

Stonestreet Green Solar
Environmental Statement
Volume 4: Appendices
Chapter 16: Other Topics
Appendix 16.3: Mineral Safeguarding Assessment

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APFP Regulation 5(2)(a)

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Contents

1. INTRODUCTION	4
2. PLANNING POLICY	7
3. THE MINERAL RESOURCE	12
4. PLANNING POLICY ASSESSMENT	17
5. CONCLUSION	25

Annexes

Annex A	Kent Minerals and Waste Local Plan, Ashford Borough Council Mineral Safeguarding Map.
Annex B	Drawings
	ICP/SS/001 – Site Plan
	ICP/SS/002 – Mineral Safeguarding Plan
	ICP/SS/003 – Existing Mineral Extraction Constraints Plan

1. Introduction

Introduction

- 1.1 This Mineral Safeguarding Assessment ('MSA') has been prepared on behalf of EPL 001 Limited ('the Applicant') to consider the relevant mineral safeguarding consideration that may be relevant in relation to the Development Consent Order (DCO) application for Stonestreet Green Solar ('the Project').
- 1.2 This MSA is **Appendix 16.3 to ES Volume 2, Chapter 16: Other Topics (Doc Ref. 5.2)**.

The Project

- 1.3 The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.
- 1.4 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.
- 1.5 The location of the Project is shown on **ES Volume 3, Figure 1.1: Site Location Plan (Doc Ref. 5.3)**. The Project will be located within the Order limits (the land shown on the **Works Plans (Doc Ref. 2.3)** within which the Project can be carried out). The Order limits plan is provided as **ES Volume 3, Figure 1.2: Order Limits (Doc Ref. 5.3)**. Land within the Order limits is known as the 'Site'.

Site Description

- 1.6 The Site is located approximately 6.5km to the south east of Ashford Town Centre and approximately 13.7km to the west of Folkestone Town Centre, in the county of Kent. The Site is situated on land located to the north and west of the village of Aldington, centred at Ordnance Survey ('OS') National Grid Reference ('NGR') TR 05898 37766.
- 1.7 The Site is within the administrative boundaries of Ashford Borough Council ('ABC') and Kent County Council ('KCC').

- 1.8 The Project will be determined pursuant to section 104 of the Planning Act (PA) 2008. On the 17 January 2024, the Overarching National Policy Statement for Energy (NPS EN-1), the NPS for Renewable Energy Infrastructure (NPS EN-3) and the NPS for Electricity Networks Infrastructure (NPS EN-5); came into force. These are the relevant National Policy Statements that have effect for the DCO application for the Project.
- 1.9 While the primary basis for making decisions on applications for development consent is the relevant NPSs, other matters which the SoS may consider to be important and relevant in decision making may include the development plan policies of the 'Host' local authorities.
- 1.10 This MSA has therefore been prepared having regard to NPS EN-1, NPS EN-3, NPS EN-5 and important and relevant considerations such as the 2020 Kent Minerals and Waste Local Plan ('KMWLP').
- 1.11 The assessment has been prepared following a review of the available information from the British Geological Survey ('BGS'), KCC and Historic England. In addition, feedback has been gained from minerals operators supplying building stone as well as engagement with the Stone Federation Great Britain; the trade association for the natural stone industry.
- 1.12 The MSA has been prepared following regular engagement with KCC, the mineral planning authority. KCC requested that the potential impact on minerals associated with the Project should have regard to of the Policy DM7 of the KMWLP.
- 1.13 The locations of the safeguarded mineral deposits are shown on Drawing Ref. ICP/SS/002 (**Annex B**). The Site includes approximately 33ha of land safeguarded for potential Sub-Alluvial River Terrace deposits, and 26ha of Limestone from the Hythe Formation.

Structure of this Mineral Safeguarding Assessment

- 1.14 The rest of this assessment is structured in the following sections:
- Section 2 – Planning Policy
 - Section 3 – The Mineral Resource
 - Section 4 – Planning Policy Assessment

- Section 5 – Conclusion

IC Planning minerals experience

- 1.15 The Managing Director of IC Planning ('ICP') has prepared this report who has an extensive track record of working within the minerals, energy and waste sectors nationwide. He has appeared as an expert mineral planning witness at a number of high profile nationally significant extraction proposals supporting their development. He has also provided several mineral safeguarding specific Continuing Professional Development events for both the Royal Town Planning Institute and the Royal Institute of Chartered Surveyors .
- 1.16 Prior to working as a mineral planning consultant, members of the ICP team also worked for minerals developers identifying new sites for extraction and gaining consent for them through the planning process.
- 1.17 ICP currently represent a number of mineral operators nationwide including those who extract sand and gravel and limestone. Alongside this ICP are also the retained minerals planning adviser for Stone Federation Great Britain who are an industry body that represents the majority of dimension building stone operators within the country.
- 1.18 The ICP team have undertaken numerous mineral safeguarding assessments nationwide including several within Kent.

Consultation

- 1.19 KCC have provided comments on minerals in both their 2022 and 2023 consultation feedback, along with the ongoing engagement undertaken to agree the scope of this assessment. These are summarised below:

Comment raised by KCC	Response
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<p>The MSA correctly identified that the sub alluvial river terrace deposits are in demand, which is due to the permitted land banks falling below the required levels.</p>	<p>Agree with that position and this report acknowledges throughout that there is a need for the sub alluvial deposits beneath the Site.</p>
<p>The Hythe Formation Ragstone is used for both building stone and as an aggregate.</p>	<p>The MSA was updated in Section 3 to reflect that position.</p>
<p>The current data in the Local Aggregates Assessment is demonstrating the landbank over the anticipated extended Kent Minerals and Waste Local Plan period to 2038 requires further reserves of the Hythe Formation, or another hard rock geology.</p>	<p>The MSA was updated in Section 3 to reflect that position.</p>
<p>Further details should be provided in relation to an assessment of the scheme against Policy DM9: Prior Extraction of Minerals in Advance of Surface Development.</p>	<p>Section 4 of the MSA has been updated to include that Policy assessment.</p>

- 1.20 Following receipt of the comments from KCC, a meeting was held with KCC on 4 April 2023, in which the comments were discussed and a response to each was agreed, and are set out within the sections of the report noted in the table above.
- 1.21 As part of that discussion, the KCC officer provided further details to supplement the comments made in their formal response. This included providing an up to date position on supply of aggregate mineral within the County following the production of the updated Local Aggregates Assessment in Late 2022 after the previous MSA was issued.
- 1.22 As part of that discussion the distances described in paragraph 4.17 were discussed and broadly agreed. The justification for using these distances is already included in the MSA and as such these points remain the same.

2. Planning Policy

- 2.1 The Project will be determined pursuant to section 104 of the PA 2008. On the 17 January 2024, NPS EN-1, NPS EN-3 and NPS EN-5 came into force. These NPSs are the relevant National Policy Statements that have effect for the DCO application for the Project.
- 2.2 Paragraph 5.11.19 of NPS EN-1 states that “*Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place*”.
- 2.3 While the primary basis for making decisions on applications for development consent is the relevant NPSs, other matters which the SoS may consider to be important and relevant in decision making may include the development plan policies of the “Host” local authorities.
- 2.4 The relevant mineral safeguarding policies are contained within the KMWLP. KCC have also produced a separate Minerals Safeguarding Supplementary Planning Document (‘SPD’) which was adopted in April 2017.
- 2.5 This assessment is consistent with the requirements of this policy.
- 2.6 The following sections of this assessment will demonstrate that recovering the mineral resources found on the Site will be highly impractical as result of several existing constraints, including the proximity of residential premises, water bodies and other pieces of infrastructure such as roads, rail lines and public rights of way.
- 2.7 As a result, these restrictions will render any potential mineral extraction fundamentally impractical and economically unviable irrespective of whether the Project is constructed.
- 2.8 With the exception of elements of Work No. 4 that are within the Sellindge Substation, any repairs, upgrades or replacements of/to the existing bridge / drain crossings and highway improvements, the Project is of a temporary nature that will be removed during the decommissioning stage and the land returned to a condition that will not constrain future mineral extraction. The minor permanent works noted above will not result in any new areas of mineral sterilisation.

Kent Minerals and Waste Local Plan – Adopted September 2020

- 2.9 The KMWLP provides information regarding the geology and mineral resources within Kent. The plan sets out planning policies to guide and determine mineral planning applications.
- 2.10 The latest version of the KMWLP was adopted in September 2020 following an Early Partial Review (EPR) into the previously adopted 2016 KMWLP. The approach to mineral safeguarding outlined within the KMWLP remains largely unchanged as a result of the EPR.
- 2.11 In relation to mineral safeguarding, Policy DM7¹ sets out the circumstances when non-minerals development may be acceptable at a location within a Minerals Safeguarding Area. This policy recognises that the aim of safeguarding is to avoid unnecessary sterilisation of resources and encourage prior extraction of the mineral where practicable and viable before non-mineral development occurs.
- 2.12 Policy DM7 states that where a non-mineral development affects a mineral safeguarding allocation the planning application should be accompanied by a “Minerals assessment”. Policy DM7 states the following:

“Policy DM 7

Safeguarding Mineral Resources

Planning permission will only be granted for non-mineral development that is incompatible with minerals safeguarding, where it is demonstrated that either:

- 1. the mineral is not of economic value or does not exist; or*
- 2. that extraction of the mineral would not be viable or practicable; or*
- 3. the mineral can be extracted satisfactorily, having regard to Policy DM9, prior to the non-minerals development taking place without adversely affecting the viability or deliverability of the non-minerals development; or*
- 4. the incompatible development is of a temporary nature that can be completed, and the site returned to a condition that does not prevent mineral extraction within the timescale that the mineral is likely to be needed; or*
- 5. material considerations indicate that the need for the development overrides the presumption for mineral safeguarding such that sterilisation of the mineral can be permitted following the exploration of opportunities for prior extraction; or*

¹ Page 117 of the KMWLP
Application Document Ref: 5.4
Planning Inspectorate Scheme Ref: EN010135

6. it constitutes development that is exempt from mineral safeguarding policy, namely householder applications, infill development of a minor nature in existing built up areas, advertisement applications, reserved matters applications, minor extensions and changes of use of buildings, minor works, non-material amendments to current planning permissions; or

7. it constitutes development on a site allocated in the adopted development plan where consideration of the above factors (1-6) concluded that mineral resources will not be needlessly sterilised.

Further guidance on the application of this policy will be included in a Supplementary Planning Document.”

2.13 The criteria outlined above have been used to guide the assessment provided in Section 4 of this report.

2.14 Policy DM9: Prior Extraction of Minerals in Advance of Surface Development is also a relevant consideration. The supporting text of DM9² within the KMWLP states that when development is proposed within a mineral safeguarding area applicants will be encouraged to assess the potential of extracting the mineral prior to the main development commencing. Policy DM9 is drafted as follows:

“Planning permission for, or incorporating, mineral extraction in advance of development will be granted where the resources would otherwise be permanently sterilised provided that:

- 1. The mineral extraction operations are only for a temporary period; and*
- 2. The proposal will not cause unacceptable adverse impacts to the environment or communities*

Where planning permission is granted for the prior extraction of minerals, conditions will be imposed to ensure that the site can be adequately restored to a satisfactory after - use should the main development be delayed or not implemented”.

2.15 The Project has been assessed against Policy DM9 and it is considered that prior extraction of minerals would not be appropriate as it would delay an urgently required project and would lead to unacceptable adverse impacts to the environment. This is discussed in further detail in Section 4 of this report.

² Page 107 of the KMWLP
Application Document Ref: 5.4
Planning Inspectorate Scheme Ref: EN010135

**Kent Minerals and Waste Local Plan – Safeguarding Supplementary Planning Document
Adopted March 2021**

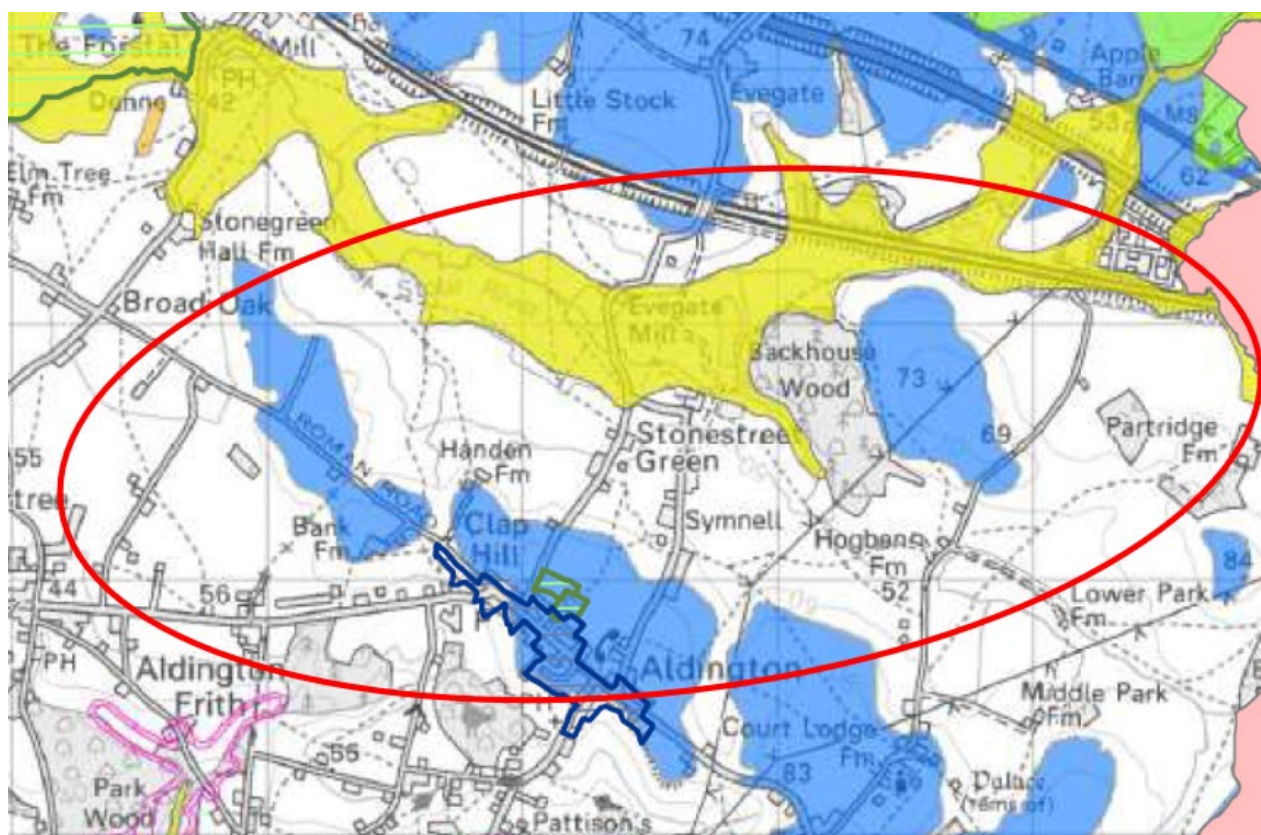
2.16 Further clarifications regarding how a minerals assessment required under Policy DM7³ of the KMWLP should be undertaken are listed within the KWMLP Safeguarding SPD. The following Sections 3 and 4 of this assessment provide further information regarding the factors discussed in Chapter 5 of the SPD in particular.

³ Page 3 of the Safeguarding SPD
Application Document Ref: 5.4
Planning Inspectorate Scheme Ref: EN010135

3. The Mineral Resource

3.1 The adopted KMWLP is accompanied by a series of Mineral Safeguarding maps for all of the Local Planning Authorities in Kent. The safeguarding maps identify the anticipated extent of superficial and bedrock mineral resource within each district based upon the available BGS data for that area. A copy of the mineral safeguarding map for ABC is attached to this report in Annex A.

Figure 3.1 - Ashford Borough Mineral Safeguarding Map Extract



3.2 The safeguarding map in **Annex A** shows that there are two separate mineral safeguarding areas that fall within the Site boundary for the Project. An extract from the Ashford Borough Minerals safeguarding map is shown above in **Figure 3.1** (broad location of the Site circled in red). Drawing No. ICP/SS/001 in **Annex B** shows a more detailed plan showing the extent of the Site.

3.3 The yellow area represents Sub-Alluvial River Terrace Deposits which can broadly be defined as containing sand and gravel. The blue area represents Limestone from the Hythe Formation, which is also known as “Kentish Ragstone” which is used primarily as a building stone. Both of these resources are discussed in more detail below.

- 3.4 The green area, that is not affected by the proposals, represents land that is underlain by sandstone from the Sandgate Formation. The pink hatch area represents land that is underlain by limestone from the Pauldina Limestone, Weald Clay Formation. The coral area is land that falls within the neighbouring district of Shepway. The horizontal green hatch represents areas that are allocated for development by ABC.
- 3.5 The full extent of the above-mentioned safeguarding areas has been overlaid with the Project's boundary and is shown on Drawing ICP/SS/002 (**Annex B**) which is appended to this report.
- 3.6 The authors of this report are not aware of any formal expressions of interest by any minerals operators in extracting either of the resources indicated as being present on-Site.

Sand and Gravel - Sub-Alluvial River Terrace Deposits

- 3.7 These are sands and gravels that have been deposited over 10,000 years ago by river action, as opposed to glaciation. Being deposited in this way means that these resources are generally free of clays and silts and are consistent in their sizing compared to sand and gravel deposits that have been formed as a result of retreating glaciers at the end of the last ice age.
- 3.8 The sand and gravel deposits contain an element of sharp sand which is important in concrete manufacturing. It is recognised in the SPD⁴ and the mineral extraction industry that opportunities for land won sand and gravel of this nature are becoming exhausted.
- 3.9 The Mineral Planning team at KCC actively monitor the supply of sand and gravel and other minerals through both the Local Aggregate Assessment ('LAA') and through the production of Annual Minerals and Waste Monitoring Reports ('AMWMR').
- 3.10 The most recent LAA was published in December 2023 which assessed the supply of permitted sand and gravel reserves against the recent sales of those minerals to calculate the number of years supply that was permitted.

⁴ Page 58 of the SPD
Application Document Ref: 5.4
Planning Inspectorate Scheme Ref: EN010135

3.11 The National Planning Policy Framework ('NPPF') (December 2023) states⁵ that Mineral Planning Authorities should maintain landbanks of at least 7 years for sand and gravel. The LAA estimated in December 2023 that based on the last 10-years sales average, Kent had a landbank of 12.67 years of sharp sands and gravel⁶. This position conforms with NPPF requirement; however, it is acknowledged that this is set in the context of a general declining trend of sand and gravel supply within Kent.

3.12 The above position is confirmed in the KCC AMWMR which was produced in December 2023, which summarised the position for sharp sand and gravel as being:

- Annual production rate of 0.176 million tonnes per annum which continues to have the effect of maintain the landbank in the region of 12+ years;
- The 10-year average was also down to 0.176million tonnes per annum ('mtpa'); and
- The permitted reserves were also down to 2.23mt.

3.13 The AMWR summarises the position as the following⁷:

“Landwon reserves continue to be depleted and are not being replenished. The data gives the impression that the NPPF landbank requirements and supply are being met, however this is as a result of sales decreasing and depleting reserves. Importation is steady, supplanting the landwon element of sand and gravel supply overall.”

3.14 In relation to the sub alluvial river terrace deposits indicated as being in the northern part of the Site, it is clear there is demand and need for this mineral. It is the MPA's position that whilst the requisite NPPF level of landbank supply is being met, it is anticipated that this may not continue being the case for the duration of the Project.

Limestone – Hythe formation (Kentish Ragstone)

3.15 The ragstone occurs in a geological formation known as the Hythe Beds of the Lower Greensand, a layer of limestones that run broadly from Kent into Surrey. Within the Ashford Borough area, where the Project is located, the ragstone occurs in a belt trending in east-west orientation across the district.

⁵ Paragraph 219, f)

⁶ Paragraph 4.3 of the December 2023 LAA

⁷ Table 4 on page 30 of the AMWR

- 3.16 Ragstone has been historically extracted and used in the construction of houses and other public works in the surrounding area. Some of these buildings have included Sessions House KCC and HMP Maidstone and the Archbishop's Palace in Maidstone. The stone has also been used in infrastructure projects and other buildings outside of Kent, for example, the Tower of London.
- 3.17 Modern demand for this stone is diverse with its properties lending itself for use as an aggregate in ready mix concrete, road construction and other civil engineering applications. Larger blocks of the material have been used in the construction of sea barriers to protect against coastal erosion.
- 3.18 The ragstone is therefore treated as an aggregate (when crushed) in relation to its monitoring under the LAA but it can also be an important material used in the restoration of historic buildings. There are currently two active hard rock quarries producing crushed rock aggregate using the Kent ragstone.
- 3.19 The NPPF⁸ requires that at least a 10-year landbank supply of crushed hard rock is maintained. The 2023 LAA has been able to provide actual sales and reserves data for the county following a mineral operator waiving their right to maintain confidentiality. Previously hard rock sales and reserves data had been restricted on commercial grounds as there were only two sites. This fell below the minimum three required by agreement with the South East Aggregate Working Party that would allow the reporting of sales per year.
- 3.20 The sales data has been shared which shows a larger than anticipated 1.24 million tonnes being sold in 2022. The sales figures showed a reversion from a high in 2020 (1.5 million tonnes) to a more historical level of 800,000 tonnes per annum in recent years.
- 3.21 Coupled with the sharing of the actual sales figures, the remaining reserves at the existing Hermitage Quarry and Blaise Farm Quarry had been accurately surveyed resulting in an estimated 14.8 million tonnes being available for extraction.
- 3.22 This additional information resulted in the AMWMR⁹ confirming the following position in relation to the need for land won crushed aggregates:

⁸ Paragraph 219, f)

⁹ Page 8 of the 2023 AMWMR

Application Document Ref: 5.4

Planning Inspectorate Scheme Ref: EN010135

Closer examination of the recorded sales between 2017 and 2022 demonstrated a great than previously reported rate of extraction. The APR for crushed rock has therefore been revised to use the 6-year sales average of 1.24mtpa. This draw down rate will be insufficient over the anticipated Plan period to 2039. Either further allocations in the Mineral Sites Plan or greater importation will be required to maintain a steady and adequate supply of this aggregate type.

- 3.23 On that basis it is reasonable to conclude that over the longer term there may be a need for new limestone mineral resources similar to those found beneath the Project Site to be brought forward for extraction.

4. Planning Policy Assessment

4.1 Paragraph 5.11.19 of NPS EN-1 states that:

“Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place”.

4.2 .

4.3 Regard has been had to both Policy DM7 of the KMWLP and the Mineral Safeguarding SPD. The Project is considered to be consistent with those policies for the following reasons:

- The Project is temporary, with the exception of elements of Work No. 4 that are within the Sellindge Substation, any repairs, upgrades or replacements of/to the existing bridge / drain crossings, PRoW footbridges and highway improvements. A Requirement in the **Draft Development Consent Order (Doc Ref. 3.1)** provides that the decommissioning works must commence no later than the 40th anniversary of the first export date. The minor permanent works noted above will not result in any new areas of mineral sterilisation as they relate to works associated with existing constraints. Aside from these minor permanent works, the overwhelming majority of the proposed Project is of a temporary nature that can be completed and returned to a condition that does not prevent future mineral extraction and therefore complies with Policy DM7 criteria 4;
- Existing Site constraints have effectively already sterilised a significant portion of the minerals indicated as being present on-Site and as such Policy DM7 criteria 2 is relevant.

4.4 The approach that has been taken has also been discussed with the KCC who agree with this conclusion.

Temporary nature of the Project

4.5 The Project would be operational for no more than 40 years after the first export date. Criteria 4 of Policy DM7 states the following:

“The incompatible development is of a temporary nature that can be completed and the site returned to a condition that does not prevent mineral extraction within the time scale that the mineral is likely to be needed.”

- 4.6 Following cessation of energy generation at the Site from the Project, all physical infrastructure constructed as part of the Project (with the exception of elements of Work No. 4 that are within the Sellindge Substation, any repairs, upgrades or replacements of/to the existing bridge / drain crossings and highway improvements) will be removed and recycled or disposed of in accordance with good practice, market conditions and available technologies for recycling/reprocessing at that time. Further details on waste are provided within **Section 16.5 of ES Volume 2, Chapter 16: Other Topics (Doc Ref. 5.2)**.
- 4.7 The decommissioning of the Site is secured through a Requirement in the **Draft Development Consent Order (Doc Ref. 3.1)**, which will ensure that the land is restored to a state that would not preclude future extraction. This means that no substantial manmade structures will be left on Site that would need to be removed prior to any mineral extraction operation.

Supply of Minerals in the Region

- 4.8 Section 3 of this report provided an overview of the supply positions of the two minerals identified as being present on-Site. The sand and gravel found within the sub alluvial deposits is a resource that is in demand due to its importance in the concrete and wider construction markets. Currently, KCC have a greater than seven-year landbank of sand and gravel.
- 4.9 The sub alluvial river terrace deposits of sand and gravel is one of the few mineral resources to occur within every district within Kent. The mineral resource is therefore comparatively widespread, meaning that it is reasonable to conclude that alternative opportunities for the extraction of the mineral resource outside of the application boundary are likely to exist within Kent. It is set within this context that the temporary sterilisation of the indicated sand and gravel beneath the Site should be acceptable, particularly when weighed alongside these significant benefits associated with the production of renewable energy through a large-scale solar farm.
- 4.10 The potential delay to sand and gravel extraction until after the operational life of the Project should be considered alongside the significant existing constraints of the Site that would limit the potential mineral extraction.

- 4.11 There is a healthier supply of the limestone from the existing quarries that are operating within Kent. However as the latest LAA confirmed there is likely to be a need to increase the supply of crushed stone through new sites over the longer term in order to maintain the required landbank.
- 4.12 As is noted above in relation to the sand and gravel extraction, the potential recovery of limestone from within the Site would be subject to several existing environmental constraints which would likely render any potential extraction technically and environmentally unacceptable.

Existing constraints on mineral extraction

- 4.13 The following section of this report highlights features in and around the Site that would represent a significant constraint to any potential mineral extraction. It is important to review these existing constraints so that the level of temporary sterilisation which would be associated with the Project can be fully understood.
- 4.14 The two separate mineral resources highlighted as being within the Site boundary are broadly located within the northern and southern portions of the Project. Each part of the Site is subject to differing types of constraint. Similarly, the two different mineral resources can be extracted in different ways which in turn dictates the degree to which they are affected by the existing constraints.
- 4.15 For example, the sand and gravel extraction will largely involve a relatively modest set of excavation plant and machinery due to the resource by its nature being loose and relatively shallow within the ground. Conversely, the removal of limestone will involve the breaking up of the mineral on-Site, a process which can involve the use of explosive blasting and the physical crushing of stone down to a size which can be used as an aggregate.
- 4.16 Both forms of extraction will result in impacts upon amenity (e.g. dust, noise, vibration and visual impact), although it is reasonable to conclude that the extraction of the limestone would have the potential to create the greater environmental impact. As such, the degree to which the Site is already effectively sterilised by existing receptors needs to be considered when establishing the potential temporary mineral sterilisation which would occur as a result of the Project.
- 4.17 This section of the report is accompanied by Drawing ref: ICP/SS/003 (**Annex B**) that has broadly highlighted the extent to which the mineral resources found on-Site are already effectively sterilised.

The following details and associated standoff distances from any possible mineral extraction scheme have been used:

- Residential properties – 250m standoff in all direction;
- Woodlands – 15m standoff;
- Hedgerows – 10m standoff;
- East Stour River – 50m standoff;
- Roads – 20m standoff;
- Channel Tunnel Rail link / HS1 railway line and railway line operated by Network Rail as part of the Kent Route between Ashford and Westenhanger– 50m standoff; and
- Public rights of way – 10m standoff.

4.18 It is accepted that there are no statutory standoffs required for mineral developments. The above mentioned distances are based on experience of the author's involvement with multiple mineral extraction sites nationwide.

4.19 In relation to the 250m distance from residential properties, this distance has been used as within that range it is more likely that the effects of noise, air quality and vibration will need to be significantly controlled and mitigated to avoid having unacceptable impacts.

4.20 The logic of using the 250m standoff distance is consistent with the approach outlined within the Mineral Safeguarding SPD. The SPD uses the 250m distance as a buffer zone around safeguarded minerals sites and infrastructures. Any non-minerals development that is proposed within this 250m buffer zone needs to be assessed to ensure that it will not introduce a new receptor, or receptors, that could impinge upon the operation of that site.

4.21 The SPD advises that unacceptable levels of dust, noise, lighting and vibration could be experienced by receptors within that 250m distance. This is used to ensure that new non-mineral related development brought forward within the 250m buffer zone does not result in any additional mitigation being placed upon minerals operators as they would introduce new sensitive receptors. This approach is consistent with the “Agent of Change” principle which is outlined in the NPPF¹⁰.

4.22 It is accepted that residential receptors can be located within 250 metres of an active minerals operation and equally that there can be receptors beyond 250m that do experience unacceptable

¹⁰ NPPF Paragraph 193
Application Document Ref: 5.4
Planning Inspectorate Scheme Ref: EN010135

amenity impacts. For the purposes of this mineral safeguarding assessment, the 250m distance provides a robust indication of an acceptable proximity to a residential receptor.

- 4.23 The standoff distances noted for the hedgerows and woodlands are based on general working practices and would vary based on each section of vegetation. For the purposes of this assessment, the distance indicated on the plan is from the tree or hedge row to any potential extraction. Ancillary mineral extraction features such as soil mounds, fencing and drainage channels would be accommodated within that distance.
- 4.24 The standoff from the East Stour River would be to ensure that any excavation does not have an impact upon the existing hydrological and hydrogeological regimes associated with the water course. The distance chosen provides a broad indication of the likely acceptable proximity of any mineral extraction. It is accepted that a closer or further distance of working could be allowed but this would be following detailed intrusive investigations into the surface water and groundwater drainage environment on-Site. In the absence of this information the 50m distance used is robust.
- 4.25 Given the nature of the Channel Tunnel rail link/ HS1 railway line and the railway line operated by Network Rail as part of the Kent Route between Ashford and Westenhanger, a significant degree of caution is applied to any form of development which would have the potential to affect the geotechnical stability of this piece of infrastructure. As was the case in relation to the East Stour River, this distance could be shortened or increased subject to further geotechnical assessment, on that basis the 50 metre distance used is fair.
- 4.26 The presence of the public highway can also constrain development. Excavation areas generally have to stand off from the public highway to ensure that the roads remain geotechnically stable and they do not present a risk to road users if a vehicle was to leave the carriage way. Typically, a 20m standoff from the public highway is observed.
- 4.27 Figure 4.1 below notes the presence of public rights of way across the Site. It is not uncommon for a public right of way to be diverted during the operational period of a mining site. Where the rights of way are diverted, they are often retained within the Site boundary, potentially further constraining the volume of mineral to be recovered. The Kent Definitive Rights of Way Map has been reviewed as part of the preparation of this section of the report.

4.28 Taking account of the above mentioned existing constraints, the extent to which each of the mineral resources could be recovered is discussed in more detail below.

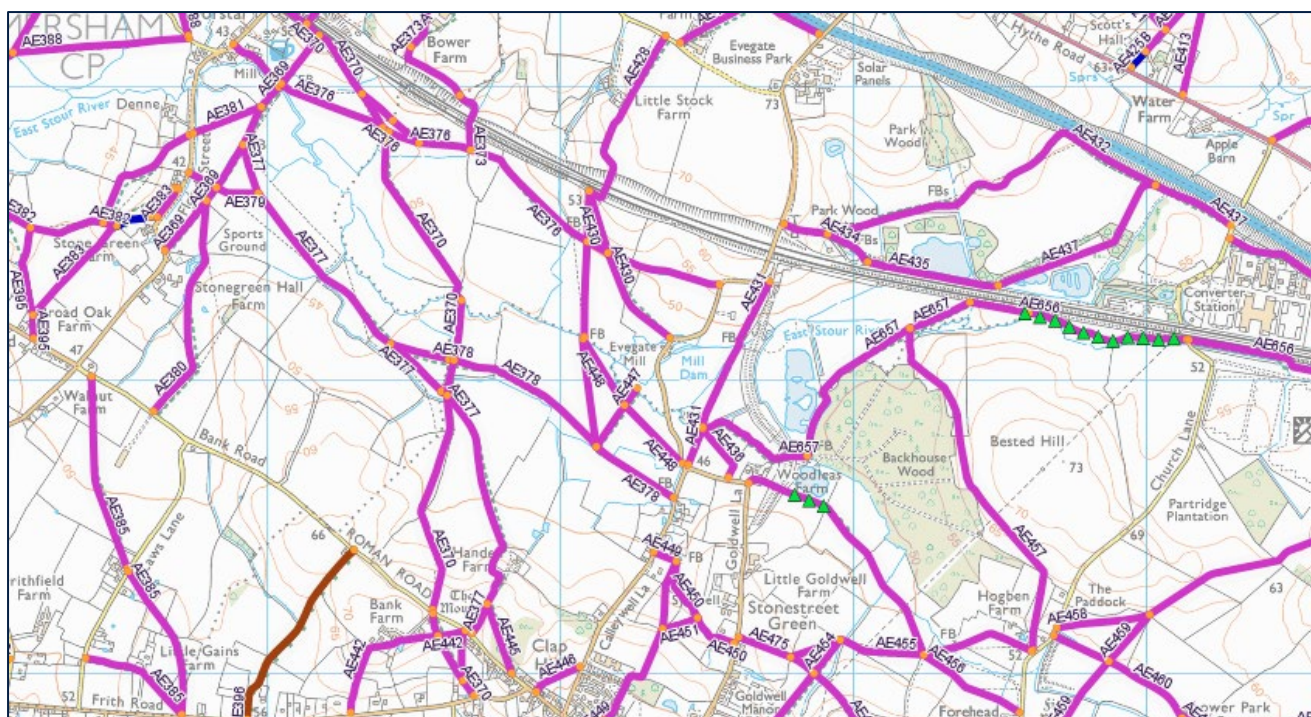
Sand and Gravel - Sub-Alluvial River Terrace Deposits

4.29 The sand and gravel deposits broadly lay beneath the northern portion of the Site, extending from the Channel Tunnel rail link in the east towards Flood Street in the west. The safeguarded mineral includes areas either side of the East Stour River, as well as land to the north and west of Backhouse Wood.

4.30 There are several residential buildings within this part of the Site including premises at Evegate Mill, Wood Leas Farm and the properties on the northern edge of Stonestreet Green. Calleywell Lane runs north to south through the safeguarded areas.

4.31 Multiple public rights of way affect this part of the Site, an extract taken from the KCC Definitive Rights of Way map¹¹ is included below.

Figure 4.1 - Extract from Kent Definitive Rights of Way map



¹¹ <https://webapps.kent.gov.uk/countrysideaccesscams/standardmap.aspx>
Application Document Ref: 5.4
Planning Inspectorate Scheme Ref: EN010135

- 4.32 The routes shown in Figure 4.1 have been included as existing constraints. However, it is accepted that these routes can be temporarily diverted unlike the other constraints listed. The purple routes are public footpaths, the dark brown are Byways Open to All Traffic (BOAT) and the green triangles highlight where vegetation clearance is required.
- 4.33 Generally, the sand and gravel resource found in the northern part of the Site is quite constrained by both the East Stour River and the HS1 / Network Rail railway line. This is clearly demonstrated on Drawing ICP/SS/003 (**Annex B**) which illustrates the degree of sterilisation which may already exist.
- 4.34 Both the rail lines and the river are highly sensitive to changes in the geotechnical and hydrogeological regimes they sit within and as such, any mineral extraction undertaken in this area would most likely need to observe significant buffer zones from each of these assets. Accounting for these standoffs within what will be a very constrained working area would likely render any potential mineral extraction in these areas technically challenging as well as potentially economically unviable.

Limestone – Hythe formation (Kentish Ragstone)

- 4.35 The limestone resource occurs within the southern portion of the Project, broadly following the route of Bank Road. There are a series of residential properties (Broadbanks, Bank Farm and Becketts Green) within this part of the Site which effectively already sterilises large parts of the existing mineral resource.
- 4.36 Given that the Project is for a temporary period, a further detailed assessment of the practicalities of extracting minerals the Site has not been undertaken. At this stage, only a high-level review of the existing constraints has been mapped, aspects such as suitable site road access, visual impact and the effect of any restoring the Site have not been considered.
- 4.37 It is considered that the Project complies with Policy DM7 of the KMWLP as it is a temporary development. Alongside this, the mineral resources indicated as being present beneath the Site are already significantly constrained to the point that their extraction would be unlikely to occur over the 40-year operational lifespan of the Project compared to other potentially less constrained sites elsewhere within Kent which may come forward over the lifespan of the Project.

Policy DM9

- 4.38 The first part of policy DM9 states that prior extraction of minerals should be considered where they would otherwise be permanently sterilised by proposed non mineral development. The Project will not result in the permanent sterilisation of the mineral reserves on-Site. On that basis alone an assessment against policy DM9 should not apply.
- 4.39 Minerals extraction on-Site would have the potential for a range of significant environmental impacts and would delay the delivery of a critical national project. Prior extraction is therefore not considered appropriate.

5. Conclusion

5.1 Paragraph 5.11.19 of NPS EN-1 states that:

“Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place”.

5.2 Regard has been had to both Policy DM7 of the KMWLP and the Mineral Safeguarding SPD. The Project is considered to be consistent with those policies for the following reasons:

- The Project is temporary, with the exception of elements of Work No. 4 that are within the Sellindge Substation, any repairs, upgrades or replacements of/to the existing bridge / drain crossings, PRoW footbridges and highway improvements. A Requirement in the **Draft Development Consent Order (Doc Ref. 3.1)** provides that the decommissioning works must commence no later than the 40th anniversary of the first export date. The minor permanent works noted above will not result in any new areas of mineral sterilisation as they relate to works associated with existing constraints. Aside from these minor permanent works, the overwhelming majority of the proposed Project is of a temporary nature that can be completed and returned to a condition that does not prevent future mineral extraction and therefore complies with Policy DM7 criteria 4; and
- Existing Site constraints have effectively already sterilised a significant portion of the minerals indicated as being present on-Site and as such Policy DM7 criteria 2 is relevant.

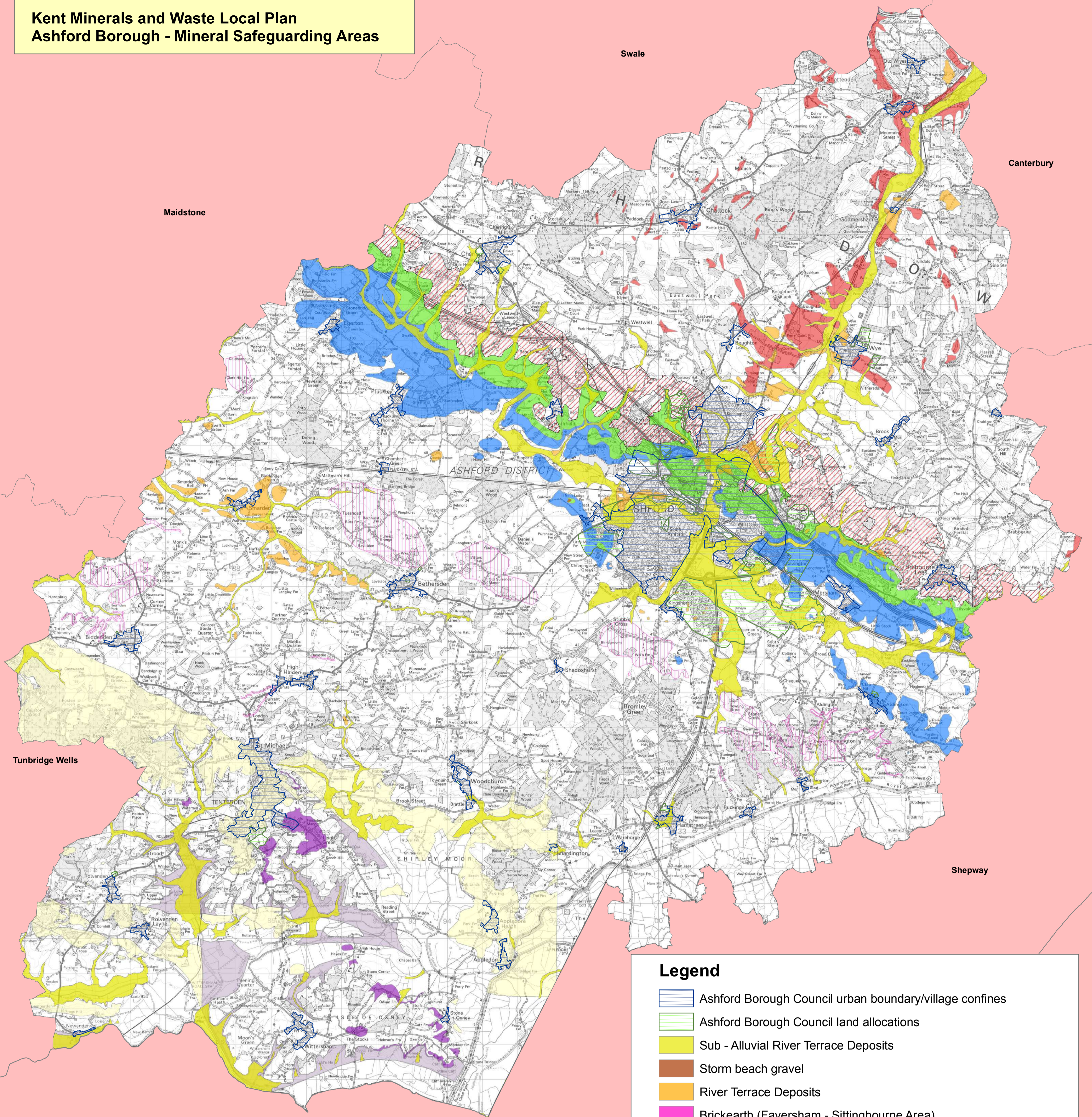
5.3 The approach that has been taken has also been discussed with KCC who agree with this conclusion.

5.4 Section 3 of this report provided an overview of the supply positions of the two minerals identified as being present on-Site. The sand and gravel found within the sub-alluvial deposits is a resource that is in demand due to its importance in the concrete and wider construction markets. Currently, KCC have a greater than seven-year landbank of sand and gravel.

5.5 The Project will deliver significant benefits through the generation of renewable energy. This benefit far outweighs any limited temporary impact the Project would have upon the safeguarded mineral resources.

5.6 In conclusion, the Project is consistent with paragraph 5.11.19 of NPS EN-1.

**Kent Minerals and Waste Local Plan
Ashford Borough - Mineral Safeguarding Areas**



Legend

-  Ashford Borough Council urban boundary/village confines
-  Ashford Borough Council land allocations
-  Sub - Alluvial River Terrace Deposits
-  Storm beach gravel
-  River Terrace Deposits
-  Brickearth (Faversham - Sittingbourne Area)
-  Brickearth (Other Areas) - Ashford, Canterbury, Dover, Shepway
-  Sandstone - Ardingly Sandstone
-  Sandstone - Ashdown Formation
-  Sandstone - Upper Tunbridge Wells Sand Formation
-  Sandstone - Wadhurst Clay Formation
-  Ironstone - Wadhurst Clay Formation
-  Limestone - Pauldina Limestone, Weald Clay Formation
-  Sandstone - Tunbridge Wells Sand Formation
-  Limestone - Calcareous Tufa
-  Sandstone - Sandgate Formation
-  Limestone Hythe Formation (Kentish Ragstone)
-  Sandstone - Cuckfield Stone Bed, Tunbridge Wells Sand Formation
-  Silica Sand/Construction Sand - Sandstone: Folkestone Formation

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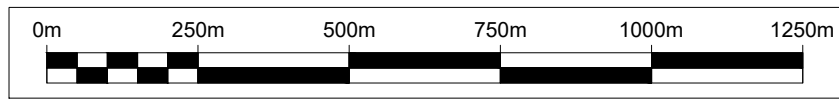
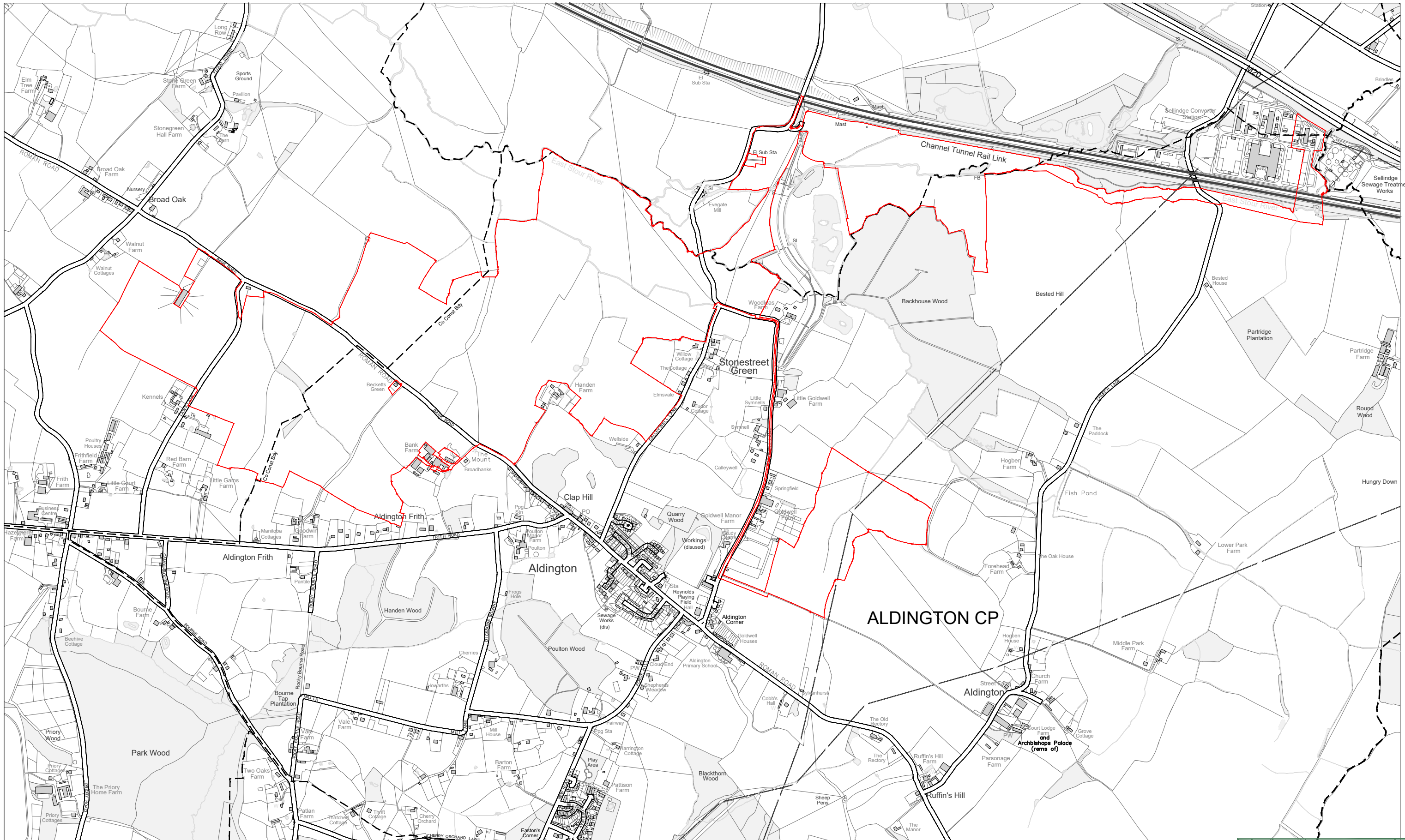
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English Channel

LEGEND

ORDER LIMITS



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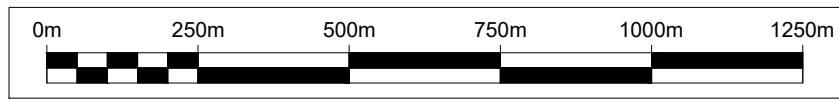
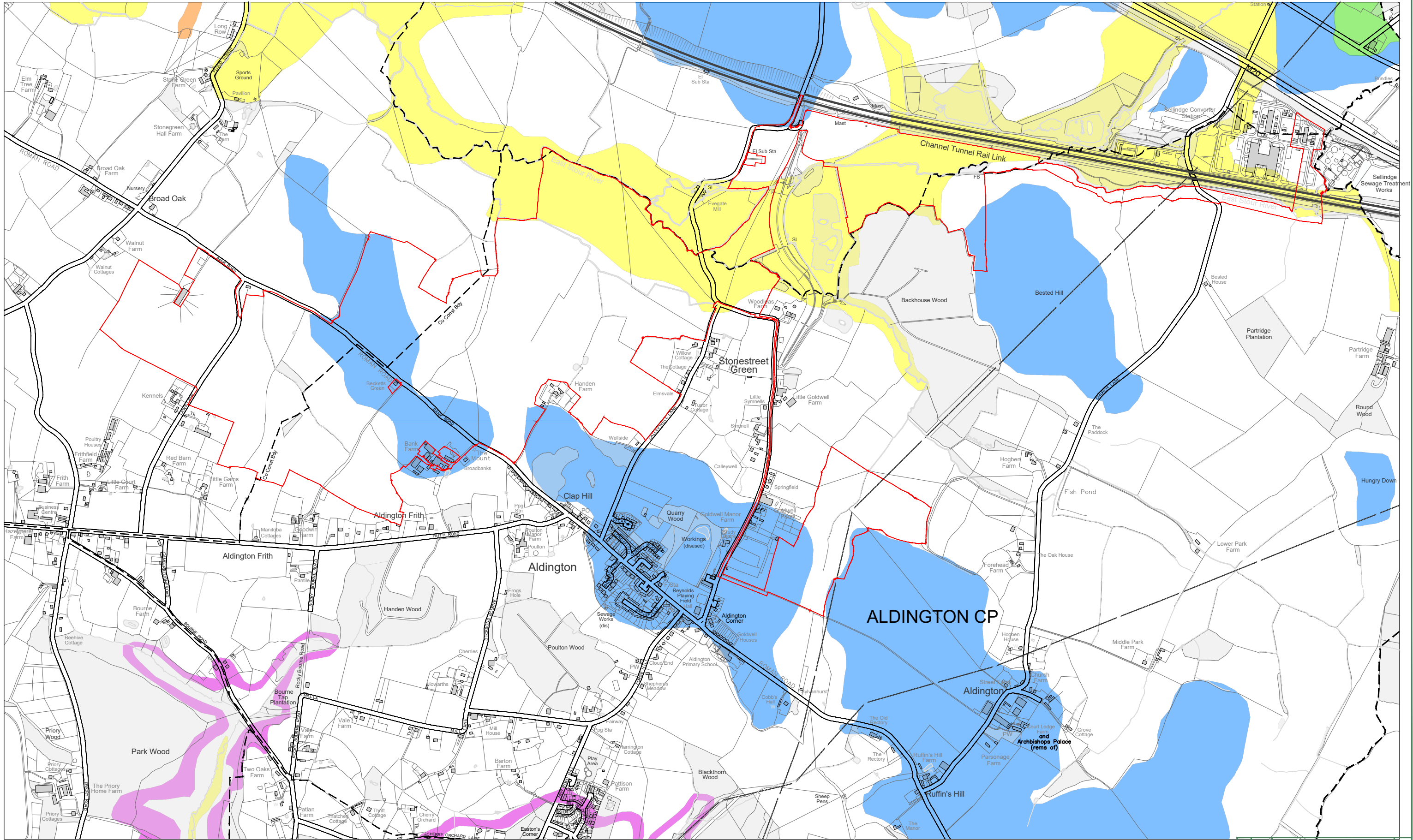


Project Title
STONESTREET GREEN SOLAR

Rev	Date	Details	Drawn	Checked	Approved	Chkd
	May 2024	Scale 1:12.5K @ A3	by GTB	by ST	by ST	
Drawing Status						FINAL
Drawing Number						ICP/SS/001
						Rev 01

LEGEND

- ORDER LIMITS
- RIVER TERRACE DEPOSITS
- LIMESTONE - PAULDINA LIMESTONE, WEALD CLAY FORMATION
- LIMESTONE HYTHE FORMATION (KENTISH RAGSTONE)
- SUB - ALLUVIAL RIVER TERRACE DEPOSITS
- SANDSTONE - SANDGATE FORMATION



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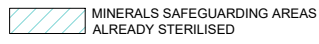
Project Title
STONESTREET GREEN SOLAR

Drawing Title
MINERAL SAFEGUARDING PLAN

Rev	Date	Details	Drawn	Checked	Approved
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Drawing Status			FINAL		
Drawing Number			ICP/SS/002		
					Rev 01

LEGEND

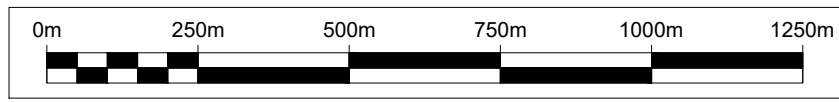
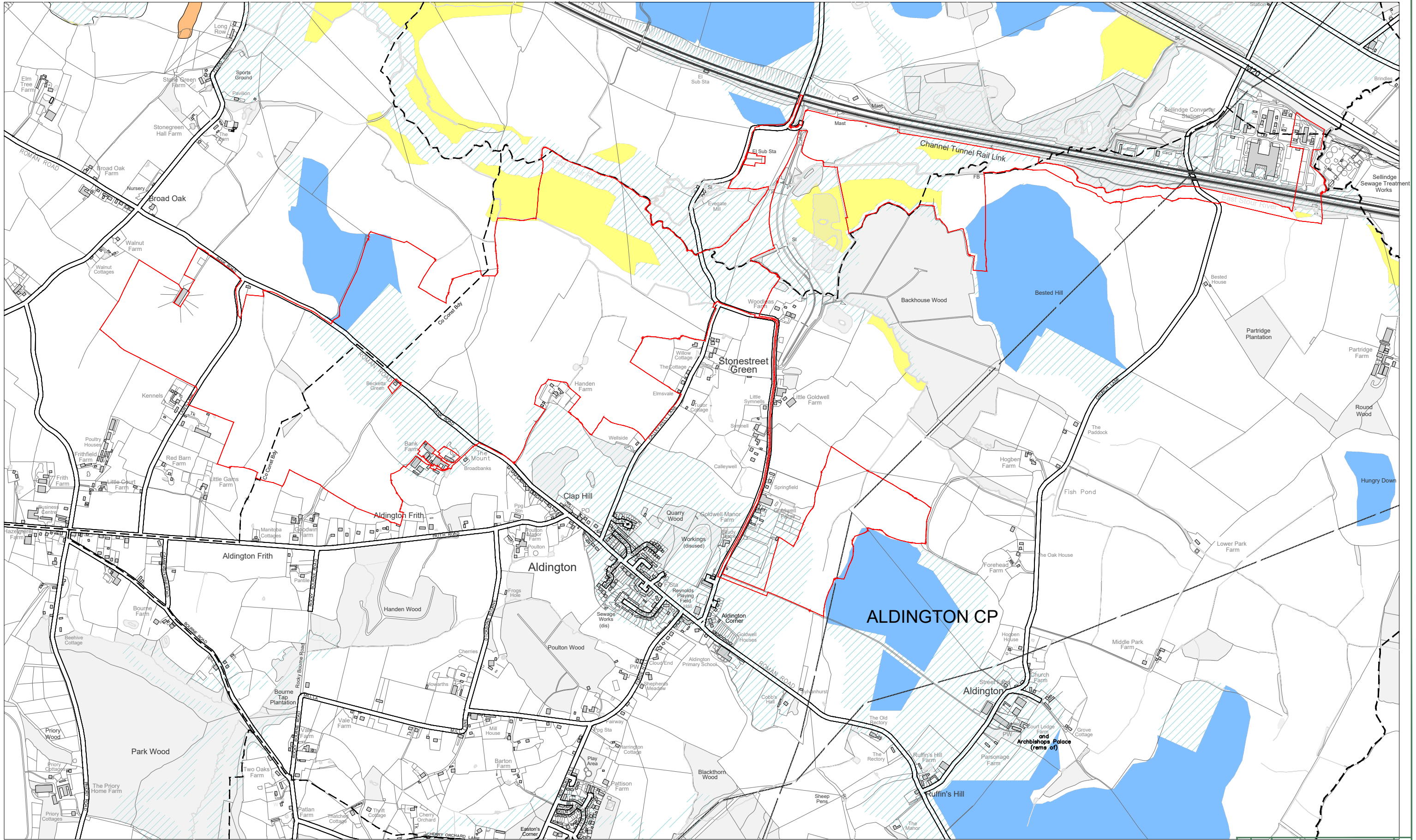
-  ORDER LIMITS
-  LIMESTONE HYTHE FORMATION (KENTISH RAGSTONE)
-  RIVER TERRACE DEPOSITS
-  SUB - ALLUVIAL RIVER TERRACE DEPOSITS

-  MINERALS SAFEGUARDING AREAS ALREADY STERILISED

NOTE

MINERALS SAFEGUARDING AREAS ALREADY STERILISED BY EXISTING LANDSCAPE FEATURES

- 250m from any residential property in all directions
- Any woodlands 15m and 10m from any hedgerows
- 20m from any roads
- 50m from the East Stour River.
- 50m from the rail line.
- 10m from any public rights of way



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Project Title
STONESTREET GREEN SOLAR

Drawing Title
EXISTING MINERAL EXTRACTION CONSTRAINTS PLAN

Rev	Date	Details	Drawn	Checked	Approved
	May 2024	1:12.5K @ A3	by GTB	by ST	by ST
Drawing Status FINAL					
Drawing Number ICP/SS/003					Rev 01