the 1780s before being levelled in 1834. The blockhouse was partially demolished in 1844. The Blockhouse has group value as part of the Henrican chain of defences and in particular its functional and visual association with Tilbury Fort and New Tavern Fort, which make a high contribution to its significance. The River Thames forms its principal setting.	The River Thames forms its principal setting, and its functional and visual association with Tilbury Fort and New Tavern Fort make a high contribution to its significance. There is a wide-ranging built and industrial landscape in the wider area. From the scheduled monument the causeway and main built part of the proposed development would be seen in association with existing electricity infrastructure including pylons, as well as the Tilbury2 development, and the other industrial/port elements along this part of the Thames.	There would be minor changes to the setting of the designated asset through slight changes in longer views northeast from the scheduled monument. It is not considered that this would detract significantly from the legibility and significance of the fort, as its principal relationship is with the River Thames and Tilbury Fort, and defending the estuary eastwards as part of the other fortifications at Shornmead Fort, Cliff Fort and Coalhouse Fort.	Minor Adverse	See LVIA Fig. 3.20 taken from viewpoint 21, and Wireframe Fig. 4.12 a-c	Minor Adverse (not significant)	Less than substantial harm
New Tavern Fort	Scheduled Monument	High	The scheduled monument comprises the remains of New Tavern Fort which includes within its grounds the earlier chapel or chantry associated with the Leper Hospital of St Mary the Virgin at Milton by Gravesend. The monument lies near Gravesend Pier and close to the River Thames. Both the fort and the chantry are also listed at Grade II* (list entry numbers 1261173 and 1089047 respectively). The chantry is located at the northwest side of the fort. New Tavern Fort was one of several forts built or improved during the later 18th and/ or earlier 19th century. 4.1.74 The fort itself, along with Tilbury Fort on the opposite bank of the Thames, illustrates well the strategic importance of the Thames Estuary and the methods employed to defend it over a period of 170 years. New Tavern Fort is particularly well preserved, having been maintained over a number of years by the New Tavern Fort Project. In the north west corner of the fort is Milton Chantry, a 14th century building representing the chapel of a medieval hospital	The setting of New Tavern Fort, on the edge of the Thames makes a significant contribution to its sensitivity, while the location of the ecclesiastical remains of the Chantry is a reminder of their association with the medieval town at Gravesend. The setting of the fort comprises its relationship with the River Thames; its visual, military and maritime connection with Tilbury Fort, and its predominant view was along Gravesend Reach to the east, towards Coalhouse Fort and Cliffe Fort, to protect post-medieval and modern London from the threat of invasion by sea (and later by air). The Site comprises a small part of a much wider setting which also has to be set in its present industrial context.	There is a wide-ranging built and industrial landscape in the wider area. From the scheduled monument the causeway and main built part of the proposed development would be seen in association with existing electricity infrastructure including pylons, as well as the Tilbury2 development, and the other industrial/port elements along this part of the River. There will be a discernible change but this is judged to be minor in the overall setting of the asset and does not affect its legibility or one's ability to appreciate the asset.	Minor Adverse	See LVIA Fig. 3.20 taken from viewpoint 21 and Wireframe Fig. 4.12 a-c .	Minor Adverse (not significant)	Less than substantial harm

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			<i>What matters and why...</i>	<i>What is the setting?</i>		<i>Magnitude of impact in EIA terms</i>	<i>Cross reference to LVIA figures</i>	<i>in EIA terms</i>	<i>in NPPF terms</i>
Coalhouse Fort	Scheduled Monument	High	Coalhouse Fort is a remarkably well preserved late 19th century fort built on the recommendation of the Royal Commission on the Defence of the UK in 1860. It is one of the finest examples of an armoured casemate fort in England and is well documented historically. The jetty and railway line are an integral part of the fort. The Henrician blockhouse is well documented historically and has high archaeological potential due to waterlogging. Such a site adds to the knowledge of the coastal fortifications made by Henry VIII. The Quick-Firer battery, built in 1893, is the sole surviving purpose-built battery of its type in the Thames basin. The rifle range is an unusual survival which adds to the known range of earthwork monuments and is closely associated with the fort. Virtually intact World War II radar installations of the type at East Tilbury are known at only two other places in England, making this an extremely rare survivor of a once widespread system. The group of structures demonstrate the former strategic importance of Coalhouse Point and demonstrate the changing approaches to defence over 400 years. Furthermore the sites formed elements of wider defence systems designed to protect the Thames Estuary and especially London.	The setting of Coalhouse Fort comprises the wider River Thames and surrounding defensive forts on both the north and south side of the river, including Tilbury Fort around the shoreline to the west, and Cliffe Fort, Shornmead Fort, Gravesend Blockhouse and New Tavern Fort, which all share a historic functional and visual connection with Coalhouse Fort, and thus form part of its wider setting and also contribute to its significance (importance). However, the intervening built form and industrial development between Tilbury Fort and Coalhouse Fort has resulted in the visual link between the two forts being considerably diminished, but remain connected by their historical association and also the Two Forts Way public footpath. The built form in Zone A does not interrupt the visual link between Coalhouse Fort and Tilbury Fort and does not detract from the significance, legibility and appreciation of the asset at Coalhouse.	The proposed development site, as an area of agricultural/common land, lies within the wider landscape setting of Coalhouse Fort, and is considered to make a low to medium contribution to its wider setting within the context of the East Tilbury Marshes. Anti-glider ditches from WWII are recorded in the EHER across this wider landscape and within Zone A, and both Coalhouse Fort, and the nearby scheduled Bowaters Farm WWII HAA battery (located 1km northwest of the fort, and c.1.25km east of Zone A) were strategically important in the defence of Britain from air attack during the Second World War. Zone A comprises a small part of the overall far wider setting of Coalhouse Fort, and therefore the impact from the insertion of additional built form into this already industrialised part of the landscape is considered to only equate to a minor change compared to the whole.	Minor Adverse	See Figs 3.18, 3.25-3.27 of LVIA (ES Chapter 6). See also Wireline Fig. 4.19a-b from viewpoint 32. Photomontage from Viewpoint 30 (Fig.31a-b).	Minor Adverse (not significant)	Less than substantial harm

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			<i>What matters and why...</i>	<i>What is the setting?</i>		<i>Magnitude of impact in EIA terms</i>	<i>Cross reference to LVIA figures</i>	<i>in EIA terms</i>	<i>in NPPF terms</i>
Bowaters Farm Battery	Scheduled Monument	High	A Second World War heavy anti-aircraft battery at Bowaters Farm is the last surviving example of such batteries in this area of Essex. It forms the latest part of a series of important defensive installations at Coalhouse Point which illustrate the development of coastal defences from the Tudor period to the mid-20th century, and therefore derives significance also from its group value with the other structures at Coalhouse Fort. It is largely sunken into the landscape and surrounded on its southeast and southwest edges by woodland. The site was not identified as a sensitive receptor by the ZTV due to intervening tree cover and woodland, but has been included for assessment because of its association with Coalhouse and Tilbury Forts in defending against an air invasion during WWII on the reclaimed land, and also for its proximity to Zone D.	Only partial visibility with the Site and at present vegetational cover prevents any visual link. However, in the context of WWII defence structures within the wider landscape, the proposed Thurrock Flexible Generation Plant forms part of the wider setting of the HAA battery at Bowaters Farm, in terms of its relationship with the expanse of flat land at the East Tilbury Marshes, and the anti-glider ditches which are recorded across the area, including within the proposed development site. However, this setting has been heavily compromised by the industrialisation of the area during the post-war period with the construction of the Tilbury A and B power stations (now replaced by the Tilbury2 scheme) as well as the insertion of numerous electricity pylons across the landscape.	It is considered that there will be a discernible but limited change to the key positive attributes that contribute to the setting of the scheduled monument, and that the key elements and attributes of the HAA battery which embody its significance and value will experience only minor, not considerable change from the built form proposed in Zone A and Zone D. The ability to appreciate and understand the Bowaters Farm HAA battery, and its legibility and archaeological/historical value, will only be slightly reduced in overall terms, although the change will be discernible. As such, the magnitude of impact will be minor. There is no impact to the relationship between Bowaters Farm Battery and the defences to the east of the asset at Coalhouse Fort and only a limited change in the wider setting of the monument to the west, which is already heavily industrialised.	Minor Adverse	See Plate 6 in Settings Report.	Minor Adverse (not significant)	Less than substantial harm

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Cliffe Fort	Scheduled Monument	High	The scheduled monument comprises a fort constructed during the 1860s as part of a wider River Thames' coastal defence system. It was part of a large and expensive defence infrastructure programme which at the time incorporated the latest in fortification theory and technology. Cliffe Fort is one of 5 surviving coastal forts in the Thames and Medway; the others are Coalhouse, Garrison Point, Hoo and Darnet. All are these are Royal Commission Coastal Forts, built in the same period 1860-70, and are casemated coastal batteries. Each is different in terms of layout and design. The point at which Cliffe Fort was built was carefully chosen as it stands at the point where the Thames Estuary suddenly narrows and on a bend in the river making the site an ideal spot to hamper and deny enemy shipping to access London. Together, with other river defences at Shornmead Fort and Coalhouse Fort, formed an outer line of defence with Gravesend and Tilbury Forts, a little further upstream, forming an inner defence line. During the Second World War the fort was armed with two 4" BL guns for the use against enemy aircraft. Many other guns were mounted within and on the fort during its time in service.	The most significant part of the setting of the scheduled monument comprises its relationship with the River Thames and Coalhouse Fort. The fields of fire for the artillery pieces mounted here in the past remain largely unaffected by later development or alterations to the river. The surrounding open ground to the south and east has been much altered by quarrying and in this area the setting of the monument has been compromised. Similarly, the addition of later jetties has detracted from the setting of the scheduled monument to some extent. It also derives group value from its association with Coalhouse Fort, and also the other forts along the shoreline both north and south of the river, at Shornmead, New Tavern/Gravesend Blockhouse and Tilbury Fort. Its reuse during WWII also gives it a group associative value with the Bowaters Farm WWII battery.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the fort, but does not make a significant contribution to its setting or significance (in heritage policy terms): the legibility and appreciation of the fort is not diminished by the proposed development due to the distance. There will be slight changes to the setting of the designated asset through very minor changes in views from the scheduled monument. The magnitude of impact is assessed as being negligible.	Negligible	See LVIA Fig 3.22 taken from viewpoint 26; Wireline Fig. 4.16a-c.	Minor Adverse (not significant)	Less than substantial harm
Tilbury Fort Officers' Barracks	Grade II* listed building	High	The Officers' Quarters are believed to have been rebuilt on the site of the late 17th century officers' range, itself rebuilt in 1742, and is a good and rare example of Ordnance Board housing at this time. It is also of interest for its use of the terrace plan for providing officers' lodgings. Part of one of the finest and most complete late C17 forts in England, it is listed as a free-standing building independent from the Scheduled fortifications and attached structures. The Quarters form an elegant terrace and form part of the hierarchy of the Site, in which Officers were provided with better accommodation than ordinary soldiers, which is expressed in the internal and external architectural detailing. This was evidenced in the 19th century when the front of the terrace was separated from the parade ground by little private gardens with iron railings, underlining the officers' status.	Located within the interior defences and facing west, fronting the parade ground, the setting of the Officers' Quarters comprises its intimate relationship with the internal structures of the fort, such as the chapel and gatehouse. The building was not outward-looking towards the proposed development.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the fort, but does not make a significant contribution to the setting or significance (in heritage policy terms) of the Officers' Quarters and there will only be a very slight change to the wider setting, with the legibility and appreciation of the Officers' Barracks not diminished by the proposed development.	Negligible to Minor Adverse	See Photomontages 10872 - HER-01, 02, 03 in Appendix 2 of Settings Report. These were taken from the Chapel, the NE bastion and the NW bastion. October 2020. See also Plate 7 in Settings Report.	Minor Adverse (not significant)	Less than substantial harm

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Riverside Station and floating landing stage	Grade II* listed building	High	A terminal for passenger ships, built by the Port of London Authority in 1924. The neo-Georgian structure includes the railway station and baggage hall, ticket office, and floating landing stage. The architect was Sir Edwin Cooper for the Port of London Authority. The station was formally closed during the 1990s. The landing stage was re-opened in 1995 and was refurbished for leisure uses.	The setting of the listed building primarily comprises its relationship with the River Thames. The functional and visual relationship with the Town Pier in Gravesend on the south side of the River Thames (listed at Grade II*, list entry number 1089004) and indeed the ability to traverse the Thames by ferry, makes a significant contribution to the significance of the asset. To the north away from the river, the setting of the asset has been compromised by extensive industrial development.	The setting of the asset has been compromised by extensive industrial development in its immediate surrounds, and the proposed development will be barely visible within the already industrialised skyline. As such, the main built area of the proposed development does not make a significant contribution to setting of the asset or its importance. The construction of the marine causeway lies beyond, and shielded by, the new infrastructure being built as part of the adjacent Tilbury2 development.	Negligible	See LVIA Fig. 3.16, taken from Viewpoint 14 (ES Chapter 6)	Minor Adverse (not significant)	Less than substantial harm
St James' Church, West Tilbury	Grade II* listed building	High	Located on elevated ground with long views over the marshland to the south and a dominant landmark. Lies adjacent to the east of the scheduled monument comprising the medieval earthworks at West Tilbury. The Church is now a private domestic dwelling. Late C11 or early C12, altered in C14 and 1879. Flint and ragstone rubble with limestone dressings. Roofs tiled. C12 nave, largely refaced in C19, except for south wall. One C12 window with rounded head, and remain of one C13 window. C11 chancel has C19 east window, with C14 splays and rear arch. North wall has C14 window with 2 centred rear arch, nor blocked, and a C19 window. Part of late C11 window above. South wall has two C19 windows incorporating some C14 detailing. North vestry and porch are 1879, incorporating much early material. West tower is also 1879.	The Church is a landmark in long views from Gravesend Reach due to its elevated position on the natural topography as the first tranche of higher ground outwith the floodplain of the Thames and the reclaimed landscape and saltmarsh on which the Proposed Development is located. Its outward-facing setting is therefore extensive and the proposed built form in Zone A forms a fraction of the total of its overall wider setting as a landmark. The more immediate, intimate setting of the Church comprises its relationship with the adjacent scheduled earthworks and historic buildings at West Tilbury Hall and the proposed development site does not form part of this intimate setting.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the church, but does not make a significant contribution to its setting or significance (in heritage policy terms). It is considered that there will be a limited change to the key positive attributes that contribute to the setting of the church and that the key elements and attributes of the church which embody its significance and value will experience limited, but not considerable change. The ability to appreciate and understand church, and its legibility and archaeological/historical value, will only be slightly reduced in overall terms, although the change will be discernible. As such, the magnitude of impact will be minor.	Minor Adverse	See LVIA Fig. 3.10 (ES Chapter 6) Wireline Fig.4.3a-c Photomontage from Viewpoint 7 (Figure 4.23a and 4.23b)	Minor Adverse (not significant)	Less than substantial harm
West Tilbury Hall	Grade II listed building	Medium	17th century or earlier house, timber framed, part plastered, part weatherboarded, with red plain tile roof. Two storeys with 2 projecting hipped gables, formerly jettied. C19 double hung vertical sliding sashes to first floor and C19 windows below. Central C19 porch, with red plain tile hipped roof. Timber framed wing at rear with red plain tile roof.	Enclosed and intimate setting located north of, the scheduled earthworks at West Tilbury, and adjacent to the west side of St James Church. The principal elevation is to the north, and the house is set in spacious grounds with mature planting screening its edges. There may be glimpsed views of the proposed development from the upper storey windows in the south elevations.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the Hall, but does not make a significant contribution to its setting or importance	Negligible to Minor Adverse	See Plate 9 in Settings Report.	Minor Adverse (not significant)	Less than substantial harm

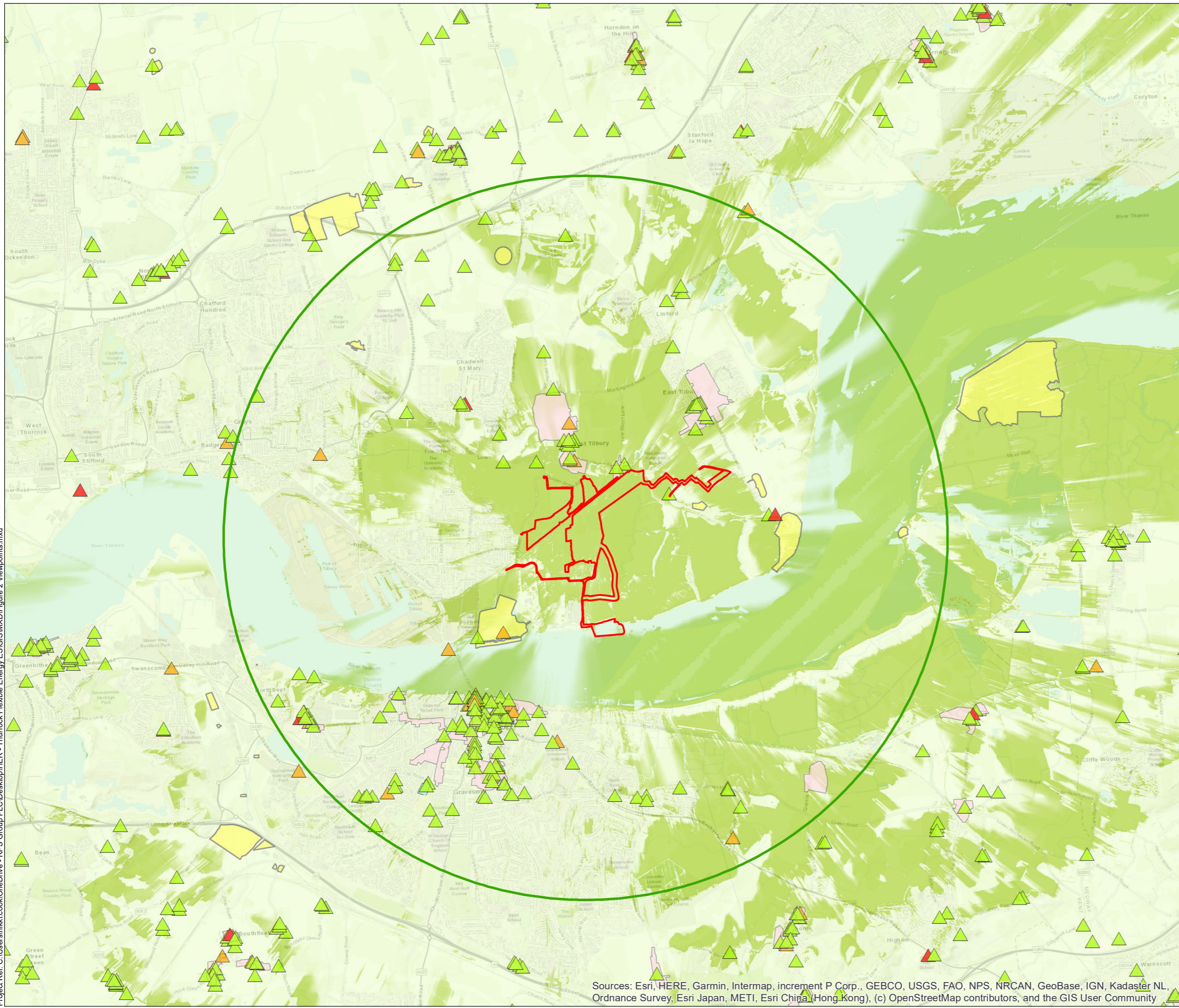
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Barn to north of West Tilbury Hall	Grade II listed building	Medium	CHURCH ROAD West Tilbury Barn to north of West Tilbury Hall comprising a C16 barn, timber framed and weatherboarded.	Enclosed and intimate setting located north of the scheduled earthworks at West Tilbury, and West Tilbury Hall. Now a dwelling, house is set in spacious grounds with mature planting screening its edges. There may be glimpsed views of the proposed development from the upper storey windows. Its importance is predominantly appreciated from its relationship with West Tilbury Hall and historic context of the Conservation Area.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the Hall, but does not make a significant contribution to its setting or importance	Negligible	See Plate 10 in Settings Report.	Negligible (not significant)	Less than substantial harm
Gun Hill Farmhouse	Grade II listed building	Medium	An early 19th century farmhouse in grey gault brick with grey slate hipped roof. Three window range, double hung vertical sliding sashes with glazing bars. Simple doorcase	Enclosed and intimate setting located west of the scheduled earthworks at West Tilbury, and West Tilbury Conservation Area. There may be glimpsed views of the proposed development from the upper storey windows. Its importance is predominantly appreciated from its historic context as an outfarm from the settlement at West Tilbury, located to the west following the natural topography.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the Hall, but does not make a significant contribution to its setting or importance.	Negligible	See LVIA Fig. 3.7, taken from Viewpoint 4, and Fig. 3.9, taken from viewpoint 6	Minor Adverse (not significant)	Less than substantial harm
Biggin Farmhouse	Grade II listed building	Medium	An 18th century brick and timber framed and plastered farmhouse with red plain tile roof. Two storeys. Three window range double hung vertical sliding sashes with glazing bars. Rectangular plan with original end chimney stacks.	Enclosed and intimate setting located west of Gun Hill, with the scheduled earthworks at West Tilbury, and West Tilbury Conservation Area further to the east. There may be glimpsed views of the proposed development from the upper storey windows. Its importance is predominantly appreciated from its historic context as an outfarm from the settlement at West Tilbury, located to the west following the natural topography.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the Hall, but does not make a significant contribution to its setting or importance.	Negligible	n/a	Negligible (not significant)	Less than substantial harm
Sunspan	Grade II listed building	Medium	A steel framed Sunspan house, built to the designs of Wells Coates and David Pleydell-Bouverie between 1934-8. Approximately 15 Sunspan houses were built in Britain. A WWII air-raid shelter survives in the grounds.	The setting of the asset comprises its immediate grounds and its principal front is to the north-northwest away from the development. There may be glimpsed views of the proposed development from the upper storey windows.	The development site makes no contribution to the heritage importance of the asset but may be seen in views from the house, and therefore introduces a very minor change into the wider setting of the asset.	Negligible	See Plate 11 in Settings Report.	Negligible (not significant)	Less than substantial harm

STEP 1: Assets affected	Designation	Importance	Description (key attributes of the asset)	Setting of the asset	Step 2: Contribution of setting to importance	Step 3: Impact of proposal	Visual representation	Stage 3: Significance of Effect	NPPF Assessment
			<i>What matters and why...</i>	<i>What is the setting?</i>		<i>Magnitude of impact in EIA terms</i>	<i>Cross reference to LVIA figures</i>	<i>in EIA terms</i>	<i>in NPPF terms</i>
St Mary's Church	Grade I	High	Early C12 church with C14 and C15 alterations. Flint rubble and ragstone with Reigate dressings, plain tiled roofs. C12, nave, has 2 C19 windows in north wall and C12 doorway with C15 doorway within it. Original arch is round with diapered voussoirs and tympanum. Two blocked C12 windows with round heads. South wall has two, C19 windows, one incorporating C14 rear arch. C12 south doorway of one round arch enclosing a plastered tympanum. Two blocked C12 windows. C15 roof loft staircase, with upper and lower doorways having 3 centred heads. C12 chancel has C19 east window incorporating C14 jambs and rear arch. North wall has one C19 window and one C14 window with one trefoiled light. South wall has 2, C14 windows each of 2 cinquefoiled lights. C15 west tower, of 3 stages, with an embattled parapet, 2 centred tower arch is of 3 chamfered arches, moulded capitals and chamfered west window of 3 four centred lights in a segmental head. West doorway has moulded jambs, four centred arch and label. Two single light windows in second stage. Four, 2 light windows to bell chamber. Chancel roof is trussed rafter.	The setting of the Church comprises its immediate location at the crossroads and its association with Chadwell House and Sleepers Farmhouse. The foundation of the church most likely extends back to the Saxon period, although the present church is of Norman and later date. The church overlooked the marshes to the south.	The site makes little contribution to the heritage importance of the asset but introduces a very minor change into the wider setting of the asset.	Negligible to Minor Adverse	See LVIA Fig. 3.6 (ES Chapter 6), taken from viewpoint 3, and Photomontage Fig.21a and 21b	Minor Adverse (not significant)	Less than substantial harm
Chadwell House	Grade II listed building	Medium	18th century red and black brick house with red plain tile gambrel roof, parapetted at verges. Two storeys. Original end chimney stacks. Three window range, C19 double hung vertical sliding sashes, with decorated stucco reveals and arches with keystones. Modern windows on south front.	The house is located at a busy junction in Chadwell St Mary and its principal elevation faces west and is situated immediately south of the Grade I listed Church. Its immediate setting comprises its relationship with the church and Sleepers Farmhouse. There may be glimpsed views of the proposed development from the upper storey windows.	The site makes no contribution to the heritage importance of the asset but may be seen in views from the house, and therefore introduces a very minor change into the wider setting of the asset.	Negligible	See LVIA Fig. 3.6 (ES Chapter 6), taken from viewpoint 3, and Photomontage Fig.21a and 21b	Negligible (not significant)	Less than substantial harm
Sleepers Farmhouse	Grade II listed building	Medium	15th century timber framed house and plastered, with thatched roof. Two storeys with single storey extension to north, also thatched. Gabled wing at south end jettied on curved brackets. 1:2:1 window range, modern casements with glazing bars. Modern doors. C17 chimney stack. Jettied originally at south end on rear. Internally extensive C17 alterations are apparent, but much original frame remains	The house is located at a busy junction in Chadwell St Mary and its principal elevation faces east towards the Grade I listed Church. Its immediate setting comprises its relationship with the church and Chadwell House. There may be glimpsed views of the proposed development from the upper storey windows.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the former farmhouse but does not make a significant contribution to its setting or importance.	Negligible	See LVIA Fig. 3.6 (ES Chapter 6), taken from viewpoint 3, and Photomontage Fig.21a and 21b	Negligible (not significant)	Less than substantial harm







STEP 1: Assets affected	Designation	Importance	Description (key attributes of the asset) <i>What matters and why...</i>	Setting of the asset <i>What is the setting?</i>	Step 2: Contribution of setting to importance	Step 3: Impact of proposal <i>Magnitude of impact in EIA terms</i>	Visual representation <i>Cross reference to LVIA figures</i>	Stage 3: Significance of Effect <i>in EIA terms</i>	NPPF Assessment <i>in NPPF terms</i>
Polwicks	Grade II listed building	Medium	Located at Low Street, in Part Two of the West Tilbury Conservation Area. C17 or earlier house, timber framed and clad with yellow stock brick. Red plain tiled hipped roof in 2 parallel ranges. Two storeys. Three window range double hung vertical sliding sashes. Central door with hood on brackets. Stock brick chimney stacks. Parapet wall.	The house is bisected from the site by the railway line. Setting is the slightly lower lying land compared to the higher ground to the west on which the Church of St James, West Tilbury Hall and associated earthworks are located. The asset derives its legibility and importance from its association with Walnut Cottage and as an outlying settlement to West Tilbury. The asset has an immediate, intimate context and is obscured from Zone A by intervening mature vegetation.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the former farmhouse but does not make a significant contribution to its setting or importance.	Minor Adverse	See LVIA Fig. 3.11 (ES Chapter 6), taken from viewpoint 8, and Photomontage Fig.24a and 24b (although these are taken from the south side of the railway)	Minor Adverse (not significant)	Less than substantial harm
Walnut Cottage	Grade II listed building	Medium	Located at Low Street, in Part Two of the West Tilbury Conservation Area. C15 house, timber framed and plastered with red plain tile roofs. Two storeys with gabled and jettied crosswing at north end. Three:one window range, casements. Black weatherboarded plinth. C16 and C19 red brick chimney stacks. Internally most of the original frame remains with jowled storey posts cambered tie beams and crown post roofs.	The house is bisected from the site by the railway line. Setting is the slightly lower lying land compared to the higher ground to the west on which the Church of St James, West Tilbury Hall and associated earthworks are located. The asset derives its legibility and importance from its association with Polwicks and as an outlying settlement to West Tilbury. The asset has an immediate, intimate context and is obscured from Zone A by intervening mature vegetation.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the former farmhouse but does not make a significant contribution to its setting or importance.	Minor Adverse	See LVIA Fig. 3.11 (ES Chapter 6), taken from viewpoint 8, and Photomontage Fig.24a and 24b (although these are taken from the south side of the railway)	Minor Adverse (not significant)	Less than substantial harm
Buckland	Grade II listed building	Medium	Early C19 house in grey gault brick with grey slate roof. Two storeys. Parapetted front. Three window range, double hung vertical sliding sashes with glazing bars. Stucco band. Principal elevation faces	The principal elevation of the house is to the east-northeast and its setting comprises its immediate, intimate surrounds and garden plot	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the house but does not make a significant contribution to its setting or importance.	Minor Adverse	See LVIA Fig. 3.13 (ES Chapter 6), taken from viewpoint 10	Minor Adverse (not significant)	Less than substantial harm
Worlds End Inn	Grade II listed building	Medium	Late C17 or early C18 house, altered in C19. Timber framed and weatherboarded, with grey slate roof. Two storeys. Three window range double hung vertical sliding sashes with glazing bars. Extensions on north side, and late C19 lean-to on south front.	Tilbury Fort lies immediately to the east of Worlds End, beyond which the Tilbury2 development creates an industrial skyline. There may be glimpsed views of the stacks within Zone A of the Proposed Development which lies within the wider setting of Worlds End but does not make a meaningful contribution to the legibility of the asset or its significance.	The setting of the asset has been compromised by extensive industrial development in its immediate surrounds, and the proposed development will be barely visible within the already industrialised skyline. As such, the main built area of the proposed development does not make a significant contribution to setting of the asset or its importance.	Negligible	See LVIA Fig. 3.15 (ES Chapter 6), taken from viewpoint 13	Negligible (not significant)	Less than substantial harm

STEP 1: Assets affected	Designation	Importance	Description (key attributes of the asset) <i>What matters and why...</i>	Setting of the asset <i>What is the setting?</i>	Step 2: Contribution of setting to importance	Step 3: Impact of proposal <i>Magnitude of impact in EIA terms</i>	Visual representation <i>Cross reference to LVIA figures</i>	Stage 3: Significance of Effect <i>in EIA terms</i>	NPPF Assessment <i>in NPPF terms</i>
West Tilbury Conservation Area - Parts 1 and 2	Conservation Area	Medium to High	West Tilbury continues to be a rural settlement within a historic rural agricultural setting on an escarpment. There are wide views to and from the former marshes to the south and west and from the north and east across the agricultural land. In Part 1, the church tower and trees around the churchyard are an important silhouette and landmark from all directions. Part 2 of the West Tilbury Conservation Area comprises the outlying hamlet at Low Street, located c.330m east-southeast and downslope of Part 1 which is located on the higher ground further to the west along Church Street.	Historic rural agricultural. The setting of the conservation area comprises the surrounding fields and landscape vista, particularly to the marshes to the south. The wider landscape has been industrialised for the past century. It is also bisected from the marshland to the south by the railway line. In the direction of the application site, the landscape has been dominated by Tilbury Power Station (now demolished) and associated infrastructure since the inter war period, and its setting has also been compromised by mineral extraction works	Despite the industrialisation of the area, the marshes and reclaimed landscape is an important part of the setting and historic context of the Conservation Area, particularly in views from the shoreline/saltmarsh to the Conservation Area on the higher ground. Historic connections/routeways linked the settlement on the higher ground to the estuary, including the creeks, drains and jetty, and the common land was part of the historic manor of West Tilbury.	Minor Adverse	n/a	Moderate Adverse (significant in EIA terms)	Less than substantial harm
East Tilbury Conservation Area	Conservation Area	Medium	The conservation area comprises the former factory complex of the British Bata Shoe Company and a large housing development of some 352 houses in a 'garden village' setting. This planned settlement was designed by architects of international importance from Zlin, Moravia (now the Czech Republic).	The setting of the whole Conservation Area is enhanced by the central area of open spaces and the original 'garden village' layout can still be appreciated. The estate still has the very spacious feel of the original design, so evident in plan form.	The main built area of the Thurrock Flexible Generation Plant forms part of the wider setting of the Bata village but does not make a significant contribution to its setting or importance.	Minor Adverse	n/a	Minor Adverse (not significant)	Less than substantial harm

Project Ref: C:\Users\nikki.coak\OneDrive - RPS Group PLC\Desktop\HER - Thurrock Flexible Energy ES\GIS\MXD\Figure 2 Viewpoints.mxd



Legend

-  Site Boundary
-  Conservation Areas
-  Grade I Listed Building
-  Grade II* Listed Building
-  Grade II Listed Building
-  Scheduled Monuments

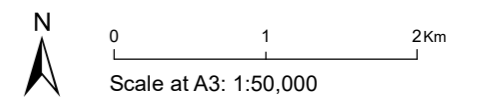
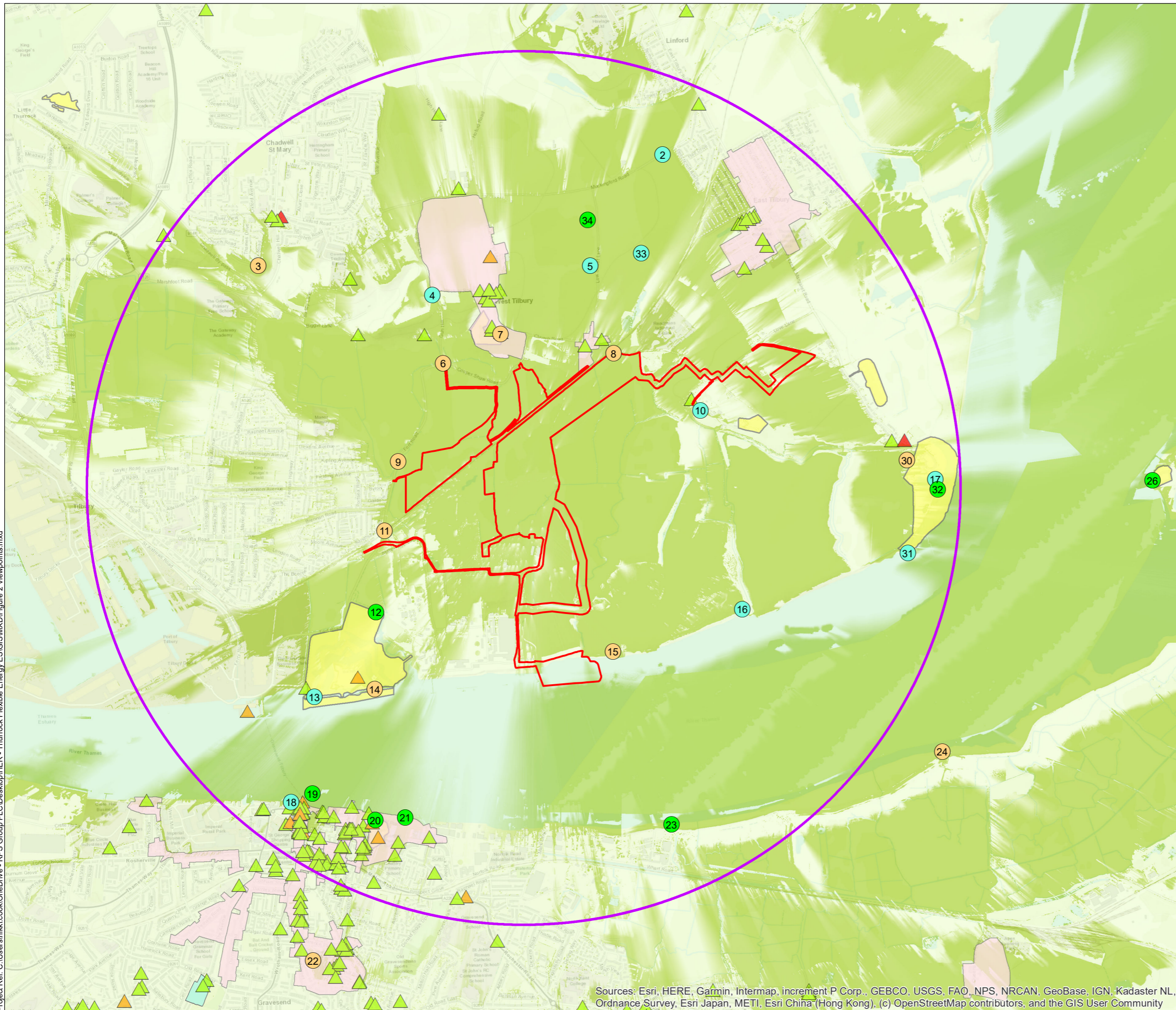


Figure 1
ZTV and heritage designations

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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Legend

- Site Boundary
- Conservation Areas
- ▲ Grade I Listed Building
- ▲ Grade II* Listed Building
- ▲ Grade II Listed Building
- Scheduled Monuments
- Photomontage and wire line viewpoint
- Viewpoint Representative
- Wire Line Viewpoint
- 3km buffer

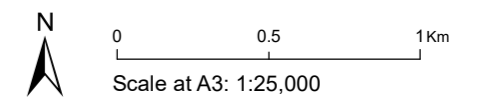


Figure 2

Viewpoint locations

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



Ref: 10872-0268-01



Date of Photo: 01/10/2020
 Lens Type: 50mm

Distance to site: 1.6 km
 OS reference: 565028, 175273

Direction to site: northeast
 Viewpoint height: 7.8 m AOD

Horizontal field of view: Approx. 75°
 Viewing distance: 300mm @ A3

Stacks in groups of 4

Tilbury Fort: Viewpoint 1
 Figure: 10872-HER-01a



Proposed illustrative view

Ref: 10872-0268-01



Date of Photo: 01/10/2020
Lens Type: 50mm

Distance to site: 1.6 km
OS reference: 565028, 175273

Direction to site: northeast
Viewpoint height: 7.8 m AOD

Horizontal field of view: 39.6°
To be viewed at comfortable arms length

Stacks in groups of 4

Tilbury Fort: Viewpoint 1
Figure: 10872-HER-01b



Existing view



Proposed illustrative view

Ref: 10872-0268-01



Date of Photo: 01/10/2020
 Lens Type: 50mm

Distance to site: 1.4 km
 OS reference: 565187, 175451

Direction to site: northeast
 Viewpoint height: 9.0 m AOD

Horizontal field of view: Approx. 75°
 Viewing distance: 300mm @ A3

Stacks in groups of 4

Tilbury Fort: Viewpoint 2
 Figure: 10872-HER-02a



Proposed illustrative view

Ref: 10872-0268-01



Date of Photo: 01/10/2020
Lens Type: 50mm

Distance to site: 1.4 km
OS reference: 565187, 175451

Direction to site: northeast
Viewpoint height: 9.0 m AOD

Horizontal field of view: 39.6°
To be viewed at comfortable arms length

Stacks in groups of 4

Tilbury Fort: Viewpoint 2
Figure: 10872-HER-02b



Existing view



Proposed illustrative view

Ref: 10872-0268-01



Date of Photo: 01/10/2020
Lens Type: 50mm

Distance to site: 1.5 km
OS reference: 564993,175430

Direction to site: northeast
Viewpoint height: 9.0 m AOD

Horizontal field of view: Approx. 75°
Viewing distance: 300mm @ A3

Stacks in groups of 4

Tilbury Fort: Viewpoint 3
Figure: 10872-HER-03a



Proposed illustrative view

Ref: 10872-0268-01



Date of Photo: 01/10/2020
Lens Type: 50mm

Distance to site: 1.5 km
OS reference: 564993,175430

Direction to site: northeast
Viewpoint height: 9.0 m AOD

Horizontal field of view: 39.6°
To be viewed at comfortable arms length

Stacks in groups of 4

Tilbury Fort: Viewpoint 3
Figure: 10872-HER-03b

