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Hertfordshire Minerals Local Plan Site Selection Report

Final Report (Updated)
Prepared by LUC and Cuesta Consulting Ltd
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Glossary of Abbreviations

Abbreviation	Definition
AONB	Area of Outstanding Natural Beauty
BGS	British Geological Survey
BMV	Best and Most Versatile
HCC	Hertfordshire County Council
HRA	Habitats Regulations Assessment
IMAU	Industrial Minerals Assessment Unit
LAA	Local Aggregates Assessment
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
MCA	Minerals Consultation Area
MWLP	Mineral and Waste Local Plan
MPA	Minerals Planning Authority
MSA	Minerals Safeguarding Area
MSSR	Minerals Site Selection Report
PPG	Planning Practice Guidance
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SPA	Special Protection Area
SPD	Supplementary Planning Document
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest

1 Introduction

Background

- 1.1 Hertfordshire County Council (HCC), as the Minerals and Waste Planning Authority, is in the process of preparing a single Minerals and Waste Local Plan (MWLP) to replace the existing Minerals Local Plan (adopted in 2007) and existing Waste Development Framework (adopted in two parts in 2012 and 2014). Policies for minerals must meet the requirements of the National Planning Policy Framework (NPPF) and have regard to the content of the online national Planning Practice Guidance (PPG); both of which are discussed further in **Chapter 2** below. One of the key aspects of a Minerals Local Plan is to plan for a steady and adequate supply of aggregates by identifying specific sites, preferred areas and/or areas of search.
- 1.2 LUC was appointed in April 2023 by HCC to review and update the Minerals Site Selection Report, originally prepared in 2018. LUC and Cuesta Consulting were originally appointed in December 2014 by HCC to review the Council's previous mineral site selection methodology (developed in 2015), amend and update it where required, and then apply the methodology to identify suitable sites for the extraction of sand and gravel and brick clay in the county. In addition, a methodology for the identification of Minerals Safeguarding Areas (MSAs) and Minerals Consultation Areas (MCAs), and its subsequent implementation was required.
- 1.3 The original site selection study report was consulted upon alongside a Draft Minerals Local Plan (MLP) in 2018. In response to this consultation, representations were received in relation to the site selection study and additional mineral sites were promoted as options for allocation in the emerging MLP. In December 2021 however, the emerging MLP, along with the emerging Waste Local Plan, were formally withdrawn in favour of preparing the MWLP. The withdrawn emerging Plans, including the previous site selection work, form part of the evidence base for the MWLP.
- 1.4 Consultation on the Draft MWLP was undertaken between July and October 2022, and representations made in relation to that consultation are considered within this report. This document, the Minerals Site Selection Report 2023, contains factual changes in response to policy and evidence updates, responds to the relevant representations received in 2022, and assesses one new mineral site option which was put forward during that Draft Plan consultation.
- 1.5 Site appraisals have been removed where sites are no longer available or suitable for allocation (for example where permission has been granted and extraction is underway or has been completed). Further information on the revised appraisal process is set out in **Chapter 5**. The conclusions and recommendations of this report will inform the new Minerals and Waste Local Plan, forming a key piece of its evidence base.
- 1.6 The previous version of this report contained information relating to Mineral Safeguarding. This has been removed and is now set out in a standalone report.

Report Structure

- 1.7 This report includes a thorough review of national policy and guidance, together with national and local information which has informed the analysis and approach undertaken. It was critical that the site selection methodology meets the statutory local plan requirements: to be positively prepared, justified, effective and consistent with national policy and guidance.
- 1.8 The remainder of this report is structured as follows:
 - **Chapter 2:** National and local policy requirements relating to selecting sites for inclusion in MLPs and identifying MSAs and MCAs.
 - **Chapter 3:** Describes the site selection methodology for sand and gravel.

- **Chapter 4:** Describes the approach to brick clay.
- **Chapter 5:** Sets out the findings of the sand and gravel and brick clay site and preferred area assessments.
- **Chapter 6:** Study conclusions.

1.9 In addition, the Report contains two appendices:

- **Appendix 1:** Updated Site Assessment Proformas.
- **Appendix 2:** Consultation comments received on the Site Selection Report 2018 which was republished alongside the Draft Minerals and Waste Local Plan 2022.

2 Policy Requirements

National Policy and Guidance

- 2.1 Minerals are essential to support economic growth and our quality of life. Paragraph 215 of the National Planning Policy Framework (NPPF)¹ states that it is important that there is a sufficient supply of materials to provide the infrastructure, buildings, energy and goods that the country needs, and emphasises that minerals can only be worked where they are found, and it is important to make best use of them to secure their long-term conservation. This highlights the importance of the need to facilitate a steady and adequate supply of minerals. A robust site selection methodology and site appraisal therefore is important in ensuring that an appropriate mix of deliverable mineral sites can be brought forward.

Site Selection for Aggregates

- 2.2 The NPPF states in paragraph 219 that Minerals Planning Authorities (MPAs) should plan for a steady and adequate supply of aggregates by:
- "...making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans taking account of the advice of the Aggregate Working Parties and the National Aggregate Co-ordinating Group as appropriate. Such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate;
 - ...maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised...".
- 2.3 The national Planning Practice Guidance² (PPG) elaborates on the policies included in the NPPF, stating in paragraph 008 that MPAs should "plan for the steady and adequate supply of minerals in one or more of the following ways (in order of priority):
- *designating Specific Sites – where viable resources are known to exist, landowners are supportive of minerals development and the proposal is likely to be acceptable in planning terms. Such sites may also include essential operations associated with mineral extraction;*
 - *designating Preferred Areas, which are areas of known resources where planning permission might reasonably be anticipated. Such areas may also include essential operations associated with mineral extraction; and/or*
 - *designating Areas of Search – areas where knowledge of mineral resources may be less certain but within which planning permission may be granted, particularly if there is a potential shortfall in supply".*
- 2.4 In exceptional circumstances, such as where a MPA is largely made up of designated protection areas such as Areas of Outstanding Natural Beauty (AONBs), it may be appropriate to rely largely on policies which set out the general conditions against which applications will be assessed. However, it should be noted that HCC is not largely made up of designated sites/areas, and the main resource in the County, sand and gravel, is located outside the Chilterns AONB.
- 2.5 It is essential that when undertaking site selection that accurate and high-quality data is used, as paragraph 009 of the PPG states that the better the quality of data available to MPAs, the better the prospect of a site being designated as a Specific Site. Designating Specific Sites in minerals plans provides the necessary certainty on when and where development may take place.
- 2.6 It must be borne in mind that under certain circumstances it may be preferable to focus on extensions to existing sites rather than plan for new sites. For example, it is likely that due to

¹ Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework

² Retrieved on 12th May 2023, [Department for Levelling Up, Housing and Communities \(2014\) Minerals](#)

plant and infrastructure already being in place, an extension to an existing mineral site may, in some cases, be able to work resources that would not otherwise be commercially viable, if worked in isolation as a new site. However, paragraph 010 of the PPG states that the suitability of each proposed site, whether an extension to an existing site or a new site, must be considered on its individual merits, taking into account issues such as:

- “need for the specific mineral;
- economic considerations (such as being able to continue to extract the resource, retaining jobs, being able to utilise existing plant and other infrastructure), and;
- positive and negative environmental impacts (including the feasibility of a strategic approach to restoration);
- the cumulative impact of proposals in an area.”

Industrial Minerals

2.7 Industrial minerals are accounted for separately in the NPPF and PPG due to differences in the ways in which they are worked, the wide range of uses they have and the range of markets they supply. As a result, paragraph 086 of the PPG states that MPAs should recognise that there are marked differences in geology, physical and chemical properties, markets and supply and demand between different industrial minerals, which can have different implications for their extraction. The differences of particular relevance to brick clay for example, and which therefore need to be taken account of in the site selection methodology, include:

- geology influencing the size of the mineral resource, how it may be extracted, and the amount of mineral waste generated;
- the fact that markets are based on the consistent physical properties of the products (bricks, in this case); and
- the potential for the quality of clay extracted from a single site varying considerably within the site. This may require multiple extraction faces within one quarry and blending to produce a consistent end-product.

Environmental Considerations

2.8 Environmental impacts from both aggregate and industrial mineral extraction require assessment. Significant environmental impacts are best addressed through consideration of an Environmental Impact Assessment which accompanies planning applications for most new mineral workings. However, when undertaking site selection as part of minerals plan preparation, MPAs need to consider planning and environmental constraints and site-specific details for similar issues, albeit it in a different level of detail. Paragraph 013 of the PPG states the principal issues that MPAs should address, bearing in mind that not all issues will be relevant at every site to the same degree, and not all issues can be addressed at the plan preparation stage, including:

- noise associated with the operation;
- dust;
- air quality;
- lighting;
- visual impact on the local and wider landscape;
- landscape character;
- archaeological and heritage features;
- traffic;
- risk of contamination to land;
- soil resources;
- geological structure;
- impact on best and most versatile agricultural land;

- blast vibration;
- flood risk;
- land stability/subsidence;
- internationally, nationally or locally designated wildlife sites, protected habitats and species, and ecological networks;
- impacts on nationally protected landscapes (National Parks, the Broads, and Areas of Outstanding Natural Beauty);
- nationally protected geological and geomorphological sites and features;
- site restoration and aftercare;
- surface and, in some cases, ground water issues; and
- water abstraction.

2.9 Not all of the issues listed above will be relevant to all sites, and not all of them will be able to be addressed properly at the site selection stage, but this list provides a useful starting point for issues to be considered.

2.10 Paragraph 150 of the NPPF outlines how mineral extraction is not an inappropriate form of development in the Green Belt provided it preserves the openness of the Green Belt and does not conflict with the purposes of including land in Green Belt. Paragraph 138 of the NPPF states that the purposes of Green Belt are:

- to check the unrestricted sprawl of large built-up areas;
- to prevent neighbouring towns merging into one another;
- to assist in safeguarding the countryside from encroachment;
- to preserve the setting and special character of historic towns; and
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

Mineral Safeguarding

2.11 Paragraph 210 of the NPPF sets out the requirement for MPAs to ensure that their Local Plans define Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs) and adopt appropriate policies in order that known locations of specific minerals resources are not needlessly sterilised by non-mineral development, whilst not creating a presumption that resources defined will be worked. In addition to mineral resources, Local Plans should safeguard existing, planned and potential facilities for the bulk transport, handling and processing of minerals including substitute, recycled and secondary aggregate material; and set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place. In the case of Hertfordshire, this means that existing and disused railheads, such as the five rail depots capable of transporting mineral throughout the county and beyond, should be safeguarded.

2.12 The PPG and the British Geological Survey report 'Mineral safeguarding in England: good practice advice'³ provide guidance on minerals safeguarding, including the steps MPAs should take to safeguard mineral resources, and what the role is of the district council, as the local planning authority, in safeguarding minerals.

2.13 Paragraph 003 of the PPG states that MPAs should adopt a systematic approach for safeguarding mineral resources, which:

- uses the best available information on the location of all mineral resources in the authority area. This may include use of British Geological Survey maps as well as industry sources;

³ British Geological Survey (2011) Mineral safeguarding in England: good practice advice

- consults with the minerals industry, other local authorities (especially district authorities in two-tier areas), local communities and other relevant interested parties to define Minerals Safeguarding Areas;
 - sets out Minerals Safeguarding Areas on the policies map that accompanies the local plan and defines Mineral Consultation Areas; and
 - adopts clear development management policies.
- 2.14 The PPG (paragraph 005) also outlines the important role district councils have in safeguarding minerals, for example, having regard to the minerals local plan when identifying suitable areas for non-mineral development in their local plans, and showing MSAs on their policies maps.

Local Policy

- 2.15 In accordance with paragraph 210 of the NPPF, MPAs should plan for a steady and adequate supply of aggregates by preparing an annual Local Aggregates Assessment (LAA), either individually or jointly by agreement with another or other MPAs, based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine-dredged, secondary, and recycled sources).
- 2.16 Paragraph 061 of the PPG defines the LAA as "*an annual assessment of the demand for and supply of aggregates in a MPAs area*". The purpose of the LAA is to assess the current local mineral provision against the requirements detailed in the NPPF and PPG, including the Government's Guidance on the Managed Aggregate Supply System.
- 2.17 An Annual Provision Rate of 1.22Mtpa has been used to plan for sand and gravel within the emerging Minerals and Waste Local Plan (MWLP). This is based on the 2022 10-year average sales figure (1.16Mt) plus an additional five percent uplift to provide flexibility⁴. Basing the Annual Provision Rate solely on the 2022 10-year average sales figure would potentially result in an undersupply, as annual sales have exceeded this 5 times in the past 10 years, despite falling below this in each of the most recent 3 years.
- 2.18 This figure (1.22Mt) will ensure that a sufficient supply of sand and gravel is provided over the Plan period (2023-2040) to meet the growth aspirations of the county, whilst also accommodating for the anticipated gradual rise in demand for sand and gravel, as the county recovers from the Coronavirus pandemic.

Table 2.1: Sand and Gravel provision from the 2022 Hertfordshire LAA (published 2023)

Aggregate Provision	Total
3-year average sales figure (2020-2022)	1.1 million tonnes per annum
10-year average sales figure (2013-2022)	1.16 million tonnes per annum
Annual Provision Rate in the emerging MWLP (10-year average plus five percent)	1.22 million tonnes per annum

⁴ Local Aggregates Assessment 2022 (2023)

3 Site Selection Methodology for Sand and Gravel

Purpose

- 3.1 The purpose of the original site selection study for sand and gravel was two-fold:
- The first purpose was to assess the potential sand and gravel sites put forward through the Call for Sites process. HCC undertook a Call for Sites in early 2016⁵, the aim of which was to receive detailed site proposals from quarry operators, land owners etc. The site-specific information submitted through this process was detailed, enabling a comparative assessment of potential sites through implementation of the site selection methodology. This process identified, where appropriate, specific sites for allocation in the then emerging Minerals Local Plan (MLP).
 - The second purpose was to enable the identification of areas to be allocated as preferred areas and/or areas of search if required.
- 3.2 The purpose of the Minerals Site Selection Report 2023 is to provide a factual update to the information within the earlier reports, and to review the original desk-based assessments in relation to each of the proposed sites.
- 3.3 Sites have been removed from the assessments where they have been withdrawn from consideration by site promoters and/or where they have been subject to planning permissions or other considerations; this is detailed later in the report.
- 3.4 Two sites were submitted during the consultation in 2022 on the Draft Minerals and Waste Local Plan. One site was MLPCS001RS and constituted only a minor boundary change from that which was assessed previously. The other site falls within adopted Preferred Area 2, however the boundary has been revised to such an extent that it has been reappraised as a new site as follows:
- MWLP001 – Land Northeast of Rickneys Quarry
- 3.5 Three sites have been subject to minor boundary changes, but have retained the same reference numbers:
- MLPCS009 - Land Adjoining Coopers Green Lane
 - MLPCS010 - The Briggens Estate
 - MLPCS001RS - Land at Cromer Hyde Farm
- 3.6 **Table 5.1** sets out which sites have been considered in this updated report and the reasons that any site has been removed.
- 3.7 This chapter sets out the process within the original site selection report and sets out where updates have been made to the issues considered and the site appraisals.

Minerals Site Selection Report 2018

- 3.8 The approach to developing the site selection methodologies for sand and gravel and brick clay, began with a review of the Council's existing site selection methodology in light of the policy requirements at that time, as summarised in **Chapter 2**. The review of policy requirements provided the background and context for developing the methodologies.

⁵ Four additional sites were promoted during the consultation of the Draft Minerals Local Plan in 2018.

- 3.9 The Council’s previous site selection methodology was used to identify sand and gravel sites during development of the 2007 Hertfordshire Minerals Local Plan, and was consulted upon in 2009. The comments received during that consultation, the policy requirements at the time, and updated background data and assumptions, were all used to inform the amended and updated draft site selection methodologies. These were prepared by LUC and Cuesta, working alongside officers at HCC.
- 3.10 Once drafted, the site selection methodologies for sand and gravel and brick clay, together with the methodology for the identification of Minerals Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs), were discussed at the Interested Parties Workshop held on 19th March 2015. The Workshop involved invited representatives of statutory and non-statutory consultees, industry and neighbouring local authorities.
- 3.11 The discussions that took place at the Workshop and comments made were noted and collated by HCC. Invitees were also given a two-week period following the Workshop within which any additional comments could be submitted to HCC. These were reviewed and used to inform the final draft site selection methodologies for public consultation.
- 3.12 The final draft site selection methodologies were consulted upon as part of the Initial Consultation on the review of the MLP, which took place between 3rd August and 16th October 2015. Consultation responses received were analysed and used to inform the site selection methodologies described and updated below and in **Chapters 4 and 5**.
- 3.13 After the Initial Consultation it was noted by LUC that the potential impact on airports had been omitted from the assessment criteria. Aircraft are vulnerable to birdstrikes, and 80% of all strikes occur on an aircraft’s take-off or landing phase of flight, therefore highlighting the necessity for wildlife management on and within proximity of an airfield. Many types of development can attract birds, including large-flat roofed structures, landfill sites, gravel pit restoration schemes and nature reserves. As such, it was considered necessary that this should be added to the assessment criteria.
- 3.14 Finally, further amendments to the site selection criteria were made following the consultation on the Site Selection Report alongside the Draft MLP in 2018.
- 3.15 Hertfordshire County Council proposed to allocate three sites within the Draft Minerals and Waste Local Plan (MWLP) 2022, set out below with the relevant MSSR reference in brackets:
- MAS01: The Briggens Estate (**MLPCS010**)
 - MAS02: Hatfield Aerodrome (**MLPCS006**)
 - MAS03: Land adjoining Coopers Green Lane (**MLPCS009**)
- 3.16 These sites are formatted in **bold text** within the site assessment tables in this document for ease of reference.

Updated Minerals Site Selection Report 2023

- 3.17 This new, updated report broadly follows the approach in the original report, driven largely by the fact that National Planning Policy Framework (NPPF), and Planning Policy Guidance (PPG) has largely remained unchanged since the last iteration of the report in 2018.
- 3.18 The sites within the original report have been considered against the updated evidence prepared in support of the MWLP, information relating to the most recent Local Aggregates Assessment⁶, updated GIS data and revisions to National Policy and Guidance.
- 3.19 All sites were considered against the three sieve process, set out below, although it was not always necessary to update the original assessments given the nature of the changes within the evidence base. Evidence related to safeguarding minerals is now set out in a separate document⁷ and not included within this updated site selection report.

⁶ [Hertfordshire County Council \(undated\) Minerals and waste planning](#)

⁷ Hertfordshire County Council (2023) Spatial Strategy for Minerals

Sustainability Appraisal

- 3.20 Under the Planning and Compulsory Purchase Act 2004, Sustainability Appraisal (SA) is mandatory for Local Development Documents (Local Plans), including waste and minerals plans prepared by County Councils (i.e. the MWLP). For these documents it is also necessary to conduct a Strategic Environmental Assessment (SEA). The requirements of the Strategic Environmental Assessment (SEA) Directive (European Directive 2001/42/EC) as transposed into law in England by the SEA Regulations, currently remain in force despite the UK exiting the European Union in January 2020. Therefore, it is a legal requirement for the emerging MWLP to be subject to SA and SEA throughout its preparation.
- 3.21 To this end, the proposed site selection methodologies which were subject to Initial Consultation were reviewed against the SA framework which supported the emerging MLP. Further information regarding this can be found in the Sustainability Appraisal of the withdrawn Minerals Local Plan (Dec 2018)⁸. This SA also appraised the sustainability effects of all the potential mineral site options once they had been put through Sieves 1 and 2 of the site selection methodology (see below). The SA supporting the MWLP transposes the scores from this assessment into its SA Framework. Demonstrating full compliance with the SA requirements.

Habitats Regulations Assessment

- 3.22 When preparing the Minerals and Waste Local Plan, Hertfordshire County Council is also required by law to carry out a Habitats Regulations Assessment (HRA), through amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010 and again in 2012 and 2017⁹. The Regulations translate Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) and 79/409/EEC (Birds Directive) into UK law and currently remain a legal requirement despite the UK exiting the European Union¹⁰. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is explained in the national Planning Practice Guidance.
- 3.23 The HRA refers to the assessment of the potential effects of a development plan (Local Plan) on one or more European sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). Potential SPAs (pSPAs)¹¹, candidate SACs (cSACs)¹², Sites of Community Importance (SCIs)¹³ and Ramsar sites should also be included in the assessment.
- 3.24 Separate SA/SEA and HRA Reports have been prepared by HCC (and will be updated as the Plan progresses), which assess the likely significant effects of the selected mineral site options on these types of nature conservation sites.

Site Selection Methodology for Sand and Gravel

- 3.25 The methodology for site selection for sand and gravel focused primarily on the identification of potential Specific Sites but also included consideration of more broadly defined Preferred Areas and/or Areas of Search. The requirements are set out in paragraph 213(c) of the NPPF, and the terms are defined in paragraph 008 of the associated online PPG.
- 3.26 Specific Sites were identified, initially, through a Call for Sites exercise, using a set of criteria and an associated assessment framework to narrow down alternative options, thereby identifying the most appropriate sites for allocation within the MLP. Once the specific site proposals had been received, the selection methodology consisted of three stages referred to as 'sieves', with the

⁸ [Hertfordshire County Council \(undated\) Emerging Minerals and Waste Local Plan](#)

⁹ The Conservation of Habitats and Species Regulations 2017 (SI 2017/1012), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579)

¹⁰ Conservation of Habitats and Species Regulations 2010 (SI 2010/490)

¹¹ Potential SPAs are sites that have been approved by Government and are currently in the process of being classified as SPAs.

¹² Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted.

¹³ SCIs are sites that have been adopted by the European Commission but not yet formally designated as SACs by the Government.

intention of sites being screened out of further detailed assessment if they did not meet the sieving criteria. However, in practice, the results of Sieves 2 and 3 were considered alongside each other when determining the potential suitability of sites. The same assessment process was applied to the existing three preferred areas¹⁴ within the adopted Hertfordshire Minerals Local Plan (2007) so that the preferred areas could be compared to the sites identified through the call for sites exercise.

- 3.27 It is important to note that at this stage the detailed site assessments undertaken for this exercise are not replacements for the assessments required as a part of any planning application for a minerals site.
- 3.28 The three stages in the site selection methodology were:
- **Sieve 1 – Major Constraints:** Discounting sites and/or areas, either in part or in full, which are subject to identified major constraints.
 - **Sieve 2 – Resource Assessment:** With regard to the identification of specific sites, this sieve involved the verification of evidence relating to commercial viability and deliverability put forward through the Call for Sites process.
 - **Sieve 3 – Detailed Site Assessments:** Assessed the sites that passed through Sieves 1 and 2 against more detailed environmental and planning constraints.
- 3.29 The three sieves are further described below.

Sieve 1 – Resource Assessment – Major Constraints

- 3.30 Certain constraints are acknowledged as absolute constraints to future minerals working. Therefore, any areas of resource or proposed sites (from the Call for Sites process) that fell within these constraints were not taken forward to Sieve 2. Where a site or area fell partly within an absolute constraint, that proportion of the site or area was discounted. All sites were re-considered within Sieve 1 in 2023. The absolute constraints are:
- Urban areas, based on the Office of National Statistics urban area dataset, which includes built up areas and built-up area subdivisions¹⁵. (Built-up areas (BUA) and built-up area subdivisions (BUASD) , created as part of the 2021 Census outputs. This data provides information on the villages, towns and cities where people live, and allows comparisons between people living in built-up areas and those living elsewhere. The definition follows a “bricks and mortar” approach, with BUAs defined as land with a minimum area of 20 hectares (200,000 square metres), while settlements within 200 metres of each other are linked).
 - Sites with extant planning permission for other development (for the identification of preferred areas or areas of search, these were limited to those sites whose area is greater than 5ha due to difficulties associated with collection of data for smaller planning permissions such as house extensions etc.).
 - Previously worked areas.

Sieve 2 – Resource Assessment

- 3.31 The purpose of Sieve 2 was to confirm the viability and deliverability of the sites put forward for consideration as Specific Sites. In line with the agreed methodology, it was assumed that sites put forward by, or with the clear involvement of, the minerals industry would be likely to be economically viable prospects. However, site-specific evidence for this was requested to be provided through the Call for Sites process to demonstrate deliverability during the Plan period. A further request for information from site promoters was made by HCC in September 2016, and additional information was submitted by the four new site promoters during the consultation on

¹⁴ The preferred areas represent areas of the County’s mineral reserves which are considered to have potential for defining further sand and gravel extraction sites if required.

¹⁵ Retrieved on 25th July 2016, [Office for National Statistics \(2011\) Built-up Area/Built-up Area Sub-division](#)

the Draft Minerals Local Plan in 2017. The new site MWLP001 Land Northeast of Rickneys Quarry submitted as part of the 2022 consultation on the Draft Minerals and Waste Plan has been reviewed against the resource assessment made in the site promoter's 2022 submission. The revised submission in 2022 is smaller than the original PA2 and the reserve is now proposed as 3.14mt.

- 3.32 Examples of the evidence required for specific sites put forward in this way included confirmation of both mineral operator and land owner willingness for mineral development to take place during the Plan period; evidence of the tonnage of reserves likely to be capable of being extracted within the Site; and confirmation that any mitigation measures needed to avoid significant adverse effects on the local environment had been taken into account by the proposer in assessing the Site's economic viability. Information submitted for each Site on each of these issues was scrutinised methodically as part of the Sieve 2 assessment, which also included independent checks on the availability and characteristics of the resources likely to be present. The findings of these assessments are presented at **Appendix 1**.
- 3.33 The British Geological Survey (BGS) digital resource map for Hertfordshire was used as the starting point for the confirmation of resource availability. Before being used, the resource outlines as supplied by the BGS (Sand_and_Gravel_Superficial_v2, dated August 2016) were closely checked and updated to reflect the latest available information. This included confirmation of geological and resource information by comparison with the BGS's earlier Industrial Mineral Assessment Unit (IMAU) reports and accompanying 1:25,000-scale resource maps and borehole logs, and with the latest available BGS superficial geology mapping.
- 3.34 No additional borehole information was made available by industry to identify new resource areas or to eliminate previously identified resources. Significant refinements were able to be made, however, by eliminating previously worked resource areas. This was achieved utilising two additional sources of data: HCC's GIS outlines of worked, partly worked and operational mineral permissions; and the outlines of lakes (as shown on the latest OS topographic mapping) which were formed in parts of the Colne and Lee River valleys, as a result of former gravel extraction.
- 3.35 The resulting updated resource outlines, together with the underlying IMAU borehole data, were then utilised to confirm the availability of workable resources within each of the proposed allocation sites, and in each of the existing Preferred Areas. They were also used as the basis for identifying Mineral Safeguarding Areas.
- 3.36 As part of the original Sieve 2 assessment in 2018, consideration was also given to the three **existing Preferred Areas** for future sand & gravel extraction within Hertfordshire:
- Preferred Area 1 comprises land close to the existing Hatfield Quarry. The south-western part (assessed separately as MLPCS006) has been subject to three planning applications for sand and gravel extraction (one approved in 2017, and two refused in 2020 and 2023), whilst the remaining, northern part is unworked and has not been subject to any previous applications for mineral working. This land is underlain by the same mineral resources as were worked in the adjoining Hatfield Quarry (i.e. Kesgrave sand & gravel beneath an overburden of glacial till), however this area was removed from options considered by the Council in 2017 owing to deliverability concerns regarding the bromate plume. As the south-western part of the site is considered separately under MLPCS006, Preferred Area 1 has been removed from the 2023 assessment.
 - Preferred Area 2 comprises two separate parcels of land, to the north and south of the existing Rickneys Quarry. All of the land is underlain by the same mineral resources as worked in Rickneys Quarry (i.e. Kesgrave sand & gravel overlain in part by an overburden of glacial till). The southern area was included within two specific site proposals (Ware Park 3/0770-16 & PL\0870\17), and is considered separately under MLPCS003. The northern area has been subject to previous planning applications for mineral extraction dating from 1988 to 1995, all of which were withdrawn. Part of the northern area was resubmitted in 2022 and is considered under MWLP001, with the remainder of the northern area not being promoted further, therefore Preferred Area 2 has been removed from this 2023 assessment.
 - Preferred Area 3 comprised land to the south-east of the existing Tyttenhanger Quarry, almost all of which has now been worked, as extensions to that site. Therefore, it has also been removed from the site assessment process.

Sieve 3 – Detailed Site Assessments

- 3.37 The final step of the site selection methodology involved the consideration of high-level designations together with more detailed local planning and environmental constraints, considerations and opportunities, and (where practicable) site specific details, including findings from the parallel Sustainability Appraisal (SA) process, Landscape and Visual Sensitivity Study (LVSS) and comments from HCC Highways officers. The 2023 site assessments broadly follow the same approach. A full update to the data used is set out in **Table 3.1**. HCC Highways have reviewed and updated comments made in their original assessments.
- 3.38 The Mineral Site Selection Report will now inform the SA, so the SA summary paragraphs have been removed.
- 3.39 Those sites and preferred areas that passed through Sieve 2 were assessed against these more detailed criteria and subjected to the evaluation process and scoring system outlined in **Table 3.1** below. Each criterion includes an explanation of how each score was applied in order to evaluate the relative merits and constraints of the potential sites. This allowed for a more detailed comparison to be made between site options. This sieve also had the ability to reduce the size of the areas taken forward rather than discounting them completely.
- 3.40 The criteria included in **Table 3.1** have been informed by Paragraph 013 of the PPG which outlines the principal issues that MPAs should address (as stated in **Chapter 2**), professional experience and feedback received through the Interested Parties Workshop¹⁶ and public consultation. Specific definitions of the term 'proximity' used within the scoring framework in **Table 3.1** was established during implementation of the site selection methodology, using established policy, guidance and best practice distances where possible. To exclude potential sites at an earlier stage can be a difficult balancing exercise – taking account of the need for greater 'front-loading' of the planning process (as required by the Planning and Compulsory Purchase Act 2004), without risking the challenge of judicial review. Therefore, it was prudent to limit the depth of analysis carried out during this sieve, focusing primarily on any obvious reasons for inclusion or exclusion.
- 3.41 It is important that this evaluation process is not seen as a means of pre-judging the outcome of subsequent planning applications. It would be wrong, for example, to exclude a proposed site simply because it overlaps a particular designation, if it was felt that the resulting impacts were capable of being adequately mitigated; or if it were considered likely that the only alternative options would be less sustainable, overall. In many cases, such issues can only be properly addressed at the planning application stage, following detailed environmental assessment (which may include Environmental Impact Assessment required by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017¹⁷).
- 3.42 It is also important to note that few, if any, designations are an absolute obstacle to mineral extraction. For example, some of the designations considered in Sieve 3 are subject to the highest level of protection in the NPPF but, nevertheless, do not entirely exclude the possibility of mineral extraction (for example if there is an overriding need for the mineral and no reasonable alternatives, or if potential impacts can be adequately mitigated and/or if there are sufficient beneficial effects that could be achieved through appropriate restoration). However, recognising the statutory protection afforded to national and international designations is important, therefore these criteria include a more severe 'dark red' category.
- 3.43 A number of potential criteria were considered for inclusion in Sieve 3, but not taken forward, for the following reasons:
- **Major Services** (gas pipelines, water pipelines, electricity transmission lines): Discounted due to detailed data and information not being available at this strategic stage of assessment.
 - **Drainage**: Discounted as drainage is a site-specific matter that would be dealt with at the planning application stage.

¹⁷ [HM Government \(2017\) The Town and Country Planning \(Environmental Impact Assessment\) Regulations 2017](#)

- **Commercial and economic issues:** Discounted due to this information being problematic to quantify and score consistently and comparably. Economic resource viability issues are dealt with under Sieve 2.
- **Mineral sterilisation:** This is partly addressed through the Sieve 3 criterion: Proximity of allocated residential or built development. However, scoring resource areas/sites on the extent to which mineral may be vulnerable to sterilisation by other development if not allocated for extraction is not considered appropriate as part of the site selection methodology. Economically viable minerals in Hertfordshire will be afforded relevant protection by the designation of MSAs and MCAs, and the supporting development management policies adopted as part of the emerging MWLP.
- **Chalk streams:** Whilst recognised as an important natural feature and habitat, it is possible for mineral extraction to occur in close proximity to a chalk stream. This is considered to be a site-specific issue that would be dealt with at the planning application stage.
- **Sensitive receptors:** Such considerations beyond those criteria already included in Sieve 3, are considered.

- 3.44 It is important to bear in mind that mineral workings are considered to be compatible with certain constraints such as Best and Most Versatile (BMV) agricultural land and Green Belt. Whilst the PPG includes 'impact on BMV land' as an environmental issue that must be addressed by MPAs, minerals extraction is not precluded on this land designation. Paragraphs 174 and footnote 58 of the NPPF state planning policies and decisions should recognise *"the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland"*, noting *"where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality"*.
- 3.45 It has long been recognised that minerals working can be accommodated on BMV agricultural land provided that high environmental standards are maintained, best practice soil handling techniques are adhered to, and sites are well restored. The PPG goes on to require that where mineral working is proposed on BMV land, the outline restoration and aftercare strategy should show, where practicable, how the methods used in the restoration and aftercare enable the land to retain its longer term capability, though the proposed after-use need not always be for agriculture.
- 3.46 NPPF paragraph 137 states that the Government attaches great importance to Green Belts, noting that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence. Paragraph 150 of the NPPF lists those forms of development which are not inappropriate in Green Belt provided that they "preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt". These potential exemptions include mineral extraction, (largely because this is recognised as being a temporary use of land, with a capability of delivering progressive restoration, and because minerals can only be worked where they occur).
- 3.47 It is important to note that some of the criteria identified in **Table 3.1** (e.g. Cumulative Effects and Restoration) have been considered in greater detail in the SA once the resource areas/sites are finalised, as it is difficult to consider this solely on a site by site basis.
- 3.48 As shown in **Table 3.1** each of the criteria was considered in detail and was not approached as a blanket constraint. As noted earlier, in some cases a potential effect can be made acceptable through the use of appropriate mitigation, and it is important that the sieve methodology does not pre-judge matters that should more properly be dealt with at the planning application stage. The assessment of a site and/or area against each of these criteria will not result in a simple yes or no; a range of evaluation scores and assumptions for each consideration have been developed.
- 3.49 The information used to assess sites and areas against the criteria in **Table 3.1** was provided from a range of sources including spatial data in GIS form, HCC's own expertise (such as the Highways Team and the Minerals and Waste Planning Team), accessible online data sources maintained by statutory consultees (e.g. Environment Agency) and other sources of relevant environmental and sustainability information. However, data for some of the criteria, such as restoration opportunities and other unique local factors were not able to be supplied in GIS format. Such data was sought through the Call for Sites, from those putting forward potential

sites and areas for consideration and/or from other stakeholders. In addition, the baseline information and findings from other studies undertaken by and for the Council such as the updated Strategic Flood Risk Assessment has been used.

- 3.50 The site selection judgements throughout the Sieves were completed through a desk-based review of relevant information. HCC officers provided additional background information, where relevant.
- 3.51 In order to record the findings of the site selection process, a simple proforma (see **Appendix 1**) was completed for each site, compiling information derived from GIS analysis of spatial data (e.g. proximity to environmental designations and sensitive or incompatible existing / planned development) and other (non-GIS) factors, and providing a score for each criterion. The format of the proformas have been updated for clarity and proformas have been completed for the revised and new sites. On review of the existing Landscape and Visual Impact Assessment, it was decided that an updated assessment was not required, and the original assessments were carried over to this updated report. The scores for each site against all criteria are summarised in Error! Reference source not found.. This approach provides a simple but effective way to evaluate sites in a consistent, robust and transparent manner. In addition, at the bottom of each site proforma, summaries of the findings of the landscape and visual sensitivity and updated HCC Highways assessments were recorded. In the Landscape and Visual Sensitivity Study the sensitivity of individual site options was assessed using a five point sensitivity scale:
- High
 - Moderate High
 - Moderate
 - Low Moderate
 - Low
- 3.52 Sites and preferred areas considered to have a 'High' and 'Moderate High' sensitivity overall were considered to be of 'High' sensitivity in the site selection study (and colour-coded red); sites and preferred areas of 'Moderate' sensitivity were considered to be of 'Moderate' sensitivity in the site selection study (and colour-coded amber); and sites of 'Low Moderate' and 'Low' sensitivity overall were considered to be of 'Low' sensitivity in the site selection study (and colour-coded green). The Landscape and Visual Sensitivity Study was not updated in 2023, as it was considered that all the conclusions within the 2018 study are still valid.
- 3.53 Following an update to their transport model, HCC Highways updated their assessments in September 2017. The 2017 conclusions were reviewed again in 2023. These updates have been reflected in the site proforma and throughout this document. These findings were taken into account alongside the Sieve 3 criteria judgements to help identify the site options likely to be most suitable for allocation within the Plan.
- 3.54 The HCC Highway findings used a similar three tier 'Red-Amber-Green' scoring system to determine the potential impact of the site options on the local highway network. Therefore, sites which scored 'Green', 'Amber' and 'Red' in the HCC Highways Assessment were considered to be 'Low', 'Moderate' and 'High' in the site selection study, respectively. Sites that were unable to be assessed in the HCC Highways Study due to a lack of information were scored 'Grey'.

Table 3.1: Evaluation Framework for Sieve 3

3.55 The scoring key used in the evaluation framework is outlined below. As described above, the justification and reasoning behind the score given is detailed in the 'justification' section of each site assessment proforma, thereby ensuring transparency and understanding of the decisions made. The completed proformas can be found in **Appendix 1**.

Key

Score	Description
Positive	There are positive impacts or benefits/enhancements.
Low	There are no/insignificant impact(s)/issue(s).
Medium	There is a minor/moderate impact/issue which may be acceptable (and may involve mitigation).
High	There is a major impact/issue which may or may not be adequately mitigated.
Very High	There is an impact on a site or area of international or national significance within which working will only be permitted once an exception or alternative test in national policy have been met.

Criterion	Justification	Scoring	Data Available
Airport Safeguarding Zones	Aircraft are vulnerable to birdstrikes, and 80% of all strikes occur on an aircraft's take-off or landing phase of flight, therefore highlighting the necessity for wildlife management on and within proximity of an airfield. Aerodrome administrators are responsible for administering bird activity with a 13km radius of the aerodrome. This is to mitigate the bird strike risk to aircraft and be aware of what species are in the local area. Many types of development can attract birds, including large-flat roofed structures, landfill	N/A	Maps provided by HCC in 2017.
		Sites or areas located outside of an Airport Safeguarding Zone.	
		Sites or areas located within an Airport Safeguarding Zone.	
		N/A	
		N/A	

Criterion	Justification	Scoring	Data Available
	sites, gravel pit restoration schemes and nature reserves.		
Ancient Woodland	Ancient woodland is afforded protection through the NPPF, which notes that it is irreplaceable. Local planning authorities should refuse planning permission for development resulting in the loss or deterioration of ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.	The potential for positive effects on ancient woodland is dependent on the exact nature and proposed design of the restoration of the minerals site, which may protect or increase the ecological connectivity of the woodland. However, this will not be known until the planning application stage.	National dataset (2023).
		Sites or areas which are distant from ancient woodland.	
		Sites or areas which lie in close proximity to ancient woodland.	
		Sites or areas which are immediately adjacent to ancient woodland.	
		Sites or areas that partly or entirely within ancient woodland.	
Aquifers	Aquifer designations are defined in the EU Water Framework Directive, and these designations reflect the importance of aquifers in terms of groundwater as a resource (drinking water supply) but also their role in supporting water flows and wetland ecosystems. Mitigation measures and/or a precautionary approach to the operation of mineral workings can often be implemented. However, this is unlikely to be known until the planning application stage.	N/A	National dataset (2023).
		Sites or areas which are outside of a designated aquifer.	
		Sites or areas which are located partly or entirely within a Secondary Aquifer.	
		Sites or areas which are located partly or entirely within a Principal Aquifer.	
		N/A	

Criterion	Justification	Scoring	Data Available
BAP Priority Species or Habitats	The NPPF requires that, where possible, biodiversity loss, including direct loss of habitats and indirect losses through the fragmentation of green infrastructure networks, should be avoided. It is also necessary to consider sites that are not afforded statutory protection but are of local importance; especially those that provide ecological connectivity (including BAP habitats).	The restoration of minerals sites is increasingly adopting innovative practice and this could have positive effects on BAP Priority Species and Habitats for restoration to nature conservation. However, this would be very dependent on the exact nature and proposed design of the restoration of the minerals site, which may not be known until the planning application stage.	Hertfordshire Environmental Records Centre (2023). Information provided through the Call for Sites.
		Sites or areas which are outside of areas known to include BAP Priority Species or Habitats.	
		Sites or areas which are partly within areas known to include BAP Priority Species and Habitats.	
		Sites or areas that are entirely within areas known to include BAP Priority Species and Habitats.	
		N/A	
BMV Land	Minerals extraction is not precluded on BMV. It has long been recognised that minerals working can be accommodated on best and most versatile (BMV) agricultural land, provided that high environmental standards are maintained, best practice soil handling techniques are adhered to and sites are well restored. Although, the potential to ensure these standards may not be known until the planning application stage.	N/A	National datasets.
		Sites or areas not located within BMV Land or on lower grades (not 1, 2 or 3).	
		Sites or areas located within higher grades of BMV land.	
		N/A	
		N/A	

Criterion	Justification	Scoring	Data Available
Cumulative effects	<p>The NPPF states that local planning authorities should take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality. The 250m buffer used to assess the potential cumulative impacts of sites in close proximity is a precautionary distance which is often used in site selection studies of this kind. The NPPF states that local planning authorities must put in place policies that ensure high quality restoration and aftercare of mineral sites takes place, including for agriculture (safeguarding the long term potential of best and most versatile agricultural land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation.</p> <p>Opportunities may sometimes exist for the creation of positive cumulative effects by adopting a landscape-scale approach to mineral extraction and restoration - for example by creating or re-establishing wildlife corridors and connectivity of habitats; by creating water storage / flood alleviation features; and/or by creating aesthetically pleasing landscape features.</p>	Opportunities exist for contributing to a landscape-scale approach to mineral extraction and restoration. For example, this could include contributions to identified green infrastructure networks or corridors, but will depend upon the information available regarding such initiatives.	<p>Table 2: Permitted sand and gravel extraction sites in Hertfordshire and Table 7: Permitted chalk extraction sites in Hertfordshire from HCC's Local Aggregate Assessment 2022.</p> <p>Knowledge from HCC officers.</p> <p>Cumulative effects in relation to all types of development is considered in Sieve 1, and within the SA report.</p>
		Sites or areas that are distant from existing mineral sites (greater than 250m away), or sites that are adjacent to or within close proximity to existing mineral sites but are distant from sensitive receptors and settlements.	
		Sites or areas that are adjacent or in close proximity to existing mineral sites (less than 250m) and within close proximity to the same settlement or sensitive receptor(s).	
		N/A	
		N/A	
Ecological status of water bodies	<p>The EU Water Framework Directive (2000/60/EC) looks at the ecological health of both groundwater and surface water with the aim of achieving 'good ecological status' by 2027, and to ensure that there is no deterioration from existing statuses.</p>	N/A	<p>Visual analysis of Ordnance Survey (OS) base maps.</p>
		Sites or areas which are not located near to a water body.	
		Sites or areas located adjacent to a water body.	

Criterion	Justification	Scoring	Data Available
	<p>The operation of mineral extraction sites can have a number of different impacts on habitats and species either within the boundary of the extraction site or in proximity to the site. There may be the potential for water pollution e.g. through addition of dust and silts to waterbodies or through accidental spills or run-off of oil from machinery for example. Thereby affecting the ecological status of water bodies.</p> <p>Noise and vibration arising from sand and gravel extraction could also affect aquatic species, however, it should be possible to avoid or mitigate adverse impacts, for example by timing works to avoid critical periods (e.g. spawning or breeding periods), or preventing work from being undertaken at night to avoid disturbance to nocturnal species (e.g. otters).</p>	<p>Sites or areas located within the boundary of a water body.</p> <p>N/A</p>	
Flood risk	<p>As stated in the PPG, local authorities should take a sequential approach to developing in areas at risk of flooding, giving preference to locating development in Flood Zone 1, followed by Flood Zone 2 then Flood Zone 3.</p> <p>Minerals working and processing (except sand & gravel working) are classed as less vulnerable, which means that they are potentially compatible with all flood zones except for Flood Zone 3b, the functional floodplain⁷. Sand and gravel workings are classed as water-compatible development and are potentially suitable for all flood zones including 3b, the functional floodplain. However, National Planning Practice Guidance⁸ also states that mineral workings should not increase flood risk elsewhere and need to be designed, worked and restored accordingly.</p>	<p>Some sites, which may dewater, may hold the potential to store excess water in times of heavy rain, which would be seen as a positive in terms of preventing flood risk. However, this may not be known until the planning application stage.</p> <p>Sites or areas located within Flood Zones 1-3a, and sand and gravel sites located within 3b.</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>	GIS information from HCC and Strategic Flood Risk Assessment 2022.

Criterion	Justification	Scoring	Data Available
Geodiversity	<p>National and locally important sites of geological/geomorphological interest (e.g. Local Geological Sites, formerly RIGS) should be protected under the NPPF. Although it is noted that quarrying often provides substantial opportunities for the creation of new geological exposures and for the creation of geodiversity trails.</p> <p>The NPPF requires planning authorities to aim to prevent harm to geological conservation interests through the use of criteria based policies, including minimising impacts on geodiversity. Mineral sites can potentially contribute to geodiversity by preserving and conserving geological features/landscapes that contribute towards the link between people, landscape and their culture. However, due to the methods of extraction and processing, this is more likely at less intensive sites (e.g. building stone) than aggregate sites.</p>	The site provides one or more opportunities for the creation of new geological exposures and/or for the creation of geodiversity trails.	<p>GIS information from HCC.</p> <p>Information provided through the Call for Sites.</p>
		Sites or areas that are either distant from geological conservation sites, or which hold opportunities to incorporate, enhance or preserve important geological features within the site.	
		Sites or areas that are within or adjacent to national sites of geological interest (SSSI) or Local Geological Sites (LGS), other than those which are classed as 'finite' sites.	
		Sites or areas that are within geological or geomorphological SSSIs which have been classified as 'finite' sites.	
		N/A	
Green Belt	<p>NPPF states that the Government attaches great importance to Green Belts, noting that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence. The NPPF lists mineral extraction as a form of development which is not inappropriate in Green Belt providing that it preserves the openness of the Green Belt and does not conflict with the purposes of including land in Green Belt.</p>	N/A	<p>GIS information from national datasets; to check the purposes for its designation does not conflict with mineral working.</p>
		Sites or areas located outside of Green Belt and/or site located within Green Belt but do not conflict with the purposes for its designation.	
		Sites or areas located within Green Belt which conflict with the purposes for its designation.	
		N/A	
		N/A	

Criterion	Justification	Scoring	Data Available
Groundwater vulnerability	<p>The NPPF states that local planning authorities should set out environmental criteria against which planning applications will be assessed so as to ensure that permitted operations do not have unacceptable adverse impacts on the natural environment, including from impacts on the flow and quantity of surface and groundwater and migration of contamination from sites. The extent to which a minerals extraction site will affect groundwater on a potential site depends on the type of mineral worked, site design and characteristics, and the geological conditions. Mineral sites that are in Source Protection Zone (SPZ) 1 could potentially lead to loss of contaminants or accidental pollution incidents. Potential for adverse effects on water quality will also be assessed at the planning application stage.</p>	<p>N/A</p> <p>Sites or areas located within Source Protection Zone 4 or outside of all Source Protection Zones.</p> <p>Sites or areas located within Source Protection Zones 2 and 3.</p> <p>Sites or areas located within Source Protection Zone 1.</p> <p>N/A</p>	GIS information from HCC.
Heritage assets	<p>Listed Buildings, their settings and Conservation Areas are afforded specific legal protection by the Planning (Listed Buildings and Conservation Areas) Act 1990, as amended. Scheduled Monuments, designated under the Ancient Monuments and Archaeological Areas Act 1979, as amended, are legally protected from unauthorised works. Registered Battlefields and Registered Parks and Gardens are national designations and are afforded specific protection in the NPPF.</p> <p>The historic environment generally is protected by the NPPF. The NPPF requires local authorities to conserve and enhance the historic environment and states that all heritage assets (whether designated or</p>	<p>Development of any kind is unlikely to have a positive effect on the significance of heritage assets.</p> <p>A positive effect would require development to better reveal the significance of an asset or assets – and given the nature of minerals development this is considered unlikely.</p> <p>Sites or areas where development is unlikely to result in physical change to a heritage asset or assets of high, medium or low significance, or to meaningfully affect their setting, resulting in a negligible/ neutral effect to its significance.</p> <p>Or where there is the potential for assets of low significance to experience minor change.</p>	Data points and records provided by HCC Historic Environment Team in 2023.

Criterion	Justification	Scoring	Data Available
	<p>otherwise) should be conserved in a manner appropriate to their significance. Accordingly, great weight should be given to the conservation of designated assets and development that causes substantial harm to them should be exceptional/ wholly exceptional.</p> <p>The development of minerals sites either containing or in proximity to heritage assets could physically affect them, and/or have a negative effect on their setting and significance.</p> <p>High-level indicative assessment of these potential effects on assets within 1km of each site has been made based on professional judgement and a strategic understanding of the assets' importance and sensitivity. The assessment conclusions are by no means definitive and a level of uncertainty will be attached to all effects, given the absence of detailed study and the fact that information regarding the development proposals is unknown. In light of this, a worst case scenario is generally assumed; mitigation measures may be possible that help reduce some effects. More detailed assessment of the effects on the historic environment will be required as part of the planning process.</p>	<p>Sites or areas that may result in minor change to the significance of an asset or assets of high or medium significance and/ or where there is the potential for moderate change to assets of low significance.</p> <p>Change will give rise to some harm.</p> <p>Sites or areas that may result in more extensive change to the significance of a heritage asset or assets of high or medium significance, giving rise to more extensive effects to that significance. Harm will occur, but likely to be less than substantial.</p> <p>Or, change likely to give rise to substantial harm to assets of low significance.</p> <p>Sites or areas where there are assets of high or medium significance with the potential to be substantially harmed by development.</p>	
International and national ecological designations	International and national ecological designations are protected through European and National legislation. Such sites include Ramsar sites, Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites	The potential for positive effects on ecological designations is dependent on the exact nature and proposed design of the restoration of the minerals site, which may not be known until the planning application stage.	National datasets (2023). GIS information from HCC.

Criterion	Justification	Scoring	Data Available
	<p>of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs).</p> <p>These nature conservation designations are given the highest level of protection and therefore should be protected against harm and in general mineral extraction within them should be avoided. However, it is recognised that in occasional situations, minerals development can have positive effects on these designations. For example, through the provision of flood alleviation or the creation of specific habitats.</p>	<p>Sites or areas which are distant from international and national ecological designations.</p> <p>Sites or areas which lie in close proximity to international and national ecological designations.</p> <p>Sites or areas which are immediately adjacent to international and/or national ecological designations.</p> <p>Sites or areas that are partly or entirely within international and/or national ecological designations.</p>	Information provided through the Call for Sites.
Land ownership	The extent to which options put forward by industry are within their control can have a bearing on the likelihood sites will be available during the emerging MLP plan period.	<p>N/A</p> <p>Sites in the control of the industry.</p> <p>Sites not in the control of the industry.</p> <p>N/A</p> <p>N/A</p>	Information provided through the Call for Sites and other correspondence with HCC.
Landscape designations	Landscape Designations (e.g. AONB) are protected by the NPPF. Both national and local landscape designations may be affected by the development of mineral workings. Landscape designations in poor condition could be enhanced through high quality restoration. However, this will not be able to be determined until the planning application stage.	The restoration of minerals sites is increasingly adopting innovative practice and this could have positive effects on landscape designations. However, this would be very dependent on the exact nature and proposed design of the restoration of the minerals site, which may not be known until the planning application stage.	<p>National datasets (2023).</p> <p>GIS information from HCC.</p> <p>Information provided through the Call for Sites.</p>

Criterion	Justification	Scoring	Data Available
		<p>Sites which are outside of landscape designations.</p> <p>Sites which are partly within or immediately adjacent to landscape designations.</p> <p>Sites that are entirely within landscape designations.</p> <p>Sites or areas that are partly or entirely within international and/or national landscape designations.</p>	
Local Nature Reserves and/or Local Wildlife Sites	Locally important sites of nature conservation should be protected under the NPPF. Where possible, biodiversity loss, including direct loss of habitats and indirect losses through the fragmentation of green infrastructure networks, should be avoided. It is also necessary to consider sites that are not afforded statutory protection but are of local importance; especially those that provide ecological connectivity. However, the level of detail to aid understanding of potential impacts on Local Nature Reserves and/or Local Wildlife Sites would not be known until the planning application stage.	<p>The restoration of minerals sites is increasingly adopting innovative practice and this could have positive effects on local nature reserves for restoration to nature conservation. However, this would be very dependent on the exact nature and proposed design of the restoration of the minerals site, which may not be known until the planning application stage.</p> <p>Sites or areas which are outside of Local Nature Reserves and/or Local Wildlife Sites.</p> <p>Sites or areas which are partly within or immediately adjacent to Local Nature Reserves and/or Local Wildlife Sites.</p> <p>Sites or areas that are entirely within Local Nature Reserves and/or Local Wildlife Sites.</p> <p>N/A</p>	<p>Data from Hertfordshire Environmental Records Centre 2023.</p> <p>Information provided through the Call for Sites.</p>
		N/A	

Criterion	Justification	Scoring	Data Available
Proximity of allocated residential or built development	There could be potential for land use conflict where minerals sites are within or in close proximity to areas allocated for future residential or built development, as mineral resources could be sterilised or mineral operations could conflict with the neighbouring sensitive land uses. Mineral sterilisation could be avoided via prior extraction. Conflict between mineral operations and sensitive land uses could be mitigated by the use of stand-off distances, noise bunds and visual screening. However, the potential for this to occur would not be known until the planning application stage for either land use.	Sites or areas are located away from planned built development.	Data on housing allocations from HCC. Visual analysis of relevant Local Plan maps for areas planned for future residential development, however, the certainty of these development locations depends on the status of the Local Plan in question, i.e. how close to Adoption it is.
		Sites or areas are located in close proximity to or adjacent to planned built development.	
		Sites or areas are located within the boundary of planned built development.	
		N/A	
Recreation	The NPPF requires that planning decisions should guard against the unnecessary loss of valued social, recreational and cultural facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs. Sites could have effects on the amenity of users of Public Rights of Way, open spaces (e.g. common land, access land, and community forests) and recreational facilities if they are in close proximity. There may also be opportunities for enhancement to recreational facilities during the development of particular mineral sites, as set out in the NPPF. In addition, there may be opportunities to create new recreation areas/open spaces during the restoration of mineral sites.	Sites or areas that have the potential for major enhancements for existing Public Rights of Way, open spaces or recreational facilities and/or the development of new Public Rights of Way, open spaces or recreational facilities.	GIS information from HCC, plus analysis of OS base map for other types of leisure/recreational facilities and open spaces.
		Sites or areas that have the potential for minor enhancements for existing Public Rights of Way, open spaces or recreational facilities, or are located away from Public Rights of Way, open spaces or recreational facilities.	
		Sites or areas that are located within close proximity of Public Rights of Way, open spaces or recreational facilities.	
		Sites or areas that are adjacent to or are located within the boundary of Public Rights of Way, open spaces or recreational facilities.	
		N/A	

Criterion	Justification	Scoring	Data Available
Restoration	<p>The NPPF states that local planning authorities must put in place policies that ensure high quality restoration and aftercare of mineral sites takes place, including for agriculture (safeguarding the long term potential of best and most versatile agricultural land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation.</p> <p>Appropriate restoration (i.e. the formation of final landform contours and replacement of soils) and reclamation (i.e. making the site suitable for an appropriate after-use), has always been an important aspect of mineral planning and is specified by conditions attached to most modern mineral permissions. Restoration should take place at the earliest opportunity, during a phased extraction or if appropriate upon completion of quarrying.</p>	N/A	Information provided through the Call for Sites ,consultation responses and by HCC.
		Sites or areas where there are clear opportunities for high quality restoration and aftercare.	
		Sites or areas where there are some opportunities for high quality restoration and aftercare.	
		Sites or areas where there is no prospect of restoration and reclamation to an appropriate future land use.	
		N/A	
Sensitive land uses	<p>Minerals sites could have effects on the health and amenity of local residents and communities from dust, noise and vibration. The NPPF is clear that MPAs should ensure that unavoidable noise, dust and particle emissions and any blasting vibrations are controlled and mitigated or removed at source. Past (e.g. Minerals Policy Statement 2) and current guidance (e.g. NPPF) state that residential properties and other sensitive uses can be affected by dust up to 1km from the source, and that concerns are most likely to be experienced near to sources, generally within 100m depending on site characteristics and in the absence of appropriate mitigation.</p>	N/A	Visual analysis of Ordnance Survey (OS) base maps.
		Sites or areas are distant from sensitive land uses.	
		Sites or areas are in close proximity to sensitive land uses.	
		Sites or areas are located adjacent to or within the boundary of sensitive land uses.	
		N/A	

Criterion	Justification	Scoring	Data Available
Sustainable transport	<p>The NPPF states that plans and decisions should ensure developments that generate significant movements can maximise the use of sustainable transport modes.</p> <p>The majority of minerals sites will involve road transportation with some involving more movements than others. However, proximity to rail lines/depots/sidings, rivers/canals or wharves could provide opportunities to explore more sustainable modes of transporting minerals.</p>	N/A	<p>National datasets and OS base map.</p> <p>Information from HCC transport documents and HCC officers.</p> <p>Information provided through the Call for Sites.</p>
		Sites or areas with direct access to the rail network or navigable waterway network.	
		Sites or areas with economically viable access to the rail network or navigable waterway network.	
		Sites or areas distant from the rail network or navigable waterway network.	
		N/A	
Pollution to the environment (dust, air, water)	<p>Environmental receptors, including humans, are protected from pollution through a number of planning and environmental regulations. Mineral workings have the potential to result to pollution of water courses, aquifers and the air. However, there are strict environmental controls in place to prevent this occurring at the site level. Potential for adverse effects on surface water quality will be assessed at the planning application stage.</p> <p>Proposals for all types of minerals sites could contribute to increasing air pollution with regards to minerals transportation by road, as well as any air pollution associated with the operation of the sites and processes used such as dust from blasting, crushing and processing.</p> <p>The further vehicles transporting minerals have to travel along local roads (i.e. not on the primary road network), the higher the potential for more localised air pollution as they are likely to travel more slowly on local roads. In</p>	N/A	<p>Visual analysis of Ordnance Survey (OS) base maps.</p> <p>GIS information from HCC.</p> <p>Information provided through the Call for Sites.</p>
		Sites or areas where associated traffic would not be likely to travel through an Air Quality Management Area, or are located adjacent to a strategic road network.	
		Sites or areas where associated traffic would be likely to travel through an Air Quality Management Area, or are in close proximity to a strategic road network.	
		Sites or areas located within an Air Quality Management Area, or not in close proximity to a strategic road network.	
		N/A	

Criterion	Justification	Scoring	Data Available
	<p>addition, if the mineral site is within, or vehicles are travelling through, AQMAs where existing air pollution issues have been identified, there is more potential for negative effects on air quality.</p>		

4 Site Selection Methodology for Brick Clay

- 4.1 NPPF paragraph 214 (c) footnote 74, requires MPAs to plan for at least 25 years' supply of brick clay, through the provision of a stock of permitted reserves sufficient to support the level of actual and proposed investment required for new and existing plant and the maintenance and improvement of existing plant and equipment. The extant Minerals Local Plan was produced before the introduction of the NPPF, and had not planned for a 25-year stock of clay reserves. The Council therefore has no previous site selection methodology for brick clay.
- 4.2 The location of the brick clay resource is provided by the BGS mineral resource information for development plans. No other detailed information is known to exist, within the public domain. This is not least because of the specialist nature of the bricks historically produced in this area and the relatively unusual nature of the Reading Formation and Clay-with-Flints resources which are used. These factors dictate different methods of extraction and processing, compared with those used in much larger brick pits (for example in neighbouring Bedfordshire) where the resources tend to be thicker and more consistent, and they also influence which parts of the resource can be utilised. There are no remaining brick clay works in Hertfordshire.
- 4.3 With the geology highly variable and the brick clay production very specialist in its nature, a detailed assessment such as that proposed for sand and gravel is not possible for brick clay for the purpose of the Minerals and Waste Local Plan (MWLP). As an industrial mineral, the full hierarchy of Specific Sites, Preferred Areas and Areas of Search is not applicable to Brick Clay; MPAs are simply required to provide a stock of permitted reserves of at least 25 years. However, in view of the lack of sufficiently detailed geological information to identify an appropriate area more precisely, it was proposed during the consultation on the methodology that the whole resource will be identified as a Mineral Safeguarding Area, and a policy for clay included within the MLP.
- 4.4 The sites previously put forward for assessment through the Minerals Site Selection Report 2018 are no longer available for consideration. As there is no existing need for brick clay from within Hertfordshire (either to serve a local market, or brick-making facilities outside of Hertfordshire) no sites have been identified for consideration or allocation for brick clay. Therefore, the assessment of these sites has been removed from this updated version of the Minerals Site Selection Report.

5 Site and Preferred Area Assessment Findings

- 5.1 HCC received 19 submissions from landowners, agents or minerals operators during the 2016 Call for Sites exercise (proposing 18 sand and gravel sites and one brick clay site) and an additional brick clay site was subsequently submitted. In addition, HCC previously defined three preferred areas in the adopted MLP within which it had been considered that there was potential for defining further sand and gravel extraction sites if required. An additional four site options were promoted during the consultation on the Draft Minerals Local Plan in 2017, including a revised boundary for Site MLPCS001 assessed separately as Site MLPCS001RS.
- 5.2 In 2018, all 24 of the sites were put through the Sieve 1, 2 and 3 assessments described in **Chapter 3**. All three of the preferred areas were put through Sieve 1 and 2 and two of the preferred areas (1 and 2) progressed to Sieve 3.
- 5.3 In preparing the 2023 report, the sites and preferred areas were reviewed and a decision was taken to remove sites that had been worked out or were no longer available for other reasons. **Table 5.1** sets out a list of all the sites submitted to the council for consideration which were originally submitted and assessed in 2018 and shows which sites are no longer under consideration. One site has been assessed for the first time within this document, namely (MWLP001 Land Northeast of Rickneys Quarry), and three sites have been reassessed with revised boundaries (MLPCS009, MLPCS010 and MLPCS001RS2). **Figure 5.1** illustrates their location within the County.

Table 5.1: List of all Submitted Sites

Site ID	Site Name	Mineral to Extract	Update to Site Status	Assessed in 2023 Report
Sites Submitted and Assessed in 2016/early 2017				
MLPCS001	Land at Cromer Hyde Farm	Sand and Gravel	Superseded by revised submission (see MLPCS001RS).	No
MLPCS002	Land at Salisbury Hall	Sand and Gravel	No change in status.	Yes
MLPCS003	Land at Ware Park	Sand and Gravel	No change in status.	Yes
MLPCS004	Land at Pynesfield	Sand and Gravel	Site has now been worked.	No
MLPCS005	Nashe's and Fairfold's Farm	Sand and Gravel	Site was withdrawn previously and has not been resubmitted for consideration.	No
MLPCS006	Hatfield Aerodrome	Sand and Gravel	No change in status.	Yes
MLPCS007	Barwick	Sand and Gravel	No change in status.	Yes

Site ID	Site Name	Mineral to Extract	Update to Site Status	Assessed in 2023 Report
MLPCS008	Hatfield – Furze Field	Sand and Gravel	Site is currently being worked.	No
MLPCS009	Land adjoining Coopers Green Lane	Sand and Gravel	No change in status (minor boundary change).	Yes
MLPCS010	The Briggens Estate	Sand and Gravel	No change in status (minor boundary change).	Yes
MLPCS011	Water Hall Quarry – Farm Fields Area	Sand and Gravel	No change in status.	Yes
MLPCS012	Water Hall Quarry – Broad Green Area	Sand and Gravel	No change in status.	Yes
MLPCS013	Harry’s Field	Brick Clay	Clay sites have been removed from consideration.	No
MLPCS014	Water Hall Quarry – Bunkers Hill South Area	Sand and Gravel	No change in status.	Yes
MLPCS015	Plashes Farm	Sand and Gravel	No change in status.	Yes
MLPCS016	Water Hall Quarry – Howe Green Area	Sand and Gravel	No change in status.	Yes
MLPCS017	Robins Nest Hill	Sand and Gravel	No change in status.	Yes
MLPCS018	Southfield Wood East	Sand and Gravel	No change in status.	Yes
MLPCS019	Pipers End	Sand and Gravel	No change in status.	Yes
MLPCS020	Roundhill Wood	Brick Clay	Clay sites have been removed from consideration.	No
Preferred Areas				
PA1	Land close to the existing Hatfield Quarry	Sand and Gravel	Northern part excluded and southern part assessed under MLPCS006.	No

Site ID	Site Name	Mineral to Extract	Update to Site Status	Assessed in 2023 Report
PA2	Land to the north of the existing Rickneys Quarry	Sand and Gravel	Southern part assessed under MLPCS003 and northern part assessed under MWLP001.	No
PA3	Land to the south-east of the existing Tyttenhanger Quarry	Sand and Gravel	Site is being worked.	No
Sites Submitted in Response to the Draft Minerals Local Plan Consultation December 2017				
MLPCS021	Land adjacent to Coursers Farm (North Mymms West)	Sand and Gravel	No change in status.	Yes
MLPCS022	Land adjacent to Coursers Farm (North Mymms East)	Sand and Gravel	No change in status.	Yes
MLPCS023	Warren Farm	Sand and Gravel	No change in status.	Yes
MLPCS001RS	Land at Cromer Hyde Farm – Revised Scheme	Sand and Gravel	No change in status (minor boundary change).	Yes
Sites Submitted in Response to the Draft Minerals and Waste Local Plan Consultation July 2022				
MWLP001	Land Northeast of Rickneys Quarry	Sand and Gravel	New site.	Yes
MLPCS001RS	Land at Cromer Hyde Farm – Revised Scheme	Sand and Gravel	Revised Site.	Yes

Sieve 1 – Major Constraints

- 5.4 As set out in **Chapter 3**, Sieve 1 sought to screen out sites and preferred areas that were known to affect absolute constraints to future minerals working. None of the original sites were screened out at this stage, and there has been no additional evidence that the original assessment should change for these sites.
- 5.5 A Sieve 1 assessment has been carried out for the newly submitted site MWLP001 Land Northeast of Rickneys Quarry and the site has not been screened out at this stage.
- 5.6 Details of the sites' Sieve 1 assessments can be found in the proformas in **Appendix 1**.

Sieve 2 – Resource Assessment

- 5.7 Similar to Sieve 1, no sites were screened out at Sieve 2 within the previous Minerals Site Selection Report 2018.

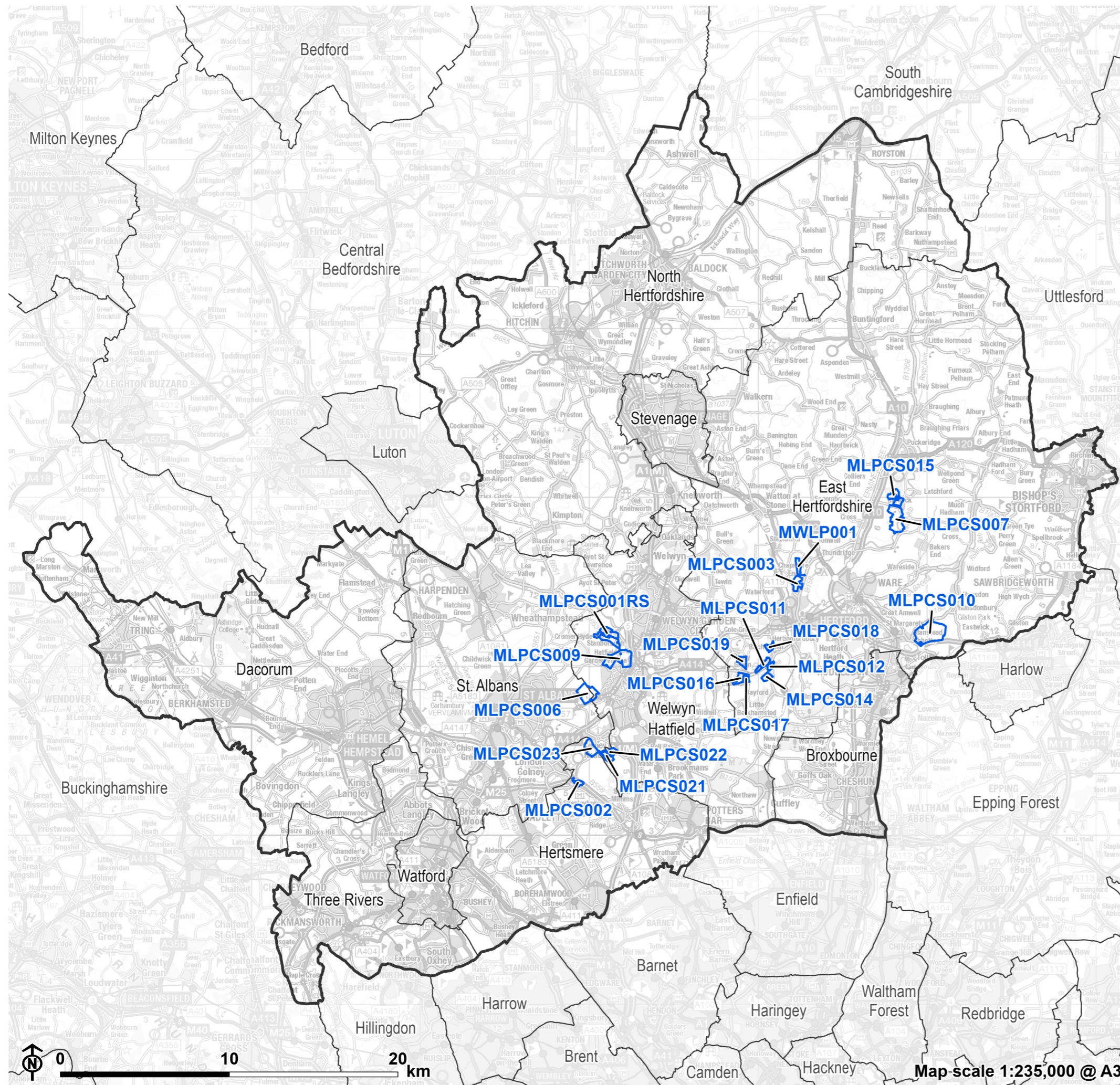
- 5.8 In 2018, 13 of the 24 original sites put forward for consideration (including both brick clay sites) were considered to have adequately demonstrated economic viability and deliverability during the Plan period. All 13 of these sites were put forward by mineral operators/brick manufacturers. Of these 13 sites, the following eight sites are still available for consideration in the Minerals and Waste Local Plan:
- MLPCS002
 - MLPCS003
 - **MLPCS006**
 - **MLPCS009**
 - **MLPCS010**
 - MLPCS012
 - MLPCS021
 - MLPCS022
- 5.9 The remaining sites were considered not to have sufficient information to determine their economic viability and deliverability. However, without the necessary information to disregard any of these sites as unviable or undeliverable, all sites (22 sand and gravel sites and two brick clay sites) were taken through to Sieve 3 in 2018, to consider their suitability against the environmental and social criteria in Sieve 3 (see below). As there has been no additional evidence to change the assessments, all sites that are still available for allocation have been taken forward to Sieve 3 in 2023.
- 5.10 All three of the preferred areas were put through Sieve 1 and 2 and two of the preferred areas (1 and 2) progressed to Sieve 3 in 2018. Preferred area 3 was not assessed at Sieve 3 in 2018 due to the fact that the area had been worked through extensions to the neighbouring Tyttenhanger Quarry. This updated 2023 report does not reassess Preferred Areas 1 and 2, as explained in **Chapter 3**.

Sieve 3 – Detailed Site Assessments

- 5.11 **Table 5.3** provides a discursive summary of the potential effects of the sand and gravel sites, taking into account the detailed assessments set out in **Appendix 1** and the findings of the original Landscape and Visual Sensitivity Study.
- 5.12 From **Table 5.3** it can be seen that a number of the assessment criteria are unlikely to be affected by minerals development at any of the promoted sites, as shown by the green 'positive' or 'low' impact scores, e.g. flood risk, geodiversity, Green Belt and designated landscapes. In addition, many of the criteria may only have a medium or low impact, which should be able to be reduced or mitigated through mitigation measures incorporated into the development proposal and implemented during operation of the site. While some potentially high or very high impacts have been identified for all of the site options, these may also be able to be mitigated either through readjustment of site boundaries and/or mitigation measures implemented during design and operation (e.g. diversion of Public Right of Ways (PRoWs)). Generally, increasing the use of sustainable transport is unlikely to be improved through development of any of the potential mineral sites and therefore impacts on amenity and local road networks are unlikely to be mitigated. Development of the Briggens sites may come with new and enhanced linkages east and west for pedestrian, cycle and equestrian use. These proposals fall under potential mitigation and would need to be secured by planning condition or obligation.



Figure 5.1: Location of Sites in County Context



- County boundary
- District boundary
- Mineral site



Table 5.2: Summary of the suitability of each of the sand and gravel sites against detailed site assessment criteria

Assessment Criteria																						
Site ID	Airport Safeguarding Zones	Ancient Woodland	Aquifers	BAP Priority Species or Habitats	BMV Land	Cumulative Effects	Ecological Status of Water Bodies	Flood Risk	Geodiversity	Green Belt	Groundwater Vulnerability	Heritage Assets	International and National Ecological Designations	Land Ownership	Landscape Designations	Local Nature Reserves and Local Wildlife Sites	Proximity of Allocated Residential or Built Development	Recreation	Restoration	Sensitive Land Uses	Sustainable Transport	Pollution to the Environment
Sites Submitted in 2016/early 2017 and Reassessed in 2023																						
MLPCS002	L	L	M	L	M	L	H	P	L	L	L	H	L	L	L	L	L	H	L	H	H	M
MLPCS003	L	H	M	P	M	L	L	P	L	L	H	M	L	L	L	P	M	H	L	H	H	H
MLPCS006	M	L	M	P	M	L	H	P	L	L	M	H	L	L	L	P	M	H	L	H	H	L
MLPCS007	L	H	M	M	M	M	H	P	L	L	H	H	H	M	L	M	M	H	L	H	H	M
MLPCS009	M	L	M	P	M	L	H	P	L	L	M	H	L	L	L	L	M	H	L	H	H	L
MLPCS010	L	H	M	P	M	L	H	P	L	L	M	H	L	L	L	M	M	H	L	H	H	L
MLPCS011	L	L	M	P	M	L	H	P	L	L	M	H	L	L	L	M	L	H	L	M	H	H
MLPCS012	L	L	M	L	M	L	L	P	L	L	M	M	L	L	L	L	L	L	L	H	H	H
MLPCS014	L	H	M	M	M	L	H	P	L	L	M	M	L	L	L	L	L	H	L	H	H	H
MLPCS015	L	VH	M	M	M	L	H	P	L	L	M	H	VH	L	L	M	L	H	L	H	H	H
MLPCS016	L	L	M	L	M	M	H	P	L	L	M	M	L	L	L	L	L	H	M	H	H	H

Assessment Criteria																						
MLPCS017	L	L	M	L	M	L	M	P	L	L	M	L	L	M	L	L	L	L	L	M	H	H
MLPCS018	L	H	M	L	M	L	H	P	L	L	M	H	L	M	L	M	M	H	L	M	H	M
MLPCS019	L	L	M	M	M	L	H	P	L	L	M	H	L	M	L	M	L	M	L	H	H	H
Sites Submitted in Response to the Draft Minerals Local Plan Consultation December 2017 and Reassessed in 2023																						
MLPCS021	L	H	M	M	M	L	M	P	L	L	M	VH	L	L	L	M	L	M	L	M	H	H
MLPCS022	L	L	M	L	M	L	H	P	L	L	M	M	L	M	L	M	L	M	L	H	H	M
MLPCS023	L	L	M	L	M	L	H	P	L	L	H	M	L	M	L	M	L	H	L	H	H	M
Sites Submitted in Response to the Draft Minerals and Waste Local Plan Consultation July 2022 and Assessed/Reassessed in 2023																						
MWLP001	M	H	M	M	M	M	L	L	L	L	M	M	L	M	L	M	M	H	L	M	H	M
MLPCS001RS	M	H	M	M	M	L	L	P	L	L	M	VH	L	L	L	M	M	H	L	H	H	M

Scoring in Table 5.2:

- L = Low
- M = Medium
- H = High
- VH = Very High
- P = Positive

Table 5.3: Summary of the potential effects of the sand and gravel sites

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
Sites Submitted in 2016/early 2017 and Reassessed in 2023				
MLPCS002	Land at Salisbury Hall	Hertsmere	860,000 tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • the ecological status of water bodies as the site contains a water body; • heritage assets as a grade II* building is located to the south east of the site, around which there is a cluster of grade II listed buildings; • recreation as the site contains a PRoW and is immediately adjacent to a number of additional PRoWs and the Watford Football Club Training Ground; • sensitive land uses as a number of residential properties are located adjacent to the site; and • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised significant concerns which are likely to attract highway objections. This site is not in proximity to any other potential sites therefore it is unlikely to have cumulative effects.</p>
MLPCS003	Land at Ware Park	East Hertfordshire	2.6 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond and local wildlife sites and BAP priority habitats or species as the proposed restoration includes woodland and a small area of wetland.</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site is located immediately adjacent to one area of ancient woodland; • groundwater as the site is partly located within Source Protection Zone 1; • recreation as the site contains a PRow and is immediately adjacent to a number of additional PRowS; • sensitive land uses as the site is located immediately adjacent to a number of residential properties; • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway; and • pollution to the environment as the site is not within close proximity to the strategic road network. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment. This site is not in proximity to any other potential sites therefore it is unlikely to have cumulative effects.</p>
MLPCS006	Hatfield Aerodrome	St. Albans and Welwyn Hatfield	8 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond and local wildlife sites and BAP priority species or habitats as the restoration proposals include the creation of grassland and wetland.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • the ecological status of water bodies as the site contains two watercourses; • heritage assets as there are a number of listed buildings immediately to the south of the site;

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<ul style="list-style-type: none"> • recreation as the site contains one PRoW and is used for informal recreation and is adjacent to the Hertfordshire Sports Village and a number of additional PRoWs; • sensitive land uses as the site is adjacent to a number of residential properties; and • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>There is potential for additional negative impacts in relation to a bromate plume.</p> <p>MLPCS006 is in close proximity to MLPCS001RS, MLPCS009, MLPCS021, MLPCS022 and MLPCS023. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise). Furthermore, the site is in close proximity to the existing Cemex Hatfield Quarry processing plant on Oaklands Lane. This plant will remain in operation if one or a combination of the sites MLPCS009 and MLPCS001RS are allocated for extraction.</p>
MLPCS007	Barwick	East Hertfordshire	Estimated at 5 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site is adjacent to an area of ancient woodland; • the ecological status of water bodies as the site contains a watercourse;

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<ul style="list-style-type: none"> • groundwater as part of the site is within Source Protection Zone 1; • heritage assets as a number of listed buildings lie immediately to the east of the site and are partly encircled by it; • international and national ecological designations as the site is immediately adjacent to Plashes Woods SSSI; • recreation as the site contains a PRow and is adjacent to a number of additional PRowS; • sensitive land uses as the site is adjacent to a number of residential properties; and • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway. <p>The site was also considered to have an overall moderate-high landscape and visual sensitivity to mineral extraction.</p> <p>HCC Highways has not provided any comments as no information was submitted with the call for sites in relation to the proposed access points or HGV routing.</p> <p>MLPCS007 is in close proximity to MLPCS015. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).</p>
MLPCS009	Land adjoining Coopers Green Lane	Welwyn Hatfield	3.52 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive effect on flood risk as any proposal may include a dewatering pond and BAP priority species or habitats as the proposed restoration includes the creation of wetland.</p> <p>However, it is considered that development of the site could have a high impact on:</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<ul style="list-style-type: none"> • the ecological status of water bodies as the site contains a watercourse and is adjacent to an additional watercourse; • recreation as the site contains two PRowS and is adjacent to two designated areas of open space; • sensitive land uses as the site is adjacent to a number of residential properties; and • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway. <p>The site is considered to have an overall moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>There is potential for additional negative impacts in relation to a bromate plume.</p> <p>MLPCS009 is in close proximity to MLPCS001RS, MLPCS006, MLPCS021, MLPCS022 and MLPCS023. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise). The cumulative effects would be greater with regard to site MLPCS001R2 as it is much closer than sites MLPCS006, MLPCS021, MLPCS022 and MLPCS023. Furthermore, site MLPCS006 is in close proximity to the existing Cemex Hatfield Quarry processing plant on Oaklands Lane. This plant will remain in operation if one or a combination of the sites MLPCS009 and MLPCS001RS are allocated for extraction.</p>
MLPCS010	The Briggens Estate	East Hertfordshire	8.8 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond and BAP priority species or habitats as the proposed restoration includes the allocation of land for nature conservation purposes.</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<p>However, it is considered that the development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site is adjacent to one area of ancient woodland; • the ecological status of water bodies as the site contains a watercourse and a number of small water bodies; • heritage assets as to the northeast of the site is a grade II* listed building, a Scheduled Monument and four more grade II listed buildings; • recreation as the site contains two PRoWs; • sensitive land uses as the site is adjacent to a number of residential properties; and • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment. This site is not in proximity to any other potential minerals sites therefore it is unlikely to have cumulative effects in relation to minerals development. Location in relation to sensitive land uses was considered in Sieve 3. The MSSR considered the proximity of existing development, planning permissions, and development allocated in local plans, in proximity to proposed mineral sites within Sieve 1. This included potential development at Gilston.</p>
MLPCS011	Water Hall Quarry – Farm Fields Area	East Hertfordshire	956,000 tonnes	<p>The site scored reasonably well during the site assessment. The development site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond and BAP priority species or habitats as the proposed restoration includes the creation of two lakes separated by wetland and additional wildlife habitat.</p> <p>However, it is considered that development of the site could have a high impact on:</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<ul style="list-style-type: none"> • the ecological status of water bodies as the site contains one watercourse and is adjacent to another watercourse; • heritage assets as immediately to the north of the site is a scheduled monument and a group of grade II listed buildings, in addition to another scheduled monument even further north; • recreation as the site is adjacent to a PRow and within close proximity of three additional PRow; • sustainable transport as the site is not located within close proximity of the rail network or a navigable waterway; and • pollution to the environment as the site is not located within close proximity of the strategic road network. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS0011 is in close proximity to MLPCS012, MLPCS014, MLPCS016, MLPCS017, MLPCS018 and MLPCS019. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).</p>
MLPCS012	Water Hall Quarry – Broad Green Area	East Hertfordshire	450,000 tonnes	<p>The site scored well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • sensitive land uses as the site is immediately adjacent to a number of residential properties; • sustainable transport as the site is not located within close proximity of the rail network or a navigable waterway; and

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<ul style="list-style-type: none"> • pollution to the environment as the site is not located within close proximity of the strategic road network. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS0012 is in close proximity to MLPCS011, MLPCS014, MLPCS016, MLPCS017, MLPCS018 and MLPCS019. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).</p>
MLPCS014	Water Hall Quarry – Bunkers Hill South Area	East Hertfordshire	1 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site is adjacent to one area of ancient woodland; • recreation as the site is adjacent to one PRoW; • sensitive land uses as the site is adjacent to a number of residential properties; • sustainable transport as the site is not located within close proximity of the rail network or a navigable waterway; and • pollution to the environment as the site is not located within close proximity to the strategic road network. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				MLPCS0014 is in close proximity to MLPCS011, MLPCS012, MLPCS016, MLPCS017, MLPCS018 and MLPCS019. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).
MLPCS015	Plashes Farm	East Hertfordshire	500,000 tonnes	<p>The site scored less well during the site assessment than other sites because it is considered that development of the site could have a very high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site contains three areas and is adjacent to three additional areas of ancient woodland; and • international and national ecological designations as the site is adjacent to Plashes Wood SSSI (Site of Special Scientific Interest). <p>The site is also considered likely to have a high impact on:</p> <ul style="list-style-type: none"> • heritage assets as there are two listed buildings located immediately to the north of the site; • recreation as the site contains three PRoW; • sensitive land uses as the site is adjacent to Plashes Farm; • sustainable transport as the site is not located within close proximity of the rail network or a navigable waterway; and • pollution to the environment as the site is not located within close proximity to the strategic road network. <p>The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>The site is considered to have an overall moderate-high landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				MLPCS015 is in close proximity to MLPCS007. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).
MLPCS016	Water Hall Quarry – Howe Green Area	East Hertfordshire	1.7 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • the ecological status of water bodies as the site contains one watercourse which also runs down its eastern boundary; • recreation as the site contains two PRoW and is within close proximity of an additional PRoW; • sensitive land uses as the site is adjacent to residential properties; • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway; and • pollution to the environment as the site is not located within close proximity of the strategic road network. <p>The site is considered to have an overall moderate landscape and visual sensitivity to mineral extraction and HCC Highways has not assessed the site as no details of access arrangements were submitted with the call for sites submission. If access is proposed from Robin Nest Hill it is anticipated that improvements will be required to accommodate mineral excavation at the site.</p> <p>MLPCS0016 is in close proximity to MLPCS011, MLPCS012, MLPCS014, MLPCS017, MLPCS018 and MLPCS019. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).
MLPCS017	Robins Nest Hill	East Hertfordshire	1 million tonnes	<p>The site scored very well during the site assessment as it is considered that development of the site is only likely have a high impact on:</p> <ul style="list-style-type: none"> • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway; and • pollution to the environment as the site is not located within close proximity to the strategic road network. <p>The development of the site is also considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>The site is considered to have an overall moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS0017 is in close proximity to MLPCS011, MLPCS012, MLPCS014, MLPCS016, MLPCS018 and MLPCS019. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).</p>
MLPCS018	Southfield Wood East	East Hertfordshire	500,000 tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site is adjacent to one area of ancient woodland; • heritage assets as a grade II listed bridge is located to the south of the site, as well as some grade II listed buildings;

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<ul style="list-style-type: none"> • recreation as the site contains two PRoW; and • sustainable transport as the site is not located within close proximity of the rail network or a navigable waterway. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS0018 is in close proximity to MLPCS011, MLPCS012, MLPCS014, MLPCS016, MLPCS017 and MLPCS019. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).</p>
MLPCS019	Pipers End	East Hertfordshire	1.4 million tonnes	<p>The site scored reasonably well during the site assessment. The development of site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • the ecological status of water bodies as the site contains two watercourses and is adjacent to two additional watercourses; • heritage assets because a grade II* listed building is located within Woolmers Park non-designated parkland, which extends into the site; • sensitive land uses as the site is adjacent to a number of residential properties; • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway; and • pollution to the environment as the site is not located within close proximity to the strategic road network.

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				<p>The site is considered to have an overall moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS0019 is in close proximity to MLPCS011, MLPCS012, MLPCS014, MLPCS016, MLPCS017 and MLPCS018. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise).</p>
Sites Submitted in Response to the Draft Minerals Local Plan Consultation 2017 and Reassessed in 2023				
MLPCS021	Land adjacent to Coursers Farm (North Mymms West)	Welwyn Hatfield	1.25 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a very high impact on heritage assets as there is a grade II listed building within the site and a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site is located immediately adjacent to one area of ancient woodland; • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway; and • pollution to the environment as the site is not located within close proximity to the strategic road network or an AQMA. <p>The site is also considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS021 is in close proximity to MLPCS001RS, MLPCS002, MLPCS005, MLPCS006, MLPCS009, MLPCS022 and MLPCS023. As such, if the sites were to come forward for extraction at the same time or immediately after</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise). The cumulative effects would be greater with regard to sites MLPCS022, MLPCS023 and MLPCS002 as they are much closer than sites MLPCS001RS, MLPCS006 and MLPCS009.
MLPCS022	Land adjacent to Coursers Farm (North Mymms East)	Welwyn Hatfield	500,000 tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • the ecological status of water bodies as the site contains two small water bodies in its eastern corner and one watercourse within its south western corner; • heritage assets because the grade I listed North Mymms Park, the non-designated parkland of which includes the site and contains several more grade II and II* listed structures; • sensitive land uses as the site is adjacent to Park Cottage and within close proximity to the Grade I listed North Mymms Park; and • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway. <p>The site is considered to have an overall moderate-high landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS022 is in close proximity to MLPCS001RS, MLPCS002, MLPCS006, MLPCS009, MLPCS021 and MLPCS023. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise). The cumulative effects would be greater with regard to sites</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
				MLPCS021, MLPCS023 and MLPCS002 as they are much closer than sites MLPCS001RS, MLPCS006 and MLPCS009.
MLPCS023	Warren Farm	Hertsmere	Estimated 2 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a high impact on:</p> <ul style="list-style-type: none"> • the ecological status of water bodies as the site contains a water body and is located adjacent to two watercourses and some other water bodies; • groundwater vulnerability as parts of the site falls within SPZs 1, 2 and 3; • recreation as the site contains a PRoW and is immediately adjacent to a number of other PRoWs; • sensitive land uses as the site is located immediately adjacent to Coursers Farm; and • sustainable transport as the site is not located within close proximity to the rail network or navigable waterway network. <p>The site is considered to have an overall low-moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment.</p> <p>MLPCS023 is in close proximity to MLPCS001RS, MLPCS002, MLPCS006, MLPCS009, MLPCS021 and MLPCS022. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise). The cumulative effects would be greater with regard to sites MLPCS021, MLPCS022 and MLPCS002 as they are much closer than sites MLPCS001RS, MLPCS006, and MLPCS009.</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
Sites Submitted in Response to the Draft Minerals and Waste Local Plan Consultation July 2022 and Assessed/Reassessed in 2023				
MLPCS001RS	Land at Cromer Hyde Farm – Revised Scheme 2023	Welwyn Hatfield	3.5 million tonnes	<p>The site scored reasonably well during the site assessment. The development of the site is considered likely to have a positive impact on flood risk as any proposal may include a dewatering pond.</p> <p>However, it is considered that development of the site could have a very high impact on heritage assets as the site is partly located within Brocket Hall Registered Park and Garden, and a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as the site is adjacent to two areas of ancient woodland; • recreation as the site contains a PRow and is adjacent to a number of additional PRows and the Brocket Park Golf Course; • sensitive land uses as the site is immediately adjacent to a number of residential properties; and • sustainable transport as the site is not located within close proximity to the rail network or a navigable waterway (this is the same for all of the site options). <p>The site is considered to have an overall moderate-high landscape and visual sensitivity to mineral extraction and HCC Highways has raised significant concerns which are likely to attract highway objections.</p> <p>MLPCS001RS is in close proximity to MLPCS006, MLPCS009, MLPCS021, MLPCS022 and MLPCS023. As such, if the sites were to come forward for extraction at the same time or immediately after one another there is potential for cumulative adverse effects (additive or temporal effects respectively) with regard to transport (e.g. vehicular movements and emissions) and the amenity of sensitive receptors (e.g. air quality, noise). The cumulative effects would be greater with regard to site MLPCS009 as it is much closer than sites MLPCS006, MLPCS021, MLPCS022 and MLPCS023. Furthermore, site MLPCS006 is in close proximity to the existing Cemex Hatfield Quarry processing plant on Oaklands Lane. This plant will remain in operation if one or a combination of the sites MLPCS009 and MLPCS001RS are allocated for extraction.</p>

Site ID	Site Name	District(s)	Proposed Mineral Reserve	Summary of Potential Effects if Site Developed for Mineral Extraction
MWLP001	Land to the north of the existing Rickneys Quarry	East Hertfordshire	3.14 million tonnes	<p>Development within this Preferred Area could have a high impact on:</p> <ul style="list-style-type: none"> • ancient woodland as there are two areas of replanted ancient woodland and further areas of ancient woodland in close proximity. <p>The site is also considered likely to have a high impact on:</p> <ul style="list-style-type: none"> • groundwater vulnerability as part of the site lies within SPZ 1; • recreation as several PRow cross the Preferred Area; and • sustainable transport as this Preferred Area is distant from the rail network and the navigable waterway network. <p>The site is also considered to have an overall moderate landscape and visual sensitivity to mineral extraction and HCC Highways has raised some concerns which could be overcome following further information/assessment. There are medium impacts on heritage assets as there are three grade II listed buildings located to the east of the site.</p> <p>This site is not in proximity to any other potential sites therefore it is unlikely to have cumulative effects.</p>

Table 5.4: Proposed sites and preferred areas ranked in terms of their potential impact on the site and surrounding environment

Rank	Site ID	Sieve 2	Sieve 3 Assessment Criteria																									
			Airport Safeguarding Zones	Ancient Woodland	Aquifers	BAP Priority Species or Habitats	BMV Land	Cumulative Effects	Ecological Status of Water Bodies	Flood Risk	Geodiversity	Green Belt	Groundwater Vulnerability	Heritage Assets	International and National Ecological Designations	Land Ownership	Landscape Designations	Local Nature Reserves and Local Wildlife Sites	Proximity of Allocated Residential or Built Development	Recreation	Restoration	Sensitive Land Uses	Sustainable Transport	Pollution to the Environment	Landscape and Visual Assessment	HCC Highways Assessment		
1	MLPCS012		L	L	M	L	M	L	L	P	L	L	M	M	L	L	L	L	L	L	L	L	L	H	H	H	L	M
2	MLPCS017		L	L	M	L	M	L	M	P	L	L	M	L	L	M	L	L	L	L	L	L	M	H	H	M	M	
3	MLPCS021		L	H	M	M	M	L	M	P	L	L	M	VH	L	L	L	M	L	M	L	M	H	H	L/M	M		
4	MLPCS022		L	L	M	L	M	L	H	P	L	L	M	H	L	L	L	M	L	M	L	H	H	M	M/H	M		
5	MLPCS006		M	L	M	P	M	L	H	P	L	L	M	H	L	L	L	P	M	H	L	H	H	H	L/M	M		
6	MLPCS009		M	L	M	P	M	L	H	P	L	L	M	H	L	L	L	L	M	H	L	H	H	L	M	M		
7	MLPCS018		L	H	M	L	M	L	L	P	L	L	M	H	L	M	L	M	M	H	L	M	H	M	L/M	M		
8	MWLP001		L	H	M	M	M	M	L	L	L	L	H	M	L	M	L	M	L	H	L	M	H	M	M	M		
9	MLPCS002		L	L	M	L	M	L	H	P	L	L	L	H	L	L	L	L	L	H	L	H	H	M	L/M	H		

Rank	Site ID	Sieve 2	Sieve 3 Assessment Criteria																						Landscape and Visual Assessment	HCC Highways Assessment
			Airport Safeguarding Zones	Ancient Woodland	Aquifers	BAP Priority Species or Habitats	BMV Land	Cumulative Effects	Ecological Status of Water Bodies	Flood Risk	Geodiversity	Green Belt	Groundwater Vulnerability	Heritage Assets	International and National Ecological Designations	Land Ownership	Landscape Designations	Local Nature Reserves and Local Wildlife Sites	Proximity of Allocated Residential or Built Development	Recreation	Restoration	Sensitive Land Uses	Sustainable Transport	Pollution to the Environment		
10	MLPCS003		L	H	M	P	M	L	H	P	L	L	H	M	L	L	L	P	M	H	L	H	H	H	L/M	M
11	MLPCS010		L	H	M	P	M	L	H	P	L	L	M	H	L	L	L	M	M	H	L	H	H	L	L/M	M
12	MLPCS011		L	L	M	L	M	L	H	P	L	L	M	H	L	L	L	M	L	H	L	M	H	H	L/M	M
13	MLPCS014		L	H	M	L	M	L	M	P	L	L	M	M	L	L	L	L	L	H	L	H	H	H	L/M	M
14	MLPCS023		L	L	M	L	M	L	H	P	L	L	H	M	L	M	L	M	L	H	L	H	H	M	L/M	M
15	MLPCS016		L	L	M	L	M	M	H	P	L	L	M	M	L	L	L	L	L	H	M	H	H	H	M	G
16	MLPCS019		L	L	M	M	M	L	H	P	L	L	M	H	L	L	M	L	M	L	M	L	H	H	M	M
17	MLPCS001RS		M	H	M	M	M	L	L	P	L	L	M	M	L	L	L	L	M	M	H	L	H	H	H	H
18	MLPCS015		L	VH	M	M	M	L	M	P	L	L	M	H	VH	VH	L	L	M	L	H	L	H	H	M/H	M

Rank	Site ID	Sieve 2	Sieve 3 Assessment Criteria																							
		Airport Safeguarding Zones	Ancient Woodland	Aquifers	BAP Priority Species or Habitats	BMV Land	Cumulative Effects	Ecological Status of Water Bodies	Flood Risk	Geodiversity	Green Belt	Groundwater Vulnerability	Heritage Assets	International and National Ecological Designations	Land Ownership	Landscape Designations	Local Nature Reserves and Local Wildlife Sites	Proximity of Allocated Residential or Built Development	Recreation	Restoration	Sensitive Land Uses	Sustainable Transport	Pollution to the Environment	Landscape and Visual Assessment	HCC Highways Assessment	
19	MLPCS007		L	H	M	M	M	M	H	P	L	L	H	H	H	H	M	L	M	M	H	L	H	H	M/H	G

* Sites have been ranked from lowest impact to highest impact, 1 being the site with the least high impacts.

** Site scoring is identical to Table 5.2 with the addition of 'Grey' as the scoring option from the HCC Highways Assessment and the category of L/M or Low/Medium in relation to the Landscape and Visual Impact Assessment.

6 Conclusions

- 6.1 This section summarises the conclusions of the Site Selection Study update carried out in 2023, highlighting which of the remaining sand and gravel site options still available in 2023 are likely to be the most appropriate for allocation in the Hertfordshire Minerals and Waste Local Plan.
- 6.2 Nineteen of the original 24 site options tested in 2018 have been subject to updated assessments. In addition, one new site has been assessed, MWLP001 Land Northeast of Rickneys Quarry. Given the lack of and/or minor nature of boundary changes to the remaining promoted sites, including changes to **MLPCS010 Briggens Estate**, **MLPCS009 Coopers Green Lane** and MLPCS001RS Cromer Hyde it was considered unnecessary to repeat the Sieve 2 assessments in this 2023 update. However, all reassessed sites have been subjected to an updated Sieve 1 and Sieve 3 assessment, drawing on updated datasets and evidence bases where available.

Sand and Gravel Site Options

- 6.3 Three sand and gravel site options have only **three or four 'red' scores** indicating a modest range of high impacts across the assessment criteria and therefore potential suitability for allocation. Starting with the least constrained, these are:
- **MLPCS012 Broad Green** has potential for high impacts against three Sieve 3 assessment criteria: sensitive land uses, sustainable transport and transport related pollution.
 - **MLPCS017 Robins Nest Hill** has potential for high impacts against two Sieve 3 assessment criteria 'sustainable transport' and 'transport related pollution', and scored 'red' in the Sieve 2 assessment.
 - **MLPCS021 North Mymms West** has potential for very high impacts against one Sieve 3 assessment criteria: heritage assets. MLPCS021 also has potential for high impacts against three Sieve 3 assessment criteria: ancient woodland, sustainable transport and transport related pollution.
- 6.4 These sand and gravel options are all located around Hatfield in the centre of the County in close proximity to the A414 which runs through the middle of the County connecting the sites to Hatfield, Hertford, Hemel Hempstead, St Albans and Welwyn Garden City.
- 6.5 Thirteen sand and gravel site options have **five or six 'red' scores** indicating a moderate range of high impacts across the assessment criteria and lower potential suitability for allocation. Starting with the least constrained, these are:
- MLPCS022 North Mymms East has potential for high impacts against four Sieve 3 assessment criteria: ecological status of water bodies, heritage assets, sensitive land uses and sustainable transport. MLPCS022 also has potential for a moderate-high impact against one Sieve 3 assessment criterion: landscape and visual assessment.
 - **MLPCS006 Hatfield Aerodrome** has potential for high impacts against five Sieve 3 assessment criteria: ecological status of water bodies, heritage assets, recreation, sensitive land uses and sustainable transport.
 - **MLPCS009 Hatfield Quarry – Land adjoining Coopers Green Lane** has potential for high impacts against five Sieve 3 assessment criteria: ecological status of water bodies, heritage assets, recreation, sensitive land uses and sustainable transport.
 - **MLPCS018 Southfield Wood East** has potential for high impacts against four Sieve 3 assessment criteria: ancient woodland, heritage assets, recreation and sustainable transport, and scored 'red' in the Sieve 2 assessment.

- **MWLP001** has potential for high impacts against one Sieve 3 assessment criterion: Ancient Woodland. This site also has potential for high impacts against three Sieve 3 assessment criteria: groundwater vulnerability, recreation and sustainable transport.
- **MLPCS002 Land at Salisbury Hall** has potential for high impacts against five Sieve 3 assessment criteria: ecological status of water bodies, heritage assets, recreation, sensitive land uses, and sustainable transport. In addition, HCC's Highways impact assessment identified potential for the site to have high impacts on the local highway network.
- **MLPCS003 Land at Ware Park** has potential for high impacts against six Sieve 3 assessment criteria: ancient woodland, groundwater vulnerability, recreation, sensitive land uses, sustainable transport and transport related pollution.
- **MLPCS010 Briggens Estate** has potential for high impacts against six Sieve 3 assessment criteria: ancient woodland, ecological status of water bodies, heritage assets, recreation, sensitive land uses and sustainable transport.
- **MLPCS011 Farm Fields** has potential for high impacts against five Sieve 3 assessment criteria ecological status of water bodies, recreation, heritage assets, sustainable transport and transport related pollution, and scored 'red' in the Sieve 2 assessment.
- **MLPCS014 Bunkers Hill South** has potential for high impacts against five Sieve 3 assessment criteria, ancient woodland, recreation, sensitive land uses, sustainable transport and transport related pollution, and scored 'red' in the Sieve 2 assessment.
- **MLPCS016 Howe Green** has potential for high impacts against five Sieve 3 assessment criteria, ecological status of waterbodies, recreation, sensitive land uses, sustainable transport and transport related pollution, and scored 'red' in the Sieve 2 assessment.
- **MLPCS023 Warren Farm** has potential for high impacts against five Sieve 3 assessment criteria: ecological status of water bodies, groundwater vulnerability, recreation, sensitive land uses and sustainable transport.
- **MLPCS019 Pipers End** has potential for high impacts against five Sieve 3 assessment criteria, ecological status of water bodies, heritage assets, sensitive land uses, sustainable transport and transport related pollution, and scored 'red' in the Sieve 2 assessment.

6.6 These thirteen site options are all located around Hatfield or to the north, south and east of Hertford in the centre of the County. Again these sites are in close proximity to the A414 which runs through the middle of the County connecting the sites to Hatfield, Hertford, Hemel Hempstead, St Albans and Welwyn Garden City.

6.7 The remaining three sand and gravel site options (MLPCS001RS Cromer Hyde Farm, MLPCS015 Plashes Farm and MLPCS007 Barwick) have **over seven 'red' scores** suggesting that these sites offer the least potential as sand and gravel site allocations. Site MLPCS001RS lies to the north west of Hatfield, whereas sites MLPCS007 and MLPCS015 represent the most north eastern site options. Site MLPCS001RS has the potential for medium impacts on heritage assets within close proximity to the site. Site MLPCS015 has potential for very high impacts on the pockets of ancient woodland it contains. Furthermore, all five options lie within close proximity to sensitive land uses and have the potential for high impacts on the local recreation resource, sustainable transport network and landscape.

6.8 There is some uncertainty attached to the suitability of the relatively unconstrained sand and gravel site options MLPCS017 and MLPCS018, moderately constrained sites MLPCS011, MLPCS014, MLPCS016, MLPCS023 and MLPCS019 and highly constrained site MLPCS007. These eight sites all score 'red' in the Sieve 2 assessment due to a lack of information to conclusively determine their economic viability and deliverability. This uncertainty should be resolved before any of these site options are allocated within the Hertfordshire Minerals and Waste Local Plan. MLPCS001RS was accompanied by additional information in relation to viability and deliverability when it was resubmitted in 2022. This has reduced the uncertainty and the score has improved.

6.9 Overall, the sand and gravel site options and preferred areas that score between two and four 'red' scores (i.e., MLPCS012, MLPCS017, and MLPCS021) are likely to have the greatest potential to mitigate the adverse impacts associated with their excavation and operation and are therefore

considered to be the most appropriate site options for allocation in the Minerals and Waste Local Plan.

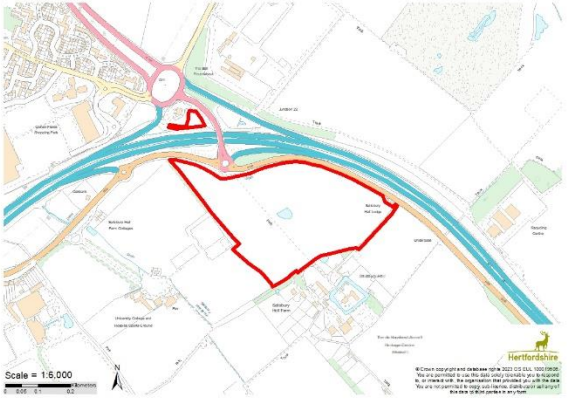

- 6.10 It should be noted that the greater the number of site options selected for extraction in the plan period and the closer their proximity, the greater the potential for cumulative effects. This report has considered potential cumulative effects in relation to existing mineral sites only, and has considered the proximity of non-minerals development in relation to Sieve 1 as well as sensitive land uses within Sieve 3. A full consideration of cumulative effects of the Plan is set out in the Sustainability Appraisal that will form part of the next consultation on the Minerals and Waste Local Plan.

Appendix 1: Site Proformas

Sites Submitted in 2016/early 2017 and Reassessed in 2023

Site Selection Proforma: MLPCS002

Site Information

Site Name: Land at Salisbury Hall	
	
Site Area	14.4 ha
Central Grid Ref	203102 519392
District	Hertsmere
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	860,000t
Planning History	The site has no relevant planning history.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is sufficient to support the proposed allocation.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This is now a fully viable and properly assessed proposal.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within in close proximity to any areas of ancient woodland.
Aquifers	Medium	The site is located within a Secondary A aquifer.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas to known to include BAP species.
BMV land	Medium	Approximately 95% of the site is located within Grade 2 agricultural land with the remaining 5% located within Grade 3 agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	High	The site contains a small water body within its centre.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the

Criterion	Score (Impact)	Justification
		openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, due to the openness of the site the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Low	The site is not located with a Source Protection Zone.
Heritage assets	High	<p>There are no designated assets within the site, but immediately to the south east of it is the grade II* listed building, Salisbury Hall; around which there is a cluster of further listed buildings. These buildings are all grade II listed and include: The Old Coach House, Nell Gwynn Cottage, Nell Gwynn bridge, Gateposts and revetment to moat, Granary and barns. These buildings are set back from Ridge Hill Road, along private entrances which are contained within large hedgerows, landscaped gardens and moated site, but it is likely that there will be some intervisibility and direct impact upon the setting of those assets which have either a functional or historical relationship with the site.</p> <p>Further south there are two grade II listed milestones along the B556. These assets have a roadside setting that is unlikely to be meaningfully impacted.</p> <p>To the northwest of the site lies London Colney Conservation area, within which there are multiple grade II listed buildings. It is unlikely given their distance from the site and the intervening built development that any of these assets would be affected by development of the site.</p> <p>There are no locally designated assets within the site, or its immediate environs¹⁸.</p> <p>The site does not lie within an archaeological area of importance but the HER does indicate that there are non-designated assets, in the form of cropmarks, within and around the site. There are also three areas of archaeological importance located in the wider vicinity, with that at Salisbury Hall being immediately adjacent to the site. The archaeological remains would likely be removed/truncated.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.

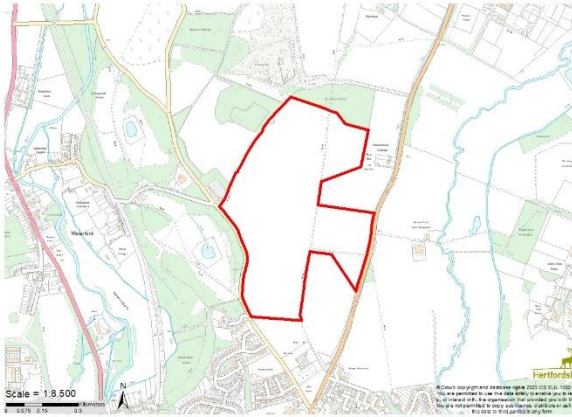

¹⁸ Based on review of the Hertsmere Local List. St Albans – to the north of the site – does not appear to have a local list.

Criterion	Score (Impact)	Justification
Local Nature Reserves and Local Wildlife Sites	Low	The site is not located within or immediately adjacent to a Local Nature Reserve or Local Wildlife Site.
Proximity of allocated residential or built development	Low	The site is located approximately 120m to the south of London Colney and 520m to the east of Old Cottages. The site is located within close proximity of a large site previously promoted through the Hertsmere Borough Council Local Plan process for 6,000 dwellings. However, the new Hertsmere Local Plan is at a very early stage.
Recreation	High	The site contains a PRoW (No: 027) and is immediately adjacent to a number of other PRoWs (No: 013 and 042). The Watford Football Club Training Ground is located immediately to the west of the site.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	The Watford Football Club Training Ground is located immediately to the west of the site and the Salisbury Hall and other residential properties are located immediately to the south of the site. The Salisbury Lodge Cattery is also located immediately adjacent to the site.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is located within close proximity to the strategic road network (M25 and A1081) but is not located within or in close proximity to an Air Quality Management Area.
Summary of HCC Highways Comments		Score:
<p>The site is considered to raise significant concerns which are likely to attract highway objections.</p> <p>The A1087/B556 junction has existing capacity problems. It is suggested by the site promoter that HGV transportation would use the B556 and A414 meaning that all HGV movements would be directed through the A1087/B556 roundabout, which serves all the vehicles entering and exiting the Colney Fields Shopping Park. The cumulative impact of the vehicles associated with the site and M25 junction 22 with the vehicles generated by the Colney Fields Shopping Park would need to be assessed to determine whether this routing arrangement is feasible.</p> <p>Detailed analysis and suggested mitigation measures will need to accompany a planning application, in addition to a site specific Transport Assessment.</p>		
Summary of LVIA Comments		
<p>The site is considered to have low-moderate sensitivity to mineral extraction due to the lack of valued features and proximity to existing built development and the ability to mitigate impacts which could be achieved through screening. Restoration proposals could also strengthen the existing degraded landscape pattern and hedgerow structure.</p>		

Criterion	Score (Impact)	Justification
		<p>There are also a limited number of residential properties in the vicinity of the site, of which only two properties along Bell Lane have open views. The impacts of mineral extraction could be mitigated by screening without losing existing visual amenity.</p> <p>Mineral extraction on the site is likely to affect a small number of people using the footpath across the site.</p>

Site Selection Proforma: MLPCS003

Site Information

Site Name: Land at Ware Park	
	
Site Area	35.5 ha
Central Grid Ref	532296, 214911
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	2.6 million tonnes (t)
Planning History	<p>Two mineral planning applications were submitted in 1990 (3/0959-90) and 1995 (3/1653-95) both of which were withdrawn.</p> <p>Two applications for mineral extraction (3/0770-16 and 3/2352-17) have recently been refused. Application 3/0770-16 is currently subject to an ongoing Planning Inquiry (APP/M1900/W/17/3178839).</p>

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information (including that contained within the planning application and environmental statement) is adequate to support the proposal.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This is now a fully viable and properly assessed proposal.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	High	<p>The site is located immediately adjacent to one area of ancient woodland. A second area of ancient woodland is located to the south of the site on the opposite side of Sacombe Road.</p> <p>However, the restoration of the site proposes woodland and a small area of wetland which could have positive effects on ecological connectivity of the woodland. However, this is uncertain as details will not be known until the planning application stage.</p>
Aquifers	Medium	The site is located within a Secondary A aquifer.
BAP Priority Species or Habitats	Positive	<p>The site is located immediately adjacent to two BAP habitats and a third BAP habitat is located to the south of the site on the opposite side of Sacombe Road.</p> <p>The restoration of the site proposes woodland and a small area of wetland which could have positive effects on nature conservation and BAP priority species and/or habitats. However, this is uncertain as details will not be known until the planning application stage.</p>
BMV land	Medium	The whole of the site is located within Grade 3 agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites. Rickneys Quarry is located in close proximity;

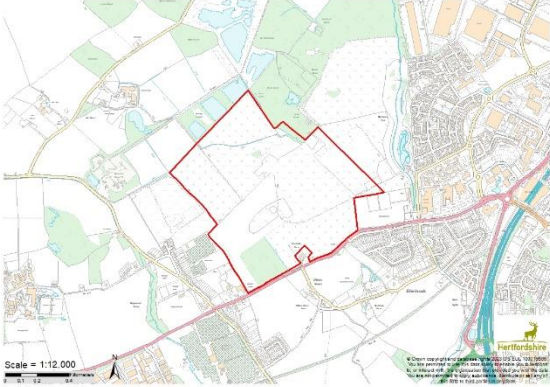

Criterion	Score (Impact)	Justification
		however, this site has been mothballed and is no longer in operation.
Ecological status of water bodies	Low	The site is not located near to a water body.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	High	Approximately 45% of the site is located within Source Protection Zone 1, 20% within Source Protection Zone 2 and 35% within Source Protection Zone 3.
Heritage assets	Medium	<p>This site is within 1km of several heritage assets. Hertford Conservation Area lies to the south of the site and may potentially be affected by setting change if development occurs on the site. Within the conservation area there are eight listed buildings – grade II and II* - within 1km of the site. These listed buildings are unlikely to experience setting change as a result of development as they do not appear to have a visual, functional or historical relationship with the site.</p> <p>To the southwest of the site is Goldings, a grade II registered park and garden, within which there are a number of listed buildings. Four of these listed buildings lie within 1km of the site and are grade II listed. Neither the park nor the listed buildings appear to have a relationship with the site that would result in setting change.</p> <p>There are another eleven grade II listed buildings and one grade I listed building west of the site, located either along the A119 or in Waterford. The majority of these do not appear to have a relationship with the site, a Waterford Hall and granary could potentially be functionally/ historically related and therefore subject to low level setting change.</p> <p>To the east of the site there are four grade II listed buildings associated with the non-designated Ware Park. The listed structures include the south lodge, the forecourt</p>

Criterion	Score (Impact)	Justification
		<p>wall to the pomarium, the pomarium and walled garden and hermitage and grotto gardens. The setting of these assets relates to the park and house, and as such, development of the site should not affect their heritage significance.</p> <p>The site does not contain any areas of archaeological interest but the HER indicates that there are non-designated archaeological assets within it. These would be removed/ truncated by development.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is under option to a mineral operator.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Positive	<p>The site is located on the opposite side of the road to the Waterford Heath Local Nature Reserve and immediately adjacent a Local Wildlife Site (Rickneys Quarry) with records of at least one Hertfordshire Red List butterfly species with evidence that the site is suitable to maintain breeding populations. The site is also immediately adjacent to St. Johns Wood (Rickneys Quarry) Local Wildlife Site.</p> <p>However, the restoration of the site proposes woodland and a small area of wetland which could have positive effects on nature conservation. However, this is uncertain as details will not be known until the planning application stage.</p>
Proximity of allocated residential or built development	Medium	<p>The site is located immediately to the north of Hertford and approximately 400m to the east of Waterford, 680m south of Crouchfield and 700m west of Ware Park.</p> <p>The site is located immediately to the north of Policy HERT4: North of Hertford (150 new homes) in the East Herts District Plan (2018).</p>
Recreation	High	<p>The site contains a PRoW (no: 001) in the central eastern area of the site and there are others adjacent to the site including 013 and 003 to the north, 013 to the east and 009 to the south.</p> <p>The site is also located on the opposite side of the road to the Waterford Heath Local Nature Reserve.</p>
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use, woodland and a small area of wetland.
Sensitive land uses	High	The site is located immediately to the north of Hertford and a number of properties along Sacombe Road. The site is also located approximately 70m to the west of a property

Criterion	Score (Impact)	Justification
		along Wadesmill Road. The Salisbury Lodge Cattery is also located immediately adjacent to the site.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	High	The site is not located within or in close proximity to an Air Quality Management Area but is located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>The site promoter suggests access directly onto Wadesmill Road with all traffic to and from the north via the A602 – the majority of vehicle movements will be via A10/A602 junction. Wadesmill Road is a numbered classified secondary distributor road with a speed limit of 60mph and a 7.5 tonne weight limit.</p> <p>A solution may be possible through mitigation measures set out in a site specific Transport Assessment that accompanies a planning application.</p> <p>The site was also under consideration for a mineral planning application (3/0770-16), although this has now been refused. Whilst, the application was refused after additional amendments HCC highways did not raise an objection to the proposals subject to conditions.</p>		
Summary of LVIA Comments		
<p>The site is considered to have low-moderate sensitivity to mineral extraction as the site is largely enclosed although its openness to the east could result in an adverse impact on the unified rural character of the wider river valley. That said, impacts could be mitigated by screening and extraction operations being set back from the ancient woodland.</p> <p>Residential properties are located to the south, however, views of the site are screened. Properties along Sacombe Road and from the footpath along the western boundary would have views of the site but they could be mitigated through planting.</p>		

Site Selection Proforma: MLPCS006

Site Information

Site Name: Hatfield Aerodrome	
	
Site Area	86.6 ha
Central Grid Ref	208269 519951
District	St. Albans and Welwyn Hatfield
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	8 million tonnes (t)
Planning History	The site has been subject to three applications, one permitted in 2017 and two refused in 2020 and 2023.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is adequate to support the proposed allocation.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This is a fully viable and properly assessed proposal.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Medium	The site is located within the Luton Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity to any areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Positive	The site contains deciduous woodland and additional habitats. However, the proposed restoration includes the creation of grassland and wetland which could have positive effects on BAP priority habitats and/ or species. However, this is uncertain as details will not be known until the planning application stage.
BMV land	Medium	Approximately 70% of the site is located within Grade 2 and 15% is located within Grade 3 agricultural land. The remaining 15% is located within non-agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites. However, the site is in close proximity to the existing Cemex Hatfield Quarry processing plant on Oaklands Lane.
Ecological status of water bodies	High	The site contains two watercourses.
Flood risk	Positive	The site is not located within Flood Risk Zones 3a or 3b. It is however located within Flood Risk Zone 2. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy

Criterion	Score (Impact)	Justification
		rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	<p>Approximately 60% of the site is located within a Source Protection Zone 3 with the remaining 40% located within Source Protection Zone 2.</p> <p>There is a plume of bromate coincident with this site with a concentration of 750 µg/l to more than 1000 µg/l in a substantial part of the area. The implications of mineral extraction on groundwater contamination in this area remain uncertain.</p>
Heritage assets	High	<p>There are no designated heritage assets within the site, but there are a number of listed buildings immediately to the south of it. These include Popefield Farmhouse, Barn range, Granary and adjoining outbuilding, all of which are grade II listed. The rural setting of these assets aids their legibility and this would be diminished by development.</p> <p>Immediately to the southwest of the site are two more grade II listed buildings - the Three Horseshoes Public House and a milestone; the setting of these assets are unlikely to be meaningfully affected by development.</p> <p>Further south, there are several more grade II listed buildings around Wilkin's Green. These include the grade II* listed Torilla, and the grade II listed Great Nast Hyde - including front garden wall, Barns on the north and west of the farmyard, and the Cottage - as well as Forge Cottage, Sunnyside, Nast Hyde Farmhouse. The agricultural buildings may have a functional/ historical relationship with the site that could be affected by development.</p> <p>At Smallford there is also a grade II listed station; it has no relationship with the site and would not be affected by development.</p> <p>Even further south is Sleafshyde Conservation Area, with which there are a number of grade II listed buildings. Two of these - The Plough Inn and Farm Cottage - lie within 1km of the site, but it is unlikely that they would be affected by development.</p>


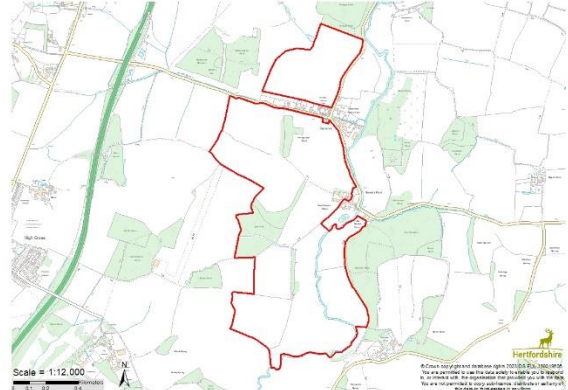
Criterion	Score (Impact)	Justification
		<p>There are no locally listed buildings within the site, or its immediate environs¹⁹.</p> <p>The HER indicates that there are non-designated archaeological assets within, and near, to the site. These could be removed/ truncated by development.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is under option to a mineral operator.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Positive	<p>The site is located immediately adjacent to the Home Covert and Round Wood Local Wildlife Site.</p> <p>However, the proposed restoration includes the creation of grassland and wetland which could have positive effects on nature conservation. However, this is uncertain as details will not be known until the planning application stage.</p>
Proximity of allocated residential or built development	Medium	<p>The site is located immediately adjacent to Hatfield and Smallford.</p> <p>The site is not located within close proximity to or within a site allocation of St. Albans District Local Plan 1994, St. Albans draft Regulation 18 Local Plan 2023 or the Welwyn Hatfield District Local Plan 2005. However, the site falls within close proximity to Policy SP 24: New Village at Symondshyde (1,130 new homes) and Policy SP 22: North West Hatfield (1,650 new homes) within Welwyn Hatfield's Proposed Submission Local Plan (August 2016). This plan is currently at an advanced stage of examination.</p>
Recreation	High	The site contains two PRoW (No's:014 and 015) and is within close proximity of two additional PRoW (No's: 012 and 062) and the Hertfordshire Sports Village. Furthermore, the site is used for informal recreation.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored to a combination of nature conservation (creation of grassland and wetland) and public open space (country park).
Sensitive land uses	High	The site is located immediately adjacent to Hatfield, Smallford and Popefield Farm.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.

¹⁹ St Albans does not appear to have a local list.

Criterion	Score (Impact)	Justification
Pollution to the environment (dust, air, water)	Low	The site is located immediately adjacent to the strategic road network (A1057) but is not located within or in close proximity to an Air Quality Management Area.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>The site was subject to a minerals planning application (5/0394-16) and the site promoter stated that the majority of HGV traffic would route to the east towards the A1(M). Access would be on to the A1057 and it is understood that a Road Safety Audit (RSA) is being undertaken. The Hatfield Road/Comet Way junction has been identified as a congestion hotspot and the Hatfield Road/Ellenbrook Road junction has also been flagged up as a potential problem location.</p> <p>A solution may be possible through mitigation measures set out in a site specific Transport Assessment that accompanies a planning application.</p>		
Summary of LVIA Comments		
<p>The site is considered to have low-moderate sensitivity to mineral extraction due to its former industrial use. The area is flat and heavily screened and post-operation restoration could improve the existing landscape character.</p> <p>The boundary vegetation screens the site from the small number of properties within the vicinity of the site. Any impacts can be fully mitigated through screening without an adverse impact on visual amenity.</p>		

Site Selection Proforma: MLPCS007

Site Information

Site Name: Barwick	
	
Site Area	120.3 ha
Central Grid Ref	218817 538112
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	8 million tonnes (t)
Planning History	Part of the site has been subject to a number of planning applications for mineral extraction. Four of which were refused (E-2097-66 ²⁰ , E-1950-64 ²¹ , E-1572-70 ²² and E/2493-65 ²³), one of which was permitted (E/1387-56) and one of which was withdrawn (E/1531-60).

²⁰ Site refused due to its location forming an attractive feature of the Rib Valley; gravel extraction would destroy the hillside and land formation which subsequent tree planting would not restore; the gravel workings, plant and machinery could not effectively screened from view; the rural character of local roads and the character and setting of Barwick Ford would be adversely effected by their use, the gravel lorries and associated congestion; and there is insufficient evidence to show that there is a demand for this material which cannot be adequately met by other sources.

²¹ Same reasoning as application: E-2097-66.

²² Same reasoning as application: E-2097-66.

²³ Same reasoning as application: E-2097-66.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is currently inadequate to support proposed allocation. Limited information has been provided.
Suitability for consideration as a Specific Site allocation, on resource grounds	No.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	High	The site is immediately adjacent to an area of ancient woodland.
Aquifers	Medium	The site is located with Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Medium	The site contains two areas of deciduous woodland and one area of additional BAP habitat. The site is also located immediately adjacent to additional areas of deciduous woodland.
BMV land	Medium	The majority of the site is located within Grade 3 agricultural land with the remaining part located in Grade 2.
Cumulative effects	Medium	The site is not located within 250m of the Barwick Ford Site which has yet to be worked.
Ecological status of water bodies	High	The site contains one watercourse within the site, the River Rib.
Flood risk	Positive	There are areas of Flood Zone 2 within this site. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.

Criterion	Score (Impact)	Justification
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is not located within the Green Belt.
Groundwater vulnerability	High	The site lies within SPZ1 and SPZ2.
Heritage assets	High	<p>There are no designated assets within the site. However, a number of listed buildings at Great Barwick Manor, including the grade II* Farmhouse and West Barn, and the grade II listed Granary, North barn, Stable and Little Barwick Farm, lie to the immediate east of the site and are partly encircled by it. The rural setting of these assets is important to their legibility and development would potentially significantly diminish this.</p> <p>To the southwest of the site there are further grade II listed buildings. These include the Sawtrees Manor and the East Barn, West Barn and Granary. Again, the ability to read these assets is related to their rural setting of which the site may form part, although any affect to these assets would likely be less than significant.</p> <p>Further to the southeast of the site lies Youngsbury, a grade II* registered park and garden, within which there is a number of listed buildings and a scheduled monument. These include the grade II* Youngsbury stable blocks, the grade II Youngsbury and garden wall, and the Youngsbury Roman barrows. The site may form an important part of the barrows setting and could feature in views from the park and house. As such there is the potential for development to result in some change to these assets setting.</p> <p>Adjacent to the park is Home Farm, which comprises four grade II listed buildings: Home Farm farmhouse, east barn, west barn and a farm building. Again, the ability to read these assets is related to their rural setting, of which the site may form part, however, development is unlikely to result in meaningful setting change.</p> <p>To the north of the site lies the grade II Plashes Farm, adjacent to which is a grade II* listed barn and stables. There are also three grade II listed cottages along the road by Hanging Wood. Again, the ability to read these assets is likely related to their rural setting, of which the site may form part, but development is unlikely to result in meaningful setting change.</p> <p>There are no locally listed buildings within, or immediate to, the site²⁴.</p>



²⁴ St Albans does not hold a local list.

Criterion	Score (Impact)	Justification
		The HER does not record any assets within the site but there are records around the site, which may suggest a potential for archaeology.
International and national ecological designations	High	The site is immediately adjacent to Plashes Wood SSSI.
Land ownership	Medium	The site is currently not in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is located within Great Barwick Manor Area Local Wildlife Site. The site is also immediately adjacent to Sawtrees Wood & New Plantation Local Wildlife Site.
Proximity of allocated residential or built development	Medium	The site is located immediately adjacent to Barwick. The site is located within close proximity to Policy WARE2: Land North and East of Ware (1,000 new homes) in the East Herts District Plan (2018).
Recreation	High	The site contains two PRow including No's 045 and 060 and is immediately adjacent to a number of other PRowS including 011 and 062.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored to agriculture, if appropriate.
Sensitive land uses	High	The site is located immediately adjacent to Barwick and properties immediately north of Sawtrees ancient woodland (also within close proximity to Barwick Ford).
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is located approximately 680m to the east of the strategic road network (A10) but is not located within or in close proximity to an Air Quality Management Area.
Summary of HCC Highways Comments		Score:
<p>The site has not been assessed by HCC Highways as no information has provided on the proposed access points or HGV routing.</p> <p>Further detailed analysis will need to be provided in a Transport Assessment detailing the proposed trip generation and the impact on the network (including HGV routing). Additionally, information on the proposed access arrangement will be required so that HCC can assess its feasibility.</p>		
Summary of LVIA Comments		

Criterion	Score (Impact)	Justification
		<p>The site is considered to have moderate-high sensitivity to mineral extraction due to the varied landform and land cover pattern and its sense of tranquillity. Mineral operations are likely to adversely affect the distinctive rural character of the area.</p> <p>There are also a number of local residents who will have open views of the site and users of the network of footpaths that cross or run adjacent to the site will also have views. Impacts cannot be fully mitigated without blocking views over the site which are currently enjoyed by the residents and footpath users.</p>

Site Selection Proforma: MLPCS009

Site Information

Site Name: Hatfield Quarry – Land adjoining Coopers Green Lane	
	
Site Area	124.5 ha
Central Grid Ref	210574 521685
District	Welwyn Hatfield
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	3.5 million tonnes (t)
Planning History	The site was refused planning permission, and the decision notice was issued on 6 January 2021.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is adequate to support the proposed allocation.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This is a fully viable and properly assessed proposal.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Medium	The site is located within the Luton Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity of any areas of ancient woodland.
Aquifers	Medium	The site is located within a Secondary Undifferentiated aquifer.
BAP Priority Species or Habitats	Positive	The site is located immediately adjacent to one area of deciduous woodland. The proposed restoration includes the creation of wetland which could have positive effects on BAP priority habitats and/ or species. However, this is uncertain as details will not be known until the planning application stage.
BMV land	Medium	Approximately 60% of the site is located within Grade 2 agricultural land, 30% in non-agricultural land and 10% is in Grade 3 agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	High	The site contains one watercourse and is adjacent to an additional watercourse.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.

Criterion	Score (Impact)	Justification
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	Approximately 95% of the site is located within Source Protection Zone 3 with the remaining 5% located in Source Protection Zone 2.
Heritage assets	High	<p>There are no designated assets in the site. One grade II listed building – The Old Cottage - is surrounded by the site, which currently provides it with a rural setting. This asset may have a functional/ historical relationship with its rural setting, which development would result in the loss of.</p> <p>In the wider vicinity there are a number of other grade II listed buildings. To the south, within Hatfield, are six buildings that are unlikely to have any relationship with the site and should not therefore be affected by its development. The remaining assets - Astwick Manor to the west, Gosmoor to the north and Woodhall to the east – could all potentially have a functional or historic relationship with the site that may change as a result of development but probably only at a minor or negligible level.</p> <p>There are no locally listed buildings within the site or its immediate environs²⁵. The site includes two areas of archaeological interest (AAS12 and AAS52) and the HER has records of non-designated assets within the site. Development would result in the removal/ truncation of these assets.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	Part of the site is in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.

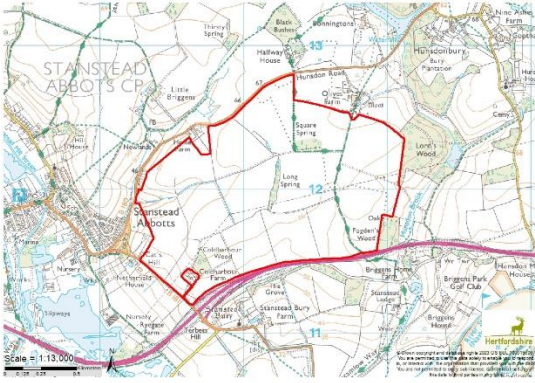

²⁵ Welwyn Hatfield does not have a local list.

Criterion	Score (Impact)	Justification
Local Nature Reserves and Local Wildlife Sites	Low	The site is not located within or immediately adjacent to a Local Nature Reserve or Local Wildlife Site.
Proximity of allocated residential or built development	Medium	The site is located immediately adjacent to Hatfield and Stanborough. The site is not located within or in close proximity to a site allocation in the Welwyn Hatfield District Local Plan 2005. However, the site is located within Policy SP 22: North West Hatfield (1,650 new homes) and within close proximity to Policy SP 24: New Village at Symondshyde (1,130 new homes) of the adopted Welwyn Hatfield Local Plan (2023).
Recreation	High	The site contains two PRoW (no: 034 and 037) in the eastern section of the site and there are others located adjacent to the site (033, 041 and 042). The site is also immediately adjacent to two designated areas of open space.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored to agriculture, with some wetland conservation. It is also suggested that a landform that would not prejudice potential future residential development would also be restored.
Sensitive land uses	High	The site is located immediately adjacent to Hatfield, Stanborough, The Old Cottage along Green Lanes, a number of properties along Great Braitch Lane and a property off Hatfield Avenue. It is also approximately 40m to the east of a property located at the junction of Hatfield Avenue and Coopers Green Lane.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Low	The site is located immediately adjacent to the strategic road network (A1(M)) and is not located within or in close proximity to an Air Quality Management Area.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>There is an existing access off Oaklands Lane. The site promoter proposes to extend the existing conveyor system to transport the minerals under Coopers Green Lane to the existing plant site located off Oaklands Lane.</p> <p>Information on the proposed trip generation and trip distribution is required so that HCC Highways can assess what impact the additional HGV movements would have on the network.</p>		

Criterion	Score (Impact)	Justification
A solution may be possible through mitigation measures set out in a site-specific Transport Assessment that accompanies a planning application.		
Summary of LVIA Comments		
<p>The site is considered to have moderate sensitivity to mineral extraction due to the flat landform and simple land cover pattern and the levels of existing development along the A1(m) corridor. Although the site is enclosed by high hedgerows along Cooper’s Green Lane, properties on the edge of Hatfield Garden Village has views of the site. Some of the impacts could be mitigated through woodland planting to the north of Hatfield Garden Village.</p>		

Site Selection Proforma: MLPCS010

Site Information

Site Name: The Briggens Estate	
	
Site Area	187.75 ha
Central Grid Ref	540185, 211984
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	8.8 million tonnes (t)
Planning History	The site has no relevant planning history.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is adequate to support the proposed allocation.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This is a fully viable and properly assessed proposal.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not within an Airport Safeguarding Zone.
Ancient Woodland	High	The site is immediately adjacent to Lords Wood Ancient Woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Positive	The site contains two areas of deciduous woodland and is immediately adjacent to two additional areas of deciduous woodland. However, the proposed restoration includes the creation of land for nature conservation which could have positive effects on BAP priority habitats and/ or species. However, this is uncertain as details will not be known until the planning application stage.
BMV land	Medium	Approximately 60% of the site is located within Grade 2 agricultural land with 40% located within Grade 3 agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	High	The site contains one watercourse and a number of small water bodies.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain.

Criterion	Score (Impact)	Justification
		However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	<p>Approximately 50% of the site is located within Source Protection Zone 2, 35% located within Source Protection Zone 3 and 15% is not located within any Source Protection Zone.</p> <p>There is a plume of bromate coincident with this site with a concentration of 750 µg/l to more than 1000 µg/l in a substantial part of the area. The implications of mineral extraction on groundwater contamination in this area remain uncertain.</p>
Heritage assets	High	<p>The only known record of historic significance within the site is a WWII plane crash site under the Protection of Military Remains Act 1986. To the northeast of the site is the grade II* listed building, Olives Farmhouse, associated with which are four more grade II listed buildings - the barn, stables, granary and the Old Bungalow. These are likely to have a functional/ historical relationship with the site that would be diminished by development of the site.</p> <p>Beyond Olives Farm lies the grade II listed Bonningtons, a former farmhouse. Its garden wall, gates and gate piers are also grade II listed. These assets are unlikely to be meaningfully affected by development within the site.</p> <p>There are multiple listed buildings further to the northeast of the site within Hudsonbury. These are all grade II listed, with the exception of Hunsdon House and the Church of St Dunstan's, which are both grade II* listed, and the Scheduled Hunsdon Brook Tudor Fishpond. These assets are visually separated from the site by Bury Plantation and Lord's Wood and are unlikely to have a relationship with the site that would result in meaningful setting change should development occur.</p> <p>Newlands, a grade II listed building, lies just north of the site, on the opposite side of the B180. North of it lies Windmill Cottage, Little Briggens and the Coach House at Little Briggens, all of which are grade II listed buildings. Development of the site is unlikely to result in meaningful setting change to these assets as they do not appear to</p>

Criterion	Score (Impact)	Justification
		<p>have a deliberate visual or historical/ functional relationship with the site.</p> <p>To the west of the site there is a large a number of further listed buildings – all grade II and II *. These all lie within the Stanstead Abbott’s Conservation Area. The character and special interest of the conservation area is likely to be susceptible to change as a result of development.</p> <p>The listed buildings within the conservation area that are closest to the site include: Netherfield Cottages, The Coach House and gate screen, piers and gates, an ornamental dairy and Eventide House. The cottages and dairy may have a relationship with the rural land that forms the site and could be susceptible to setting change.</p> <p>South of the site, on the opposite side of the A414, is the Grade II registered park and garden - Stanstead Bury. Within and adjacent to this park are another 19 listed buildings. These include, the Old Church of St James, which is Grade I listed, and Standstead Bury, which is grade II* listed. The remaining buildings and structures are grade II listed and include the barn, granary, Ha Ha, stables, granary, north wall of the east garden, the bull house, dairy, outhouse and boundary wall, and several monuments/tombs associated with the church. There may be views out of the park/ house that may be affected by development and it is possible that the site once formed part of the agricultural lands associated with the site.</p> <p>To the southeast of the site are a further four grade II Listed buildings – Briggens Farmhouse, stables, and aisled barn and Stanstead Lodge. There is also a second grade II registered park and garden, Briggens, in which there are six grade II listed structures – Briggens House, gates and gate piers, lodge, kitchen garden walls, stable block, and west terrace and steps. Again, the rural land within the site could be related to some of these assets in such a way that development would result in setting change.</p> <p>The grade II listed stable and granary at Olive’s Farm are on the heritage at risk register, as is the curtilage listed stables at the barn. Also on the heritage at risk register are the grade II listed gates and gate piers and kitchen garden walls at Briggens House.</p> <p>There are four areas of archaeological significance within the site and the HER indicates that there is non-designated assets within the site. Development would result in their removal/ truncation.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The terms for an option agreement with a mineral operator are being finalised.

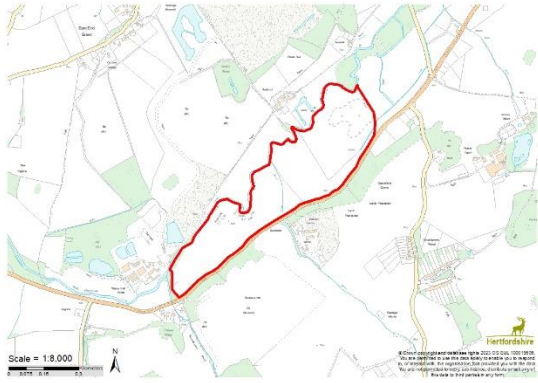

Criterion	Score (Impact)	Justification
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is immediately adjacent to Lord's Wood Key Wildlife Site.
Proximity of allocated residential or built development	Medium	The site is located immediately adjacent to Hunsdon Road Cottages and approximately 110m east of Stanstead Abbots. The site is located within close proximity to Policy GA1: The Gilston Area (10,000 new homes) in the East Herts District Plan (2018). East Herts have recommended the application for approval although a decision notice has not been issued at the time of this report (February 2024).
Recreation	High	The site contains three PRoW (No's:002, 020 and 023). In addition, PRoW 022 is adjacent to the site.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored to agriculture, forestry and land to improve biodiversity.
Sensitive land uses	High	The site is located immediately adjacent to Hunsdon Road Cottages and surrounds Coldharbour Farm. The site is also located in the vicinity of Home Farm, Olives Farm and properties along Cat's Hill. The site is also on the opposite side of the B181 where a number of additional properties are located.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Low	The site is located immediately adjacent to the strategic road network (A414) and is not located within or in close proximity to an Air Quality Management Area.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>General Assessment</p> <p>The site is currently in agricultural use and forms part of The Briggens Estate situated immediately to the north of the A414 and west of Harlow. The proposal consists of an annual extraction of around 500,000 tonnes of sand and gravel aggregate, with the potential for other added value uses (bagging plants / RMX and concrete plants) and potential for the import of inert material supporting the restoration of the site.</p> <p>It is the Highway Authority's position that the most appropriate route for HGV's to the site would be via the A414. Access to the site is intended to be via the A414 and B181, currently access off the A414 onto the B181 is limited to east facing slips, which means vehicles approaching from the west (A10) would need to u-turn at some point east of the B181, the safest place to do this is currently at the Eastwick Roundabout. However, the Gilston Planning Application for the Central Stort Crossing removes this junction and therefore vehicles would</p>		

Criterion	Score (Impact)	Justification
		<p>have to go further into Harlow to u-turn, clearly this is unacceptable and such an additional length of unnecessary journey would be contrary to LTP4 Policy. To mitigate this impact the site promoter has considered a number of options. The only option that the Highway Authority supports in principle and is considered deliverable at this stage is for vehicles approaching from the west to re-opening of the existing west-facing slips that were previously constructed for a Gravel Extraction Quarry site, together with suitable connection to the B181. Vehicles approach from the east would do so via the existing east facing slips. Historically, when the west-facing slip roads onto the A414 were closed, a bridleway (019) was introduced through the A414 underpass. The west-facing slips meet at Netherfield Lane, from which a new haul road linkage will be established connecting onto the western side B181 Roydon Road via a priority-controlled junction. HGVs will then turn left out of the haul road link onto the Roydon Road B181 and proceed to the site access.</p> <p>Highway Impact</p> <p>Transport Assessment will be required which clearly identifies the likely transport implications on the highway network from the expected number of HGV movements both on a daily basis and during the peak traffic hours. Consideration must be given to the cumulative impacts arising from other committed developments as well as impacts on the nearby dwelling and Wildlife Trust land.</p> <p>Proposals will need to fully consider the interaction between site related traffic and other highway users, particularly people walking, cycling or riding a horse. Any proposals should include solutions which mitigate impacts on those users, in line with County Council’s Local Transport Plan Policies.</p> <p>The site access will be served from Roydon Road (B181), it is envisaged that this will take the form of a priority junction with a ghost island right turn on the northern side of Roydon Road. The design of the access to the site must be engineered in a way to prevent site traffic travelling through Stanstead Abbots and provide right turn lane into the site from Roydon Road (B181). The suitability and detailed design of the access would be subject to Road Safety Audits which could necessitate further alterations, however, the access proposed is acceptable in-principle.</p> <p>Site traffic will route along the B181 between the access and a new priority junction to be located in the vicinity of the existing east facing slips onto the A414. This junction would provide connectivity to allow for onward travel both east, via the existing slip lanes, and west via a new haul road connecting to the re-opened west facing slips.</p> <p>As a consequence of the proposal’s consideration should be given to vulnerable road users wishing to use the B181 and the impact of large numbers of HGVs using the route, with suitable alternative provision being made as appropriate.</p> <p>The junction, providing access to the A414, should be designed in accordance with DMRB CD123 and the proposals should be in-line with County’s Local Transport Plan 4 (LTP4) and National Planning Policy Framework (NPPF). In particular careful consideration should be given to the conflicting movements at the junction and associated intervisibility, the proximity of bus stops and the interaction with vulnerable road users. Road Safety Audits should then be undertaken for the proposal with any residual issues being addressed. Access onto the haul road will need to be carefully managed and designed.</p> <p>Re-opening of the west facing slip roads onto the A414 and the interaction with existing RoW need to be carefully considered. This would require operational management of the slips to prevent non-site traffic, and suitable operational access arrangements of the underpass under the A414 including consideration/mitigation of any impacts on bridleway Stansted Abbots 019.</p> <p>Collision Data</p> <p>The Highway Authority commissioned the County’s Road Safety Team to undertake a high-level report for the entire proposal initiated by the site promoter. It was considered that most of the concerns could be dealt with at the Detailed design stage and via legal Agreements, apart from</p>

Criterion	Score (Impact)	Justification
		<p>where the proposed haul road emerges onto the B181. With the introduction of new priority junction, opposite the A414 east bound on-slip, there will be significant increase in conflicting movements. This is where 6 reported accidents have occurred over a five-year period, half of these being of serious severity. Accordingly, this location raises fundamental highway safety concerns and needs to be reviewed as part of any application. Any alternative options/junction arrangements to be explored to alleviate highway safety concerns, should be subject to Stage 1 Road Safety Audit in order for any scheme proposals to be acceptable in-principle.</p> <p>Vulnerable Road Users</p> <p>Consideration should be given to vulnerable road users wishing to use the B181 and the impact of large numbers of HGVs using the route, suitable alternative provision should be made. For example, there are no on carriageway provisions for cyclists. It will need to be identified as part of any development whether cyclists use the proposed HGV route and what measures will be provided to protect these road users. Investigations must be carried out to establish possible parallel routes/ upgrading existing routes to improve accessibility for both pedestrians and cyclists.</p> <p>HGV Routing</p> <p>The access strategy to the site will need to fully consider HGV movements between the A414 and the access to the site on the B181. Therefore, any routing will need to demonstrate the suitability of the route in terms of the highway capacity constraints, safety and the impact on other vulnerable road users. It is estimated that there could be up to 232 vehicles movements per day, which includes 222 HGV movements. The demand is likely to be spread through the day with average hourly movements of 24 HGVs and peak hourly demand up to 20% of the daily total, i.e. up to 48 movements per hour. Additionally, discussions with HCC Highways Network Management would be required regarding the HGV route and weight restrictions on the network.</p>
		<p>Summary of LVIA Comments</p>
		<p>The site is considered to have low-moderate sensitivity to mineral extraction due to the gently undulating landform and its enclosure by both topography and existing vegetation. Impacts could be mitigated by safeguarding valued features within the site such as existing mature tree and woodland coppices. Post-operation restoration could provide the opportunity to increase the quality of the hedged field boundaries.</p> <p>Although there is a very limited number of properties with open views over the site, the impacts of mineral extraction could be mitigated by screening without losing their existing visual amenity. Impacts on recreational users of the Harcamlow Way could be mitigated by woodland screening or a diversion of the footpath. Any impacts on visual amenity could be fully mitigated with woodland planting.</p>

Site Selection Proforma: MLPCS0011

Site Information

Site Name: Water Hall Quarry – Farm Fields Area	
	
Site Area	24.3 ha
Central Grid Ref	529900 209800
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	956,000 tonnes (t)
Planning History	The site has been subject to five minerals planning applications four of which were refused (E/1246-67 ²⁶ , E/0827-68 ²⁷ , 3/0531-74 ²⁸ and 3/1236-01 ²⁹) and one of which was withdrawn (3/0464-94).

²⁶ Site refused on the grounds that the excavation of this valley floor would destroy the present scenic character of a particularly attractive reach of river and would be detrimental to the amenity of the area generally. In addition, there is no overriding need of the sand and gravel industry as a whole which would justify the granting of consent.

²⁷ Same reasoning as application E/1246-67.

²⁸ Same reasoning as application E/1246-67. Refusal appealed.

²⁹ Site refused on the grounds that the proposal would not conserve the landscape of the Lea Valley; limit the capacity of the floodplain and increase the risk of flooding elsewhere; is premature and would prejudice the outcome of the Hertfordshire Minerals Local Plan Review; the proposed landform is not natural in appearance and does not sit harmoniously within the surrounding landscape; the proposal would be intrusive in the local landscape particularly during working, having a detrimental impact upon the setting of Roxford House and the bridge over Roxford Moat, listed buildings and Roxford Moat, scheduled ancient monument.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Most information is adequate, but confirmation of mineral operator, landowner willingness and evidence of reserve calculation (including proven thickness of mineral) is needed, given that a (single) IMAU borehole suggests only limited thickness. No further evidence was submitted in response to the request for supplementary information.
Suitability for consideration as a Specific Site allocation, on resource grounds	No – proposer failed to respond to the request for additional information.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity of any areas of ancient woodland.
Aquifers	Medium	The site is located within a Secondary A aquifer.
BAP Priority Species or Habitats	Positive	The site contains one area of deciduous woodland and is immediately adjacent to two other areas of deciduous woodland. Two further areas of deciduous woodland are located on the opposite side of Lower Hatfield Road. However, the proposed restoration includes the creation of two lakes separated by wetland (14.4ha) and the provision on new wildlife habitat (1.5ha) which could have positive effects on BAP priority habitats and/ or species. However, this is uncertain as details will not be known until the planning application stage.
BMV land	Medium	The site is entirely located within Grade 3 Agricultural land.
Cumulative effects	Low	The site is located immediately adjacent to Waterhall Farm Quarry. However, Waterhall Farm Quarry is inactive with regard to mineral extraction, as such, no cumulative effects are likely. Furthermore, the site has been put forward by the owner of the existing quarry and it is likely that extraction at this site will only commence once works on

Criterion	Score (Impact)	Justification
		<p>the existing quarry have been completed, if Waterhall Quarry ever became active again.</p> <p>The site is also within close proximity to Bunkers Hill Quarry but it is currently being restored.</p>
Ecological status of water bodies	High	The site contains one watercourse and is immediately adjacent to another watercourse.
Flood risk	Positive	<p>The site is located within Flood Zones 2-3b.</p> <p>The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.</p>
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	Approximately 85% of the site is located within Source Protection Zone 3 with the remaining 15% not located within any Source Protection Zone.
Heritage assets	High	<p>There are no designated heritage assets within the site. Immediately to the north of the site is Roxford Moated site, a scheduled monument comprising earthworks and buried remains, which may be perceptible to setting change.</p> <p>Adjacent to the scheduled monument is a group of grade II listed buildings. These include Roxford House, Roxford Barns, a bridge, and ice house. It is possible that the site encroaches on the former parkland associated with these assets, meaning that development could affect their setting.</p> <p>Slightly further north lies another scheduled monument, a Baroque Garden in Grotto Wood. There is the potential for setting change to this asset, but possibly not in a meaningful way.</p> <p>Even further north lies the East End Green Conservation Area, containing three grade II listed buildings – two cottages and a farmhouse. Just north of the conservation area is Hazeldene a grade II listed building. Development within the site is unlikely to result in meaningful setting change to any of these assets.</p> <p>To the immediate west of the site is another grade II listed building, Waterhall Farm House. It is likely to have a</p>



Criterion	Score (Impact)	Justification
		<p>functional and historical relationship with the surrounding rural landscape, including the site. Development would diminish this relationship, and the ability to read the building.</p> <p>Further west is a grade II listed summer house at Arkley Hole. It is sited in Spring Wood and unlikely to be affected by development within the site.</p> <p>Some distance to the south of the site is Little Berkhamstead Conservation Area. To the east of which is the grade II listed Stockings, a former farmhouse with four associated outbuildings that are also all grade II listed. East of this is the grade II listed Bayford Hall. None of these assets are likely to experience meaningful setting change as a result of development of the site.</p> <p>A short distance to the east of the site is Bayfordbury, a grade II registered park and garden, in which there are four listed buildings. Three of these lie within 1km of the site; these include Bayfordbury House, which is grade II* listed building, and the garden and stables, both grade II listed. It is possible that views from the house and garden may be affected as a result of setting change.</p> <p>Just north of the Bayfordbury is the grade II listed Bayfordbury Park Farmhouse. Four grade II listed buildings are associated with it – a barn, stable, granary and shelter. It is possible that the agricultural land forming the site may at one point have had a relationship with the farm and these buildings.</p> <p>To the west of Bayfordbury Park Farm is a grade II listed bridge over the river Lea. Its heritage significance will relate to the road and river and development within the site is unlikely to affect it.</p> <p>There are no locally listed assets in the immediate vicinity of the site³⁰. Nor does the HER record any non-designated assets in the site. However, an absence of known archaeology does not preclude the potential for archaeology, especially given that part of the site is adjacent to a scheduled monument.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is under option to a mineral operator.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is immediately adjacent to the River Lea Local Wildlife Site.

³⁰ Welwyn Hatfield does not hold a local list.

Criterion	Score (Impact)	Justification
Proximity of allocated residential or built development	Low	The site is not located within or in close proximity to any existing settlements or any site allocations within the East Hertfordshire Local Plan 2018.
Recreation	High	The site is located immediately adjacent to a PRoW (No: 074) and is within 100m of three more PRoW (No's: 054, 074 and 254).
Restoration	Low	Once mineral extraction has finished onsite the land will be restored to two lakes separated by wetland (14.4ha) and new wildlife habitats on adjacent land (11.5ha).
Sensitive land uses	Medium	The site is located within close proximity of Roxford and a number of properties located on the opposite side of Lower Hatfield Road.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	High	The site is not located within or in close proximity to an Air Quality Management Area, but is not located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>It is stated by the site promoter that minerals can be carried over private land directly to the processing plant at Water Hall Quarry. This being the case, the amount of traffic generated by Water Hall will need to be carefully assessed to ensure that the level of traffic does not exceed that accepted in the past.</p> <p>The B158/B1455 junction has existing congestion problems. This would require further investigation.</p> <p>A solution may be possible through mitigation measures set out in a site specific Transport Assessment that accompanies a planning application.</p>		
Summary of LVIA Comments		
<p>The site is considered to have low-moderate sensitivity to mineral extraction due to the flat landform, the enclosed nature of the site and the proximity to existing mineral extraction sites.</p> <p>Impacts could be fully mitigated by screening and post-extraction restoration could strengthen the character of the river corridor which is adjacent to the site.</p> <p>There are also a limited number of residential properties within the vicinity of the site and impacts on them could be fully mitigated by screen planting without adversely changing their visual amenity.</p>		

Site Selection Proforma: MLPCS0012

Site Information

Site Name: Water Hall Quarry – Broad Green Area	
	
Site Area	11.8 ha
Central Grid Ref	210001 530723
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	450,000 tonnes (t)
Planning History	The site has been subject to two mineral planning applications one of which was refused (3/0705-13 ³¹) and one of which was withdrawn (E/1485-64).

³¹ Site refused due to the proposal involving working outside of an identified Preferred Area, wherein planning permission for mineral extraction will only be granted when the landbank is below the required level and there is a need for the proposal to maintain the County's appropriate contribution to local, regional and national need that cannot be met from the identified area, and it can be demonstrated that the proposals would not prejudice the timely working of Preferred Areas; or sterilisation of resources will otherwise occur; the application has failed to demonstrate a particular need for the mineral and it is not evident that sterilisation would occur; and the site is located within the Green Belt.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is adequate to support the proposed allocation. More convincing evidence would be needed at the planning application stage regarding the mitigation of (currently unexpected) potential impacts on groundwater.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity of any areas of ancient woodland.
Aquifers	Medium	The site is located within a Secondary Undifferentiated aquifer.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas to known to include BAP species.
BMV land	Medium	The site is located entirely within Grade 3 agricultural land.
Cumulative effects	Low	The site is within close proximity to Bunkers Hill Quarry but it is currently being restored.
Ecological status of water bodies	Low	The site does not contain nor is it located near to a water body.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).



Criterion	Score (Impact)	Justification
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery may have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	The site is entirely located within Source Protection Zone 3. There is a plume of bromate coincident with this site with a concentration of 750 µg/l to more than 1000 µg/l in a substantial part of the area. The implications of mineral extraction on groundwater contamination in this area remain uncertain.
Heritage assets	Medium	<p>There are no designated heritage assets within the site. To the east is Bayfordbury, a grade II registered park and garden in which there are four listed buildings. Three of these lie within 1km of the site; these include Bayfordbury House, which is grade II* listed building, and the garden and stables, both grade II listed. It is possible that the house and garden may be affected, but probably only to a limited extent as a result of setting change.</p> <p>Just north of the Bayfordbury is the grade II listed Bayfordbury Park Farmhouse. Four grade II listed buildings are associated with it – a barn, stable, granary and shelter. It is possible that the agricultural land forming the site may at one point have had a relationship with the farm but any setting change would be very limited.</p> <p>To the west of Bayfordbury Park Farm is a grade II listed bridge over the river Lea. Its heritage significance will relate to the road and river and development within the site is unlikely to affect it.</p> <p>To the north of the site is Roxford Moated site, a scheduled monument comprising earthworks and buried remains. It is possible that it has a relationship with the site but setting change would be limited.</p> <p>Adjacent to the scheduled monument is a group of grade II listed buildings. These include Roxford House, Roxford Barns, a bridge, and ice house. It is possible that the site encroaches on the former parkland associated with these assets, meaning that development could affect their setting to a limited extend.</p> <p>Slightly further north lies another scheduled monument, a Baroque Garden in Grotto Wood. There is the potential for setting change to this asset, but probably not in a meaningful way.</p> <p>To the west of the site is the grade II listed Waterhall Farm House. It is likely to have a functional and historical relationship with the surrounding rural landscape,</p>

Criterion	Score (Impact)	Justification
		<p>potentially including the site. Development would diminish this, and the ability to read the building.</p> <p>There are no locally listed assets within or in the immediate vicinity of the site.</p> <p>The site does not contain any areas of archaeological interest, nor does the HER record any non-designated assets in the site.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is under option to a mineral operator.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Low	The site is immediately adjacent to the River Lea Local Wildlife Site.
Proximity of allocated residential or built development	Low	<p>The site is located immediately adjacent to Broad Green Wood.</p> <p>The site is not located within or in close proximity to a site allocation of the East Hertfordshire Local Plan 2018.</p>
Recreation	Low	The site does not contain nor is it located within close proximity to any PRow or recreational facilities.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	The site is located immediately adjacent to Broad Green Wood.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is not located within or in close proximity to an Air Quality Management Area and is not located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>The site promoter states that mineral extraction would be carried over private land, through Bunkers Hill Quarry, across Lower Hatfield road directly to the processing plant at Water Hall Quarry. As the minerals will be processed at Water Hall, the amount of traffic generated by Water Hall will need to be carefully assessed to ensure that the level of traffic does not exceed that accepted in the past.</p>		

Criterion	Score (Impact)	Justification
The B158/B1455 junction has existing congestion problems. This would require further investigation.		
Summary of LVIA Comments		
<p>The site is considered to have low-moderate sensitivity to mineral extraction due to the gently sloping landform, simple land cover pattern and its enclosed nature. The proximity to former and operational mineral sites decreases the rural quality of the immediate area. However, valued features such as the historic field pattern should be safeguarded.</p> <p>There are also few residential properties within the vicinity of the site and only those at Broad Green Wood have open views, which due to the flat nature of the site, could be mitigated without losing existing visual amenity.</p>		

Site Selection Proforma: MLPCS014

Site Information

Site Name: Water Hall Quarry – Bunkers Hill South Area	
	
Site Area	18.1 ha
Central Grid Ref	209397 530439
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	1 million tonnes (t)
Planning History	Part of the site was subject to a mineral planning application which was withdrawn (3/0040-99).

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is currently inadequate to support the proposed allocation. More convincing evidence is needed on economic viability, including allowance for the mitigation of (currently unexpected) potential impacts on groundwater. Confirmation of mineral operator’s involvement would also be helpful. Evidence is also needed to support the reserve calculation. No further evidence was submitted in response to the request for supplementary information.
Suitability for consideration as a Specific Site allocation, on resource grounds	No – inadequate information.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	High	The site is immediately adjacent to one area of ancient woodland.
Aquifers	Medium	The site is located within a Secondary Undifferentiated Aquifer.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas to known to include BAP species.
BMV land	Medium	The site is located entirely within Grade 3 agricultural land.
Cumulative effects	Low	The site is within close proximity to Bunkers Hill Quarry but it is currently being restored.
Ecological status of water bodies	Medium	The site is located immediately adjacent to a water course.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain.

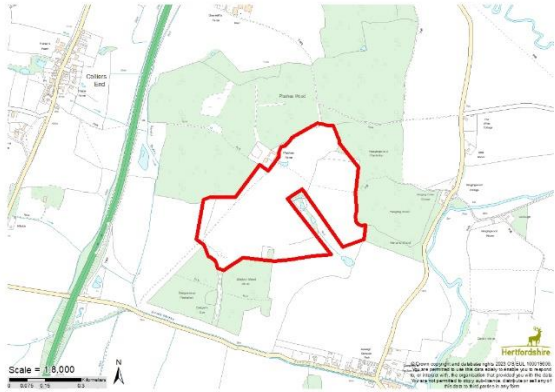

Criterion	Score (Impact)	Justification
		However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery may have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	<p>Approximately 15% of the site is located within Source Protection Zone 3 with the remaining 85% not located within any Source Protection Zone.</p> <p>There is a plume of bromate coincident with this site with a concentration of 750 µg/l to more than 1000 µg/l in a substantial part of the area. The implications of mineral extraction on groundwater contamination in this area remain uncertain.</p>
Heritage assets	Medium	<p>There are no designated heritage assets within the site boundary. A short distance to the south of the site is Bayford Hall, a grade II listed building. The setting of this asset may have a relationship with the site that will be affected by its development.</p> <p>Further south is the grade II* Church of St Mary, associated with which are five grade II listed structures. These include the Church Cottages, three burial monuments and a lych gate. The setting of these assets is unlikely to be affected in a meaningful way.</p> <p>To the east of the site is Bayfordbury, a grade II registered park and garden, within which there are four listed structures. One of these structures – the walls of the walled garden – lies within 1km from the site. There is the potential for the park to be affected by development of the site to a minor extent, but the walls of the walled garden are unlikely to be affected.</p> <p>To the north of the site is Roxford Moated site, a scheduled monument comprising earthworks and buried remains. Adjacent to the scheduled monument is a group of grade II listed buildings. These include Roxford House, Roxford Barns, a bridge, and ice house. Slightly further north lies another scheduled monument, a Baroque Garden in Grotto Wood. It is unlikely that these assets would experience meaningful setting change as a result of the site's development.</p> <p>The grade II listed Waterhall Farm House also lies to the north of the site. It may have a functional and historical</p>

Criterion	Score (Impact)	Justification
		<p>relationship with the surrounding rural landscape, including the site. However, the effect of its development would probably be very limited.</p> <p>To the southwest of the site there are five more grade II listed buildings associated with Stockings Farm. Little Berkhamsted Conservation Area also lies to the south of the site. Development is unlikely to result in meaningful setting change to these assets.</p> <p>There are no locally listed assets within the site, or its immediate environs. The site does not contain any areas of archaeological interest and the HER does not record any non-designated assets in the site.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is under option to a mineral operator.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Low	The site is not located within or immediately adjacent to a Local Nature Reserve or Local Wildlife Site.
Proximity of allocated residential or built development	Low	<p>The site is located within close proximity of Broad Green Wood.</p> <p>The site is not located within or in close proximity to a site allocation within the East Hertfordshire Local Plan 2018.</p>
Recreation	High	The site is located immediately adjacent to one PRow (No: 004).
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	The site is located immediately adjacent to Bayford Hall and Bayford Hall Farm.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	High	The site is not located within or in close proximity to an Air Quality Management Area but is located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>It is stated that the minerals would be carried over private land, through Bunkers Hill Quarry, across Lower Hatfield Road directly to the processing plant at Water Hall Quarry. This would</p>		

Criterion	Score (Impact)	Justification
		<p>result in an increase in HGVs crossing the Lower Hatfield Road, which could lead to congestion and safety issues along the road. As the minerals will be processed at Water Hall, the amount of traffic generated by Water Hall will need to be carefully assessed to ensure that the level of traffic does not exceed that accepted in the past.</p> <p>Further information is required with regards to the level of intensification the site would create at this access and also information on how this would be managed with the existing services.</p> <p>The B158/B1455 junction has existing congestion problems. This would require further investigation.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGV movements). Additionally, details of the proposed access arrangement would be required so that HCC Highways can assess its feasibility.</p>
<p>Summary of LVIA Comments</p>		
		<p>The site is considered to have low-moderate sensitivity to mineral extraction due to the gently undulating landform, simple land cover pattern and proximity to restored or active mineral sites which decrease the rural quality of the immediate area.</p> <p>There are a limited number of residential properties in the vicinity of the site and distant views of the site from Broad Green. Impacts could be fully mitigated by screening that would be in keeping with the existing landscape character and without adversely affecting visual amenity.</p>

Site Selection Proforma: MLPCS015

Site Information

Site Name: Plashes Farm	
	
Site Area	24.4 ha
Central Grid Ref	220324 538030
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	500,000 tonnes (t)
Planning History	Part of the site has been approved for mineral extraction under planning permissions (3/1391-01 and 3/2158-00).

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is currently inadequate to support the proposed allocation. More convincing evidence is needed on economic viability. Evidence is also needed to support the reserve calculation. No further evidence was submitted in response to the request for supplementary information.
Suitability for consideration as a Specific Site allocation, on resource grounds	No – inadequate information.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	Very High	The site contains three areas of ancient woodland and is located immediately adjacent to three additional areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Medium	The site contains three areas of deciduous woodland and is located immediately adjacent to one additional area of deciduous woodland.
BMV land	Medium	The site is entirely located within Grade 2 agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	Medium	The site contains one water body.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.

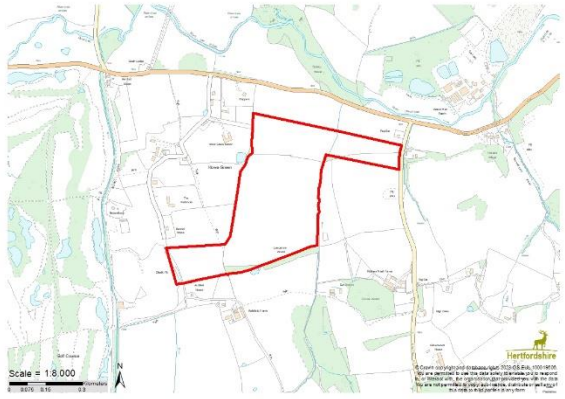

Criterion	Score (Impact)	Justification
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery may have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	The site is entirely located within Source Protection Zone 2.
Heritage assets	High	<p>There are no designated heritage assets within the site boundary. Immediately to the north of the site there are two listed buildings. These include Plashes Farm, which is grade II listed, and the barn and stables are grade II* listed. The legibility of these buildings is related to their agricultural setting, which comprises the site and would be lost via its development.</p> <p>Further north there is a group of 14 listed buildings – 13 grade II and one grade II* listed - at Colliers End. To the east of these there is Dowsett’s Farm, another grade II listed building. All of these assets are visually separated from the site by Plashes Wood, and are unlikely to be subject to setting change.</p> <p>To the east of the site there are three grade II listed cottages, along the road. These are separated from the site by Hanging Wood and are unlikely to be affected by development of the site.</p> <p>There are no locally listed assets within the site or its immediate environs³².</p> <p>The HER indicates that there are non-designated assets within the site, and the majority of it is an area of archaeological significance. These remains would be removed/truncated by development.</p>
International and national ecological designations	Very High	The site contains and is immediately adjacent to Plashes Wood SSSI.
Land ownership	Low	The site is in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.

³² East Hertfordshire does not maintain a local list.

Criterion	Score (Impact)	Justification
Local Nature Reserves and Local Wildlife Sites	Medium	The site is partly within Blackey Mead Wood (High Cross) Local Wildlife Site and is immediately adjacent to Badger's Eye Plantation and Plashes Farm Buildings Local Wildlife Sites.
Proximity of allocated residential or built development	Low	The site is not located within close proximity of any existing settlement. The site is not located within or in close proximity to a site allocation with the East Hertfordshire Local Plan 2018.
Recreation	High	The site contains three PRoW (No's: 041, 043, and 044).
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	The site is located immediately adjacent to Plashes Farm.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	High	The site is not located within or in close proximity to an Air Quality Management Area, but is located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>Access to the site would be via Gore Lane with HGV movements directed onto the A10. Discussions with HCC Highways would be required to determine the level of improvements that would be required/appropriate for Gore Lane and so they can assess its feasibility.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGVs).</p>		
Summary of LVIA Comments		
<p>The site is considered to have moderate-high sensitivity to mineral extraction due to the varied landform, historic field pattern and valued landscape features. Mineral extraction is likely to disturb the strong rural character of the site and the impacts could not be fully mitigated.</p> <p>The southern half of the site is fairly open and there are open views of the site from footpaths which cross the site. Impacts on the visual amenity of some residents in the village of Barwick could be mitigated by screening to the north of the village.</p>		

Site Selection Proforma: MLPCS016

Site Information

Site Name: Water Hall Quarry – Howe Green Area	
	
Site Area	25.8 ha
Central Grid Ref	528943 209246
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	1.7 million tonnes (t)
Planning History	Part of the site has been subject to a mineral planning application which was refused (IDO-094-49 ³³).

³³ No proper documents found. Application appears to have been refused or delayed. Stated as non-determination.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is currently inadequate to support the proposed allocation. No further evidence was submitted in response to the request for supplementary information.
Suitability for consideration as a Specific Site allocation, on resource grounds	No – inadequate information.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within in close proximity to any areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas to known to include BAP species.
BMV land	Medium	Approximately 40% of the site is located within Grade 2 agricultural land with the remaining 60% located within Grade 3 agricultural land.
Cumulative effects	Medium	The site is located immediately adjacent to Bedwell Park Quarry both of which are within close proximity to Howe Green.
Ecological status of water bodies	High	The site contains one watercourse which also runs down its eastern boundary.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).

Criterion	Score (Impact)	Justification
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery may have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	The site is entirely located within Source Protection Zone 3.
Heritage assets	Medium	<p>There are no designated heritage assets within the site boundary. To the west of the site is a grade II listed building, Laurel Cottage, which may experience some setting change but probably not to a meaningful level. Further west is Hertford Lodge, another grade II listed building. It is unlikely to have a relationship with the site that would cause it to experience setting change as a result of development.</p> <p>To the north of the site is the grade II* listed building, Wollmer's Park the parkland to which is non-designated. It contains the grade II listed summer house at Arkley Hole, which is located in Spring Wood. It is unlikely that any meaningful setting change would occur to the setting of these assets.</p> <p>To the northeast of the site is the grade II listed Waterhall Farmhouse. It may have a functional and historical relationship with the surrounding rural landscape, including the site. However, the effect of its development would probably be very limited.</p> <p>To the southeast of the site there are five more grade II listed buildings associated with Stockings Farm. Little Berkhamsted Conservation Area also lies to the south of the site. It is unlikely that these assets would experience meaningful setting change as result of the site's development.</p> <p>There are no locally listed assets within the site, or its immediate environs³⁴.</p> <p>There are two areas of archaeological significance that extend into the site and the HER indicates that there are non-designated assets in the site. These would be removed/ truncated by development.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is under option to a minerals operator.

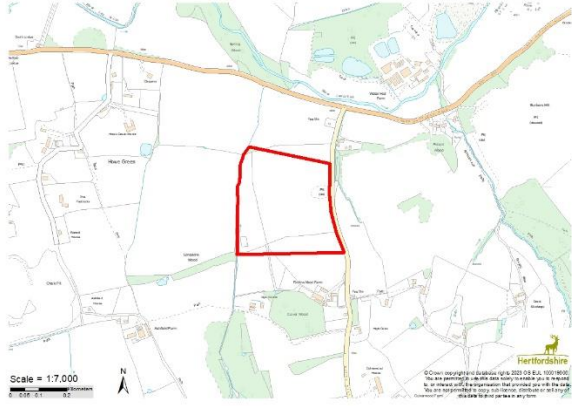

³⁴ East Hertfordshire Council do not hold a local list.

Criterion	Score (Impact)	Justification
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Low	The site is not located within or immediately adjacent to a Local Nature Reserve or Local Wildlife Site.
Proximity of allocated residential or built development	Low	The site is allocated immediately adjacent to Howe Green. The site is not located within or in close proximity to a site allocation within the East Hertfordshire Local Plan 2018.
Recreation	High	The site contains one PRoW (No: 074) and Bridleway (074) to the west and is within 100m of two other PRoW (No: 074) to the south.
Restoration	Medium	No use has been suggested for the site's restoration. As such, it is uncertain whether a high-quality restoration would take place once mineral extraction has finished.
Sensitive land uses	High	The site is allocated immediately adjacent to Howe Green. The site is also within close proximity to a property at Ashfield Farm and one property along Robins Nest Hill.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is not located within or in close proximity to an Air Quality Management Area but is not located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site has not been assessed by HCC Highways as no details of access arrangements have been provided. If access is proposed to be from Robins Nest Hill it is anticipated that improvements will be required to accommodate the proposal.</p> <p>It should be noted that the minerals extracted will be processed at Water Hall Quarry. This being the case, the amount of traffic generated by Water Hall Quarry will need to be carefully assessed to ensure that the level of traffic does not exceed that accepted in the past.</p> <p>The B158/B1455 junction has existing congestion problems. This would require further investigation.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGVs). Additionally, details of the proposed arrangement will be required so that HCC can assess its feasibility.</p>		
Summary of LVIA Comments		
<p>The site is considered to have moderate sensitivity to mineral extraction due to the site's openness, historic field system and its rural character. However, some impacts could be mitigated by screening to the west and post-excitation restoration offers opportunities to improve degraded hedgerow structure.</p>		

Criterion	Score (Impact)	Justification
Views of the site from Howe Green are possible and there are open views from the footpaths that cross the site. Impacts on these receptors could be partially mitigated through screening.		

Site Selection Proforma: MLPCS017

Site Information

Site Name: Water Hall Quarry – Robins Nest Hill	
	
Site Area	11.7 ha
Central Grid Ref	209296 529341
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	1 million tonnes (t)
Planning History	The site was subject to a mineral planning application which was refused (IDO-094-49 ³⁵).

³⁵ No proper documents found. Application appears to have been refused or delayed. Stated as non-determination.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is inadequate to support the proposed allocation. Evidence is needed on economic viability, including allowance for the mitigation of (currently unexpected) potential impacts on groundwater. Confirmation of mineral operator involvement and landowner agreement is also needed. Evidence is also needed to support the reserve calculation. No further evidence was submitted in response to the request for supplementary information.
Suitability for consideration as a Specific Site allocation, on resource grounds	No – inadequate information.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity to any areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas to known to include BAP species.
BMV land	Medium	Approximately 30% of the site is located within Grade 2 agricultural land with the remaining 70% located within Grade 3 agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	Medium	The site is immediately adjacent to a watercourse.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain.

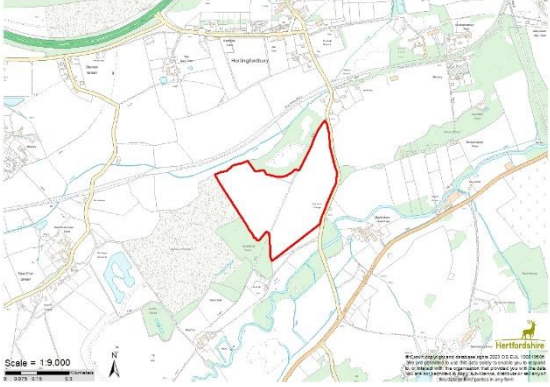

Criterion	Score (Impact)	Justification
		However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery may have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	The site is entirely located within Source Protection Zone 3. There is a plume of bromate coincident with this site with a concentration of 750 µg/l to more than 1000 µg/l in a substantial part of the area. The implications of mineral extraction on groundwater contamination in this area remain uncertain.
Heritage assets	Low	<p>There are no designated heritage assets within the site boundary. However, to the northwest of the site there are two grade II listed buildings – Laurel Cottage and Hertford Lodge. It is unlikely that either building would experience meaningful setting change as a result of development.</p> <p>To the north of the site is the grade II* listed building, Wollmer’s Park the parkland to which is non-designated. It contains the grade II listed summer house at Arkley Hole, which is located in Spring Wood. Again, it is unlikely that any meaningful setting change would occur to the setting of these assets.</p> <p>To the northeast of the site is the grade II listed Waterhall Farmhouse. It could have a functional and historical relationship with the surrounding rural landscape, including the site. However, if there was an effect on this assets setting, it would probably be very limited.</p> <p>To the southeast of the site there are five more grade II listed buildings associated with Stockings Farm. Little Berkhamsted Conservation Area also lies to the south of the site, and within it (and 1km of the site) is the Grade II* listed Stratton’s Tower. It is unlikely that these assets would experience meaningful setting change as result of the site’s development.</p> <p>The site is not located within an area of archaeological interest and the HER does not record any non-designated assets within the site. However, the absence of known archaeology is not indicative of there being no archaeology and an area of archaeological interest lies adjacent to the site, suggesting that there may be some archaeological potential.</p>

Criterion	Score (Impact)	Justification
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Medium	The site is not in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Low	The site is not located within or immediately adjacent to a Local Nature Reserve or Local Wildlife Site.
Proximity of allocated residential or built development	Low	The site is located within close proximity to Howe Green. The site is not located within or in close proximity to a site allocation within the East Hertfordshire Local Plan 2018.
Recreation	Low	The site does not contain nor is it located within close proximity to any PRow or recreational facilities.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	Medium	The site is located within close proximity to one property along Robins Nest Hill.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	High	The site is not located within or in close proximity to an Air Quality Management Area, but is located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>The site would be accessed via Robins Nest Hill which has constraints that are likely to be overcome by modest highway improvements.</p> <p>It should be noted that the minerals extracted from the site would be processed at Water Hall Quarry. This being the case the amount of traffic generated by Water Hall Quarry will need to be carefully assessed to ensure that the level of traffic does not exceed that accepted in the past.</p> <p>The B1455 junction has existing congestion problems. This would require further investigation.</p>		
Summary of LVIA Comments		
<p>The site is considered to have moderate sensitivity to mineral extraction due to the site's openness, historic field system and its rural character. Some impacts could be mitigated by screening and post-excavation restoration offers opportunities to improve the degraded hedgerow structure.</p>		

Criterion	Score (Impact)	Justification
<p>There are filtered views of the site from Howe Green and local footpaths within the vicinity of the site and there is one residential property within the vicinity of the site with open views. However, it is considered that views from this property could be mitigated by screen planting.</p>		

Site Selection Proforma: MLPCS018

Site Information

Site Name: Southfield Wood East	
	
Site Area	16.7 ha
Central Grid Ref	211056 530564
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	500,000 tonnes (t)
Planning History	Part of the site has been subject to a mineral planning permission which was refused (3/1568/78 ³⁶).

³⁶ No record found.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is inadequate to support the proposed allocation. More convincing evidence is needed on economic viability, including allowance for the mitigation of (currently unexpected) potential impacts on groundwater. Confirmation of mineral operator involvement and landowner agreement is also needed. Evidence is also needed to support the reserve calculation. No further evidence was submitted in response to the request for supplementary information.
Suitability for consideration as a Specific Site allocation, on resource grounds	No – inadequate information.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	High	The site is located immediately adjacent to one area of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas to known to include BAP species.
BMV land	Medium	The site is entirely located within Grade 2 agricultural land.
Cumulative effects	Low	The site is located immediately adjacent to Waterhall Farm Quarry. However, it is inactive with regard to mineral extraction. Furthermore, the site has been put forward by the owner of the existing quarry and it is considered that extraction at this site will only commence once works on the existing quarry have been completed.
Ecological status of water bodies	Low	The site does not contain nor is it located near to a water body.



Criterion	Score (Impact)	Justification
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	The site is entirely located within Source Protection Zone 3.
Heritage assets	High	<p>There are no designated heritage assets within the site boundary. To the south of the site, over the River Lea, is Roxford Bridge, a grade II listed building. The setting elements important to its heritage significance are the road and river, which would not be affected by development of the site.</p> <p>A short distance from the bridge, are a number of grade II listed buildings at Bayfordbury Farm. These include Bayfordbury Park Farmhouse, brick stable, western shelter shed, barn and granary. Beyond these, lies Bayfordbury, a grade II registered park and garden, in which there are four designated assets – three of which lie within 1km of the site. These include the Bayfordbury House, stable and walls of the walled garden. There is the potential for setting change to affect the significance of some of these assets.</p> <p>Abutting the north of the site is Hertfordbury Conservation Area. Within which there is a large number of grade II and II* listed buildings. It is unlikely that the setting of any of these listed buildings will be affected as they are unlikely to have a relationship with the site. However, development of the site could adversely affect the setting of the conservation area.</p> <p>To the northeast of the site is the grade II listed Hertingfordbury Park, which is now a school. Its non-designated parkland extends to the opposite side of St Mary's Lane to the site. Development may affect the non-designated parkland but is unlikely to result in meaningful change to the listed building.</p> <p>To the northwest of the site are three more grade II listed buildings – The Old Curatage, The Bury Farmhouse and Mayflower Place Memorial Hall. Setting change is possible</p>

Criterion	Score (Impact)	Justification
		<p>to the farmhouse as it may have a functional/ historical relationship with the site. However, any change would likely be very limited.</p> <p>To the west of the site is Hazeldene, a grade II listed building. Near to this is East End Green Conservation Area, in which there are three grade II listed buildings. Two of these are within 1km of the site – East End Green Farmhouse and Keeper’s Cottage. It is unlikely that any of these assets would experience meaningful setting change as a result of development.</p> <p>To the southwest of the site lies a scheduled monument, a Baroque Garden in Grotto Wood. There is the potential for setting change to this asset, but probably not in a meaningful way.</p> <p>Also to the southeast of the site is Roxford Moated site, a scheduled monument, adjacent to which are a group of grade II listed buildings. These include Roxford House, Roxford Barns, a bridge, and ice house. It is possible that the site encroaches on the former parkland associated with these assets, meaning that development could affect their setting.</p> <p>The site is not within an area of archaeological significance but the HER does record a non-designated asset within the site, which may be removed/ truncated by development.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Medium	The site is not in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is immediately adjacent to Southfield Wood Local Wildlife Site.
Proximity of allocated residential or built development	Medium	<p>The site is located within close proximity to Hertingfordbury.</p> <p>The site is located within close proximity to Policy HERT3: West of Hertford (550 new homes) in the East Hertfordshire District Plan (2018).</p>
Recreation	High	The site contains two PRoW (Nos: 002 and 057).
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	Medium	The site is located within close proximity of a number of properties along St. Mary’s Lane.

Criterion	Score (Impact)	Justification
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is located within close proximity to the strategic road network (A414) and is not located within or in close proximity to an Air Quality Management Area.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>Access would be directly over company land to the existing Water Hall Quarry processing plant. This being the case the amount of traffic generated by Water Hall Quarry will need to be carefully assessed to ensure that the level of traffic does not exceed that accepted in the past.</p> <p>The B158/B1455 junction has existing congestion problems. This would require further investigation.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGVs). Additionally, details of the proposed arrangement will be required so that HCC can assess its feasibility.</p>		
Summary of LVIA Comments		
<p>The site is considered to have low-moderate sensitivity to mineral extraction due to the gently undulating landform and its elevated and enclosed position above the River Lea. Impacts could be fully mitigated by screening and setting mineral extraction back from the ancient woodland.</p> <p>Views of the site from the locality are limited and could be mitigated by screening.</p> <p>However, mineral workings are likely to be seen by people using the footpath crossing the site unless it is diverted.</p>		

Site Selection Proforma: MLPCS019

Site Information

Site Name: Pipers End	
	
Site Area	25.2 ha
Central Grid Ref	210423 529310
District	East Hertfordshire
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	1.4 million tonnes (t)
Planning History	The site has no relevant planning history.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is inadequate to support the proposed allocation. More convincing evidence is needed on economic viability, including allowance for the mitigation of (currently unexpected) potential impacts on groundwater. Confirmation of mineral operator involvement and landowner agreement is also needed. Evidence is also needed to support the reserve calculation. No further evidence was submitted in response to the request for supplementary information.
Suitability for consideration as a Specific Site allocation, on resource grounds	No – inadequate information.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity to any areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Medium	The site contains one area of deciduous woodland.
BMV land	Medium	The site is entirely located within Grade 3 agricultural land.
Cumulative effects	Low	The site is located within close proximity to Waterhall Farm Quarry. However, it is inactive with regard to mineral extraction. Furthermore, the site has been put forward by the owner of the existing quarry and it is considered that extraction at this site will only commence once works on the existing quarry have been completed.
Ecological status of water bodies	High	The site contains two watercourses and is immediately adjacent to two additional watercourses.

Criterion	Score (Impact)	Justification
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	<p>Approximately 85% of the site is located within Source Protection Zone 3 with the remaining 15% not located within any Source Protection Zone.</p> <p>There is a plume of bromate coincident with this site with a concentration of 750 µg/l to more than 1000 µg/l in a substantial part of the area. The implications of mineral extraction on groundwater contamination in this area remain uncertain.</p>
Heritage assets	High	<p>There are no nationally or locally designated heritage assets within the site boundary. To the west of the site lies Woolmers Park, a grade II* listed building, located within Woolmers Park non-designated parkland, which extends into the site. Further listed buildings associated with Woolmers Park include a gardener's cottage and kitchen garden wall and summer house, which are all grade II listed. Development of the site would cause physical and setting change to the parkland and potentially affect the setting of the listed buildings within it.</p> <p>To the south of the site there are two more grade II listed buildings – Hertford Lodge and Laurel Cottage, and Waterhall Farm house. As the site comprises parkland associated with Woolmer's Park these assets are unlikely to be related to the site and its development should therefore not result in any meaningful setting change to them.</p> <p>To the northeast of the site lies East End Green Conservation Area, within which lies a number of listed buildings. which contains three grade II listed buildings – two cottages and a farmhouse. Just north of the conservation area is Hazeldene a grade II listed building. Development within the site is unlikely to result in meaningful setting change to any of these listed buildings but may affect the conservation area to a limited extent.</p>



Criterion	Score (Impact)	Justification
		<p>To the north of the site there are five grade II listed buildings scattered between Birch Green, Labby Green and Letty Green. These include a church, a farmhouse and three houses. There is also a scheduled monument, which includes the buried remains of a settlement site. It is unlikely that any of these assets have a relationship with the site that would be affected by its development.</p> <p>There are no areas of archaeological significance within the site, and the HER records no known assets within it.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Medium	The site is not in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is located immediately adjacent to Spring Wood (near Howe Green) Local Wildlife Site.
Proximity of allocated residential or built development	Low	<p>The site is located within close proximity of Letty Green.</p> <p>The site is not located within or in close proximity to a site allocation within the East Hertfordshire Local Plan 2018.</p>
Recreation	Medium	The site is located within the grounds of the Hertfordshire Polo Club.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	<p>The site is located immediately adjacent to a number of properties along Woolmers Lane.</p> <p>The site is also located within the grounds of the Hertfordshire Polo Club.</p>
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	High	The site is not located within or in close proximity to an Air Quality Management Area, but is located within close proximity to the strategic road network.
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>It is proposed that minerals would be transported over company land to the existing Water Hall Quarry processing plant. This being the case the amount of traffic generated by Water Hall Quarry will need to be carefully assessed to ensure that the level of traffic does not exceed that accepted in the past.</p>		

Criterion	Score (Impact)	Justification
		<p>The B158/B1455 junction as having existing congestion problems. This would require further investigation.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGVs). Additionally, details of the proposed arrangement will be required so that HCC can assess its feasibility.</p>
<p>Summary of LVIA Comments</p>		
		<p>The site is considered to have moderate sensitivity to mineral extraction due to its unified rural character and valued features. However, the well wooded character means impacts on the surrounding landscape could be mitigated by effective screening that is in character with the landscape.</p> <p>There are a limited number of properties within the vicinity of the site and only two cottages have open views of the site. Due to the flat landform impacts on these cottages could be mitigated though screening without losing the existing visual amenity.</p>

Sites Submitted During Draft Minerals Local Plan Consultation in 2018 and Reassessed in 2023

Site Selection Proforma: MLPCS021

Site Information

Site Name: Land adjacent to Coursers Farm (North Mymms West)	
	
Site Area	25 ha
Central Grid Ref	521000 204800
District	Welwyn Hatfield
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	1.25 million tonnes
Planning History	The site has no relevant planning history.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is sufficient to support the proposed allocation.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This appears to be a fully viable and properly assessed proposal. However, the Council await confirmation from the site promoter that the local site operators are interested. Therefore, there is some uncertainty.

Sieve 3



Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	High	The site is located immediately adjacent to one area of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Medium	The site contains an area of deciduous woodland and one area of additional BAP habitat. The site is also located immediately adjacent to additional areas of deciduous woodlands.
BMV land	Medium	The majority of the site is located within Grade 3 agricultural land with the remaining part located in Grade 2.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	Medium	The site does not contain a water body. However, its south western edge is bordered by a watercourse and another watercourse lies within close proximity to the north eastern edge of the site.
Flood risk	Positive	The site is located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain.

Criterion	Score (Impact)	Justification
		However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	The whole of the site is located within Source Protection Zone 3.
Heritage assets	Very High	<p>There is a grade II listed building – a London Coal duty marker - within the site. This could be subject to significant physical and setting change.</p> <p>To the west of the site is a grade II listed barn. It is unlikely to be affected by meaningful setting change.</p> <p>To the south of the site is the grade I listed building, North Mymms Park. Its non-designated parkland includes the site and several grade II and II* listed buildings. Development within the site would result in physical and setting change to the park and could affect the setting of the main house and designated assets related to it.</p> <p>To the north of the site there is a group of grade II listed buildings in Colney Heath. These are unlikely to have their setting meaningfully affected by development within the site.</p> <p>There are no locally designated assets within the site, or its immediate vicinity. The site is not located in an area of archaeological significance but the HER does record archaeological assets within it. These would be removed/ truncated by development.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is owned by a mineral operator.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is partly located within Scrubby Grasslands Local Wildlife Site and is immediately adjacent to Frederick's Wood LWS, Walsingham Wood LWS and North Mymms Park LWS.

Criterion	Score (Impact)	Justification
Proximity of allocated residential or built development	Low	The site is located approximately 700m south of Colney Heath. The site is not located within close proximity to or within a site allocation of Welwyn Hatfield's District Local Plan 2005, Welwyn Hatfield's Proposed Submission Local Plan 2016, St Alban's 1994 District Plan Saved Policies or the St Albans draft Regulation 18 Local Plan 2023. The site lies immediately to the north east of a large site previously promoted through the Hertsmere Borough Council Local Plan process for 6,000 dwellings. However, the new Hertsmere Local Plan is at a very early stage of preparation.
Recreation	Medium	The site does not contain any PROW but is immediately adjacent to a PROW (No. 32).
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	Medium	The site is located within close proximity to Coursers Farm.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	High	The site is not located within or in close proximity to an Air Quality Management Area, but is not located within close proximity to the strategic road network.
Summary of Landscape and Visual Sensitivity Comments		
<p>The site is considered to have low-moderate sensitivity to mineral extraction due to the fact that views from properties and Rights of Ways tend to be screened by woodland, or could be mitigated through further planting.</p> <p>Although the site is gently undulating and relatively enclosed, the openness to the east could result in an adverse impact on the unified parkland character of the wider valley. Additionally, mineral workings could result in the loss of valuable landscape features including mature trees. Again, impacts could be partially mitigated by further screening.</p>		
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>The site promoter suggests access onto Coursers Road, stating that traffic should enter and leave via The Bell Roundabout. The proposed access point on Coursers Road is on a bend and would therefore make it hazardous for HGVs to enter and exit the site.</p> <p>Numerous junctions around the site are already identified as congestion hotspots.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGVs).</p>		

Site Selection Proforma: MLPCS022

Site Information

Site Name: Land adjacent to Coursers Farm (North Myrms East)	
	
Site Area	12 ha
Central Grid Ref	521500 204800
District	Welwyn Hatfield
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	500,000 tonnes
Planning History	The site has no relevant planning history.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is sufficient to support the proposed allocation.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This appears to be a fully viable and properly assessed proposal. However, the Council await confirmation from the site promoter that the local site operators are interested. Therefore, there is some uncertainty.

Sieve 3



Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity to any areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas known to include BAP species.
BMV land	Medium	The whole of the site is located within Grade 3 agricultural land.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	High	The site contains two small water bodies in its eastern corner and one watercourse within its south western corner.
Flood risk	Positive	The site is located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.

Criterion	Score (Impact)	Justification
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	Medium	The whole of the site is located within Source Protection Zone 3.
Heritage assets	High	<p>There are no designated assets within the site. To the west are a grade II listed London Coal duty marker and barn. Neither of these is likely to be experience meaningful setting change as a result of development.</p> <p>To the south of the site is the grade I listed North Mymms Park, the non-designated parkland of which includes the site and contains several more grade II and II* listed structures. Development would result in physical and setting change to the park, and could potentially affect the house and other assets.</p> <p>To the west of the site is a grade II listed barn. It is unlikely to be affected by meaningful setting change.</p> <p>To the north of the site there is a group of grade II listed buildings in Colney Heath. These are unlikely to have their setting meaningfully affected by development within the site.</p> <p>There are no locally designated assets within the site, or its immediate vicinity. The site is not located in an area of archaeological significance and the HER records no assets other than the parkland.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is under option to a mineral operator.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is partly located within North Mymms Park Local Wildlife Site.
Proximity of allocated residential or built development	Low	The site is located approximately 400m south of Colney Heath.

Criterion	Score (Impact)	Justification
		The site is not located within close proximity to or within a site allocation of Welwyn Hatfield's District Local Plan 2005, Welwyn Hatfield's Proposed Submission Local Plan 2016, St Alban's 1994 District Plan Saved Policies or St Alban's new draft Regulation 18 Local Plan 2023. The site lies immediately to the north east of a large site being promoted through the Hertsmere Borough Council Local Plan process for 6,000 dwellings. However, the new Hertsmere Local Plan is at a very early stage of preparation.
Recreation	Medium	The site does not contain any PROW; however, it is located within close proximity to a number of PROWs (No's: 055 and 029).
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	The site is located immediately adjacent to Park Cottage and within close proximity to the Grade I Listed North Mymms Park.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is located approximately 500m west of the strategic road network (A1) but is not located within or in close proximity to an Air Quality Management Area.
Summary of Landscape and Visual Sensitivity Comments		
<p>The site is considered to have moderate-high sensitivity due to the open view from adjacent properties and the Rights of Way.</p> <p>The openness of the valley could result in an adverse impact on the unified parkland character of the wider valley and the setting it provides to North Mymms Park. Additionally, mineral workings could result in the loss of valuable landscape features including mature trees and copses.</p>		
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>The site promoter suggests access onto Coursers Road, stating that traffic should enter and leave via The Bell Roundabout. The proposed access point on Coursers Road is on a bend and would therefore make it hazardous for HGVs to enter and exit the site.</p> <p>Numerous junctions around the site are already identified as congestion hotspots.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGVs).</p>		

Site Selection Proforma: MLPCS023

Site Information

Site Name: Warren Farm	
	
Site Area	48.1 ha
Central Grid Ref	520112 205180
District	Hertsmere
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	Estimated 2 million tonnes
Planning History	The site has no relevant planning history.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	<p>The information provided in the submission is inadequate to support the identification of the site as a proposed allocation. This is despite a request by HCC for further information.</p> <p>In particular, there is no evidence to support the reserve estimate, no evidence that environmental impacts have been considered and no evidence to confirm the involvement and willingness of a commercial operator.</p>
Suitability for consideration as a Specific Site allocation, on resource grounds	<p>Not unless the missing evidence already exists (e.g. in a technical appendix on minerals relating to previous submissions for housing development).</p> <p>However, the site does appear to meet National and Local policy requirements for prior extraction.</p>

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The site is not located within an Airport Safeguarding Zone.
Ancient Woodland	Low	The site is not located within close proximity to any areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary Undifferentiated and Secondary A aquifers.
BAP Priority Species or Habitats	Low	The site is not located within any BAP habitats or areas known to include BAP species.
BMV land	Medium	The site is located within Grade 2 and 3 agricultural land, approximately 70% and 30% of the site respectively.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	High	The site contains a small water body within its centre and is adjacent to two watercourses and some small water bodies.



Criterion	Score (Impact)	Justification
Flood risk	Positive	There is an area of Flood Zone 2 within this site. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).
Green Belt	Low	The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.
Groundwater vulnerability	High	Approximately 10% of the site is located within Source Protection Zone 1, 15% within Source Protection Zone 2 and 75% within Source Protection Zone 3.
Heritage designations	Medium	<p>There are no nationally or locally designated assets within the site. To the south of the site is a grade II listed barn. It is unlikely to be affected by meaningful setting change.</p> <p>To the southeast of the site is a grade II listed structure – a London Coal duty marker, which may be subject to setting change.</p> <p>To the east and north of the site there is a group of grade II listed buildings in Colney Heath. With the exception of the Mill at Mill house and the coal duty marker, the setting of these assets is unlikely to be meaningfully affected by development within the site.</p> <p>To the west of the site is the grade I listed Tyttenger House and grade II listed stable and kitchen garden wall. Where there may be limited potential for setting change.</p> <p>There are no locally designated assets within the site, or its immediate vicinity. The site is not located in an area of archaeological significance but the HER indicates that it contains a non-designated archaeological asset.</p> <p>Development of the site would potentially result in physical change to non-designated archaeological remains and setting change to designated assets.</p>
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Medium	The site is currently not in control of the industry.

Criterion	Score (Impact)	Justification
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is partly located within Tyttenhanger Gravel Pits North Local Wildlife Site and is immediately adjacent to the New Plantation LWS and Colney Heath Common LWS/LNR.
Proximity of allocated residential or built development	Low	The site is located approximately 600m south west of Colney Heath. The site lies immediately to the north west of a large site previously promoted through the Hertsmere Borough Council Local Plan process for 6,000 dwellings. However, Hertsmere Local Plan is at a very early stage of preparation.
Recreation	High	The site contains a PROW (No: 004) and is immediately adjacent to a number of other PROWs including No's 032 and 008.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	The site is located immediately adjacent to Coursers Farm.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is located approximately 680m to the south east of the strategic road network (A414) but is not located within or in close proximity to an Air Quality Management Area.
Summary of Landscape and Visual Sensitivity Comments		
<p>The site is considered to have low-moderate sensitivity due to the screened views from properties and the potential for visual mitigation of the impacts on the users of the local Rights of Way.</p> <p>The openness of the landscape to the south could result in an adverse impact on character of the wider area. However, due to its flat topography features including mature boundary trees can also be mitigated through tree protection measures.</p>		
Summary of HCC Highways Comments		Score:
<p>The site is considered to require further information/assessments to overcome some highways concerns.</p> <p>The site promoter suggests access onto Coursers Road. However, Tollgate Road and the road it connects to are not suitable for HGVs.</p> <p>Numerous junctions around the site are already identified as congestion hotspots.</p> <p>Further information is required in the form of a Transport Assessment detailing the proposed trip generation and the impact on the network (including the proposed routing of HGVs).</p>		

Sites Submitted During Draft Minerals and Waste Local Plan Consultation 2022 and Assessed in 2023

Site Selection Proforma: MWLP001

Site Information

Site Name: Land Northeast of Rickneys Quarry	
	
Description	Land to the north of the existing Rickneys Quarry
Site Area	61 ha
Central Grid Ref	216260 532275
District	East Hertfordshire District
Mineral to Extract	Sand and Gravel
Planning History	The preferred area has been subject to a number of applications (3/1653-95, 3/0959-90 and 3/0711-88) all of which were withdrawn. A smaller part of the preferred area has been subject to an application 3/2077-13 (varying 3/0629-06) which has a resolution to grant.

Sieve 1

Proceed to Sieve 2	Yes.
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Sieve 2

Suitability for consideration as a Preferred Area allocation, on resource grounds	Yes (subject to any HCC information on deliverability).
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Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Low	The Preferred Area is not located within an Airport Safeguarding Zone.
Ancient Woodland	High	There are two areas of replanted ancient woodland and there are further areas of ancient woodland in close proximity.
Aquifers	Medium	This Preferred Area is located partly within a Secondary Aquifer and partly within an undifferentiated Secondary Aquifer.
BAP Priority Species or Habitats	Medium	The Preferred Area contains an area of deciduous woodland, which is a BAP priority habitat.
BMV land	Medium	This Preferred Area consists entirely of Grade 3 agricultural land.
Cumulative effects	Medium	The Preferred Area is adjacent to Rickneys, Chapmore End, which has planning permission for sand and gravel extraction (extension of existing quarry), although the site has not been worked. There are some dwellings in proximity of the site, particularly at Chapmore End.
Ecological status of water bodies	Low	There are no watercourses within proximity to the Preferred Area.
Flood risk	Low	The Preferred Area lies entirely within Flood Zone 1.
Geodiversity	Low	This Preferred Area is not within or adjacent to any geodiversity conservation sites.
Green Belt	Low	The Preferred Area lies entirely within the Green Belt but minerals working is unlikely to conflict with the purposes of Green Belt designation.

Criterion	Score (Impact)	Justification
Groundwater vulnerability	High	The southern part of this Preferred Area is located within SPZ 1 and there are also substantial areas of SPZ 2 within the area.
Heritage assets	Medium	<p>To the east of the site there are three grade II listed buildings, including a granary at High Trees Farm and two timber-framed houses at Chapmore End. There is the potential for setting change to these assets, but it may not be meaningful.</p> <p>To the south of the site is Hertford Conservation Area. Within 1km of the site the conservation area includes four grade II listed buildings and two grade II* listed buildings. The buildings are unlikely to be affected by setting change but the conservation area may be to a very limited extent.</p> <p>To the southwest of the site is Goldings, a grade II registered park and garden, within which there are a number of listed buildings. Four of these listed buildings lie within 1km of the site and are grade II listed. Neither the park nor the listed buildings appear to have a relationship with the site that would result in setting change.</p> <p>There are another eleven grade II listed buildings and one grade I listed building west of the site, located either along the A119 or in Waterford. The majority of these do not appear to have a relationship with the site, and as such would be unlikely to be affected by setting change.</p> <p>To the northwest of the site is the grade II* Church of St Mary the Virgin, and to the northeast there are two grade II listed buildings – a water tower and the Robin Hood Public House. It is not considered likely that any of these assets would experience adverse setting change.</p> <p>To the southeast of the site is the non-designated Ware Park, in which there are a number of listed buildings – although these lie beyond 1km away. The park and buildings are unlikely to be affected by setting change.</p> <p>There are no locally listed buildings within the immediate vicinity of the site.</p> <p>The site includes two areas of archaeological significance – one of which could be entirely lost. The HER also has records of non-designated assets within and the site. Being principally sub-surface remains in the form of features cut into the subsoil, these archaeological assets are all highly susceptible to physical change e.g. damage/ removal.</p>
International and national ecological designations	Low	This Preferred Area is not within close proximity to national or international ecological designations.
Land ownership	Medium	The Preferred Area is within multiple ownership with part of the land subject to existing mineral rights.

Criterion	Score (Impact)	Justification
Landscape designations	Low	This Preferred Area is not within or adjacent to any landscape designations.
Local Nature Reserves and Local Wildlife Sites	Medium	Upper Stonyhills Wood and Flowersash Wood Key Wildlife Sites lie partially within the Preferred Area. In addition, Lower Stonyhills Wood and Bardon Clumps Key Wildlife Sites lie adjacent to the Preferred Area.
Proximity of allocated residential or built development	Medium	The site is located to the north of Policy HERT4: North of Hertford (150 new homes) in the East Herts Pre-Submission District Plan (2016).
Recreation	High	Several public rights of way cross this Preferred Area, including Bengoe Rural 014, Bengoe Rural 012, Bengoe Rural 022, Bengoe Rural 002 and Bengoe Rural 009.
Restoration	Low	The 2002-2016 Hertfordshire Minerals Local Plan Review suggests that proposals will need to demonstrate that there is a sufficient balance of material to achieve proposed restoration.
Sensitive land uses	Medium	The Preferred Area is in proximity to dwellings at Chapmore End, Dimmings, Stonyhill and the former Rickneys Farmhouse.
Sustainable transport	High	This Preferred Area is distant from the rail network and the navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The Preferred Area is within proximity of the strategic road network. There is an AQMA in the centre of Hertford, but it is uncertain whether vehicles from minerals workings in the Preferred Area would use this route.

Summary of Landscape and Visual Sensitivity Comments

Overall this site is considered to have a moderate sensitivity. Although landscape is gently undulating and the site is largely enclosed, the openness to the east could result in an adverse impact on the unified rural character of the wider river valley. Additionally, mineral workings could result in the loss of valuable landscape features including hedgerows. Impacts could be partially mitigated by further screening and extraction operations set back from the ancient woodland. Views from properties and Rights of Way tend to be screened by hedgerows, tree groups and woodland, and could be mitigated through further planting.

Summary of HCC Highways Comments

Score:

Further information/assessments are required to overcome **some highways concerns**.

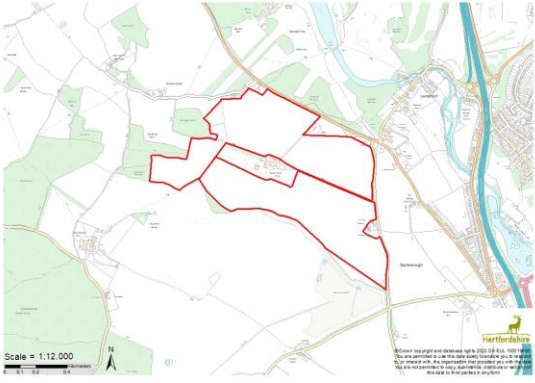

General Assessment

The site promoter suggests access directly onto Wadesmill Road with all traffic to and from the North via the A602- majority of output would be via the A10/A602 junction. Wadesmill Road is a numbered classified secondary distributor road with a speed limit of 60mph and a 7.5 tonne weight limit.

Criterion	Score (Impact)	Justification
		<p>The site promoter for Ware Park submitted an application (ref: PL0776/16), which was accompanied by a Transport Statement (TS). The application was refused on 4th March 2016. Whilst, the application was refused after additional amendments HCC highways did not raise an objection to the proposals subject to conditions.</p> <p>The traffic impact of this site will need to be assessed and the cumulative impact of other mineral extraction sites would need to be assessed to ensure there is sufficient network capacity for all mineral extraction site in the area.</p> <p>The site appears to have an existing access onto the B158. The access appears to have suitable geometry and visibility in both directions. Any planning application would need to provide details of the access design and demonstrate the existing access is suitable for the proposed output/trip generation.</p> <p>A capacity assessment of the priority access junction will be required. Junction improvement may be required to ensure free flow traffic conditions are maintained along the B158.</p> <p>Highway Impact</p> <p>Current Trafficmaster based journey time data and the Countywide strategic highway model COMET has been reviewed for the Ware Park site, and has identified the following congestion hotspot: A602 Ware Road/A602 Westmill Road/Wadesmill Road/Anchor Lane Roundabout.</p> <p>As part of any subsequent application for this site, an assessment should be undertaken at the roundabout and any other junctions materially affected by the mineral extraction traffic.</p> <p>Collision Data</p> <p>For the Ware Park mineral extraction site, Personal Injury Collision Data (PIC) was obtained for a 5 year period between 2010-2015, the area considered the B158 Wadesmill Road from the northern extent of the built up area of Hertford to the roundabout junction with the A602.</p> <p>The study indicated 13 collisions of these 13 collisions one resulted in a fatality, one serious and 11 slight.</p> <p>Vulnerable Road Users</p> <p>Further investigations are required to establish possible parallel routes/ upgrading existing routes to improve accessibility for both pedestrians and cyclists. Suitable promotional materials should also be considered to encourage users on them.</p>

Site Selection Proforma: MLPCS001RS

Site Information

Site Name: Land at Cromer Hyde Farm	
	
Site Area	10 ha
Central Grid Ref	211834 521084
District	Welwyn Hatfield
Mineral to Extract	Sand and Gravel
Tonnage of Reserves Calculated	3.5 million tonnes
Planning History	The site has no relevant planning history.

Summary of Sieve 1

Proceed to Sieve 2	Yes.
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Summary of Sieve 2

Adequacy of Supporting Information	Information is now sufficient to support the proposed allocation.
Suitability for consideration as a Specific Site allocation, on resource grounds	Yes: This is now a fully viable and properly assessed proposal.

Sieve 3

Criterion	Score (Impact)	Justification
Airport Safeguarding Zones	Medium	The site is located within the Luton Airport Safeguarding Zone.
Ancient Woodland	High	The site is located immediately adjacent to two areas of ancient woodland.
Aquifers	Medium	The site is located within Secondary A and Secondary Undifferentiated aquifers.
BAP Priority Species or Habitats	Medium	The site contains a small area of deciduous woodland and is located within close proximity to a number of other deciduous woodlands (one immediately adjacent to the site).
BMV land	Medium	The site is located within Grade 2 and 3 agricultural land, approximately 70% and 30% of the site respectively.
Cumulative effects	Low	The site is not located within 250m of any existing mineral sites.
Ecological status of water bodies	Low	The site does not contain nor is it located near to a water body.
Flood risk	Positive	The site is not located within Flood Zones 2-3b. The proposed use may include a dewatering pond, which has the potential to hold excess water in times of heavy rain. However, this is uncertain and will not be known until the planning application stage.
Geodiversity	Low	The site is not located near to a Local Geological Site or a national site of geological interest (SSSI).

Criterion	Score (Impact)	Justification
Green Belt	Low	<p>The site is located within the Green Belt and it is considered that development of the site for mineral extraction will not have an unacceptable impact on the openness of the Green Belt or conflict with the purposes of including land in the Green Belt. However, due to the openness of the site the use and location of mineral plant/machinery could have an unacceptable impact on the Green Belt. This is uncertain as a detailed design of the site will not be known until the planning application stage.</p>
Groundwater vulnerability	Medium	<p>Approximately 80% of the site is located within Source Protection Zone 3 with the remaining 20% not located within Source Protection Zone.</p>
Heritage assets	Very High	<p>This site includes part of the grade II Brocket Hall, a registered park and garden. The majority of the registered park and garden, and all of its associated listed buildings, lie to the north of the site. The listed buildings include the grade I Brocket Hall, two sets of listed gates - one grade II*, the other grade II - , the temple and bridge - which are both grade II* - , as well as the stables, former laundry, and pump house, the garden house and walled gardens, and Brocket Lea (a house), all of which are grade II listed. The park would experience physical and setting change, and there is the potential for setting change to the listed main house and gates.</p> <p>Four grade II listed buildings lie just beyond the edge of the proposed site. These include Gosmoor (Lemsford Boarding Kennels and Cattery), The Crooked Chimney public house, 12/14 and 16/18 Cromer Hyde. With the exception of Gosmoor, none of these appear to have a relationship with the site that would result in a meaningful change to their setting and significance.</p> <p>Further listed buildings in close proximity to the site include Upper Cromer Hyde Farmhouse, Symondshyde Farmhouse, the Old Cottage and the Church of St John the Evangelist - all of which are grade II listed. While the two farmhouses could have a functional/ historical relationship with parts of the site, development is unlikely to result in meaningful setting change to either of them. Noise, dust, and increased traffic could potentially have a minor effect on the setting of the church.</p> <p>There are two more grade II listed buildings to the north of the site - Warren Farm and granary - and eleven more within Lemsford to the northeast of the site. These are unlikely to experience setting change as they are separated from the site by the registered park and garden and do not appear to have a visual, functional, or historical relationship with the site.</p>

Criterion	Score (Impact)	Justification
		No locally designated assets have been identified within the site or its immediate environs ³⁷ . Hertfordshire HER ³⁸ indicates that there are non-designated assets within the site, part of which is also an area of archaeological interest (AAS10). There is the potential for these assets to be removed/ truncated.
International and national ecological designations	Low	The site is not located within 250m of any international or national ecological designations.
Land ownership	Low	The site is in control of the industry.
Landscape designations	Low	The site is not located within a landscape designation.
Local Nature Reserves and Local Wildlife Sites	Medium	The site is located immediately adjacent Benstead's Wood and Long Spring and Long Grove Plantation Local Wildlife Sites.
Proximity of allocated residential or built development	Medium	The site is located immediately adjacent to Cromer Hyde and approximately 30m to the south of Lemsford. The site is not located within close proximity to or within a site allocation of the Welwyn Hatfield District Local Plan 2005. However, it is immediately adjacent to Policy SP 24: New Village at Symondshyde (1,130 new homes) and approximately 100m to the north of Policy SP 22: North West Hatfield (1,650 new homes) within Welwyn Hatfield's Proposed Submission Local Plan (August 2016). This plan is now at an advanced stage of examination.
Recreation	High	The site contains a PRow and is immediately adjacent to a number of other PRowS. Brocket Park Golf Course is also located to the north of the site.
Restoration	Low	Once mineral extraction has finished onsite the land will be restored back to agricultural use.
Sensitive land uses	High	The site is located immediately adjacent to Cromer Hyde, Gosmoor and a property which is located on the access to Cromer Hyde Farm. Lemsford is also located approximately 30m north of the site.
Sustainable transport	High	The site is not located within close proximity to the rail network or navigable waterway network.
Pollution to the environment (dust, air, water)	Medium	The site is located within close proximity to the strategic road network (A1 and A414) and is not located within or in close proximity to an Air Quality Management Area.

³⁷ This is because Welwyn Hatfield has not published a local list.

³⁸ The HER was interrogated online via Heritage Gateway.

Criterion	Score (Impact)	Justification
Summary of HCC Highways Comments		Score:
<p>The site is considered to raise significant concerns which are likely to attract highway objections.</p> <p>The suggested site abuts Marford Road (B653) to the north and Green Lanes to the east. Marford Road is a Classified Road B Secondary Distributor. Green Lanes is an unnumbered Classified Road – C, L2 Local Access road. No information has been provided on the proposed access arrangements for the site.</p> <p>There is a school and a church located to the east of the site off Lemsford Village. More information on the proposed routing of HGV vehicles is required to assess whether there will be any safety implications for these existing land uses.</p> <p>In order to assess this site further HCC highways would require a Transport Assessment detailing the proposed trip generation and the impact of the network (including the proposed routing of HGV vehicles).</p> <p>If this site were to be taken forward, it would also need to be assessed in relation to the potential cumulative impact of site 8 and site 9 to assess the impact on the network, this will also need to consider any phasing of extraction operations. Additionally, it should be noted that the site abuts another site which has been highlighted as a proposed housing allocation site for 2031 through the Welwyn Hatfield Proposed Development Local Plan. However, the cumulative impact of this can only be assessed when more information on the phasing of extraction is provided.</p> <p>Highway Impact</p> <p>Marford Road is identified as a traffic sensitive route particularly during the hours of 07:00-09:30 and 16:00- 18:30, Monday to Friday. This will need to be considered as part of any assessment.</p> <p>Current Trafficmaster based journey time data and the Countywide strategic highway model COMET have also been reviewed and the following congestion hotspots have been identified:</p> <ul style="list-style-type: none"> • A1M Junction 5 with B197; • B197, Brocket Road and Coopers Green Lane roundabout • A6129 roundabout with Coopers Green Lane; and • B653 roundabout with B651. <p>Delay and congestion within these locations, would need to be reviewed and mitigation measures may ultimately be sought.</p> <p>Collision Data</p> <p>Within the last 5 year period there have been a total of 12 collisions resulting in slight injuries on Marford Road within direct proximity of the site. Five of these collisions occurred at the intersection of Marford Road and Green Lanes. Whilst not identified as a hazardous site (6 or more collisions) further review of this junction will be required to illustrate that there are no safety issues.</p> <p>Vulnerable Road Users</p> <p>Pedestrians - A narrow footway is present along Marford Road which is segregated from the carriageway by a grass verge. Any HGV routing will need to consider impacts on pedestrians, and particularly children if routing is via Lemsford Village as a School and Church are present. Measures will need to be identified to protect such road users.</p>		
Summary of LVIA Comments		

Criterion	Score (Impact)	Justification
		<p>The site is considered to have moderate-high sensitivity to mineral extraction due to the openness of the site and open views from residential properties adjacent to the site that cannot be mitigated by screen planting without blocking the open views across the wider landscape currently enjoyed by those residents. Mineral workings are likely to be seen by people using the footpath crossing the site.</p> <p>The site is open, particularly to the south and mineral extraction is likely to degrade some valued features, such as the ancient woodland contained within the site and potential severance of the visual link along the lime avenue between Benstead’s Wood and Brocket Hall. Although the ancient woodland could be left untouched, extraction could not be screened without changing the characteristic large-scale openness of the area and interrupting the visual link along the lime avenue between Benstead’s Wood and Brocket Hall. There may be opportunities to improve degraded hedgerows as part of any mitigation scheme.</p>

Appendix 2: Consultation Comments and Actions in Relation to the Previous Version of the Minerals Site Selection Report

The responses summarised in the table below were submitted in response to the consultation on the Draft MWLP in 2022. The issues raised have been summarised due to the number of representations received and as many of the representations related to the same material planning concerns.

In some cases, the 'LUC Response' in the final column states that consideration will be given to developments in local evidence and associated plans, as well as additional sources of information recommended by consultees. This was undertaken in summer 2023, as part of the updated site assessment process, and where appropriate, updates have been made to **Table 3.1: Evaluation Framework for Sieve 3** in the main body of the site selection report.

Summary table of consultation comments received in relation to the Site Selection Report 2018 published alongside the Draft Minerals and Waste Local Plan in 2022, and associated responses and actions

Consultation Comments – Summarised where Appropriate	Response/Action Taken to Address Consultation Comment
Documents are too technical and difficult to understand.	The Minerals Site Selection Report is inherently a technical document to provide evidence for the site allocation process.
The Minerals Site Selection Report does not properly take account of planned development, including the garden villages and policies within neighbourhood development plans.	The Minerals Site Selection Report sets out the information used within the sieving process, and the criteria used to assess sites consistently, in chapter 3 . Planned development was considered within the Minerals Site Selection Report 2018 and has been considered again within the updated Minerals Site Selection Report 2023.
<p>The process of sieving the sites for suitability is flawed due to:</p> <ul style="list-style-type: none"> • lack of information; • out of date information; • lack of accurate identification of historic assets or environmental designations; and • lack of proper consideration of cumulative impacts. 	The Minerals Site Selection Report sets out the information used within the sieving process, and the criteria used to assess sites consistently. The data used for the desktop assessment has been updated and sites have been reassessed against the most up-to-date information available. Cumulative impacts are considered in relation to minerals sites within the Minerals Site Selection Report. Wider cumulative impacts are considered within the separate Sustainability Appraisal prepared by HCC.
Information within the Minerals and Waste Local Plan in relation to the Minerals Site Selection Report is vague and does not adequately explain the process.	The Minerals and Waste Local Plan summarises the evidence in relation to the draft policies. The Minerals Site Selection Report sets out the process for the site assessment and the criteria used, and forms the basis for the decisions made for site allocations.
Scoring of sites is inconsistent, does not follow the criteria set out and should be reviewed. A full review	The initial Minerals Site Selection Report report used the information that was available at the time the original report was provided. The updated Minerals Site Selection Report

Consultation Comments – Summarised where Appropriate	Response/Action Taken to Address Consultation Comment
<p>of scoring would result in different outcomes for the proposed allocations.</p>	<p>has used updated information in relation to the constraints, as well as information provided through the consultation on the draft Minerals and Waste Plan. The site assessment process is set out in section 3 and 5 of the updated Minerals Site Selection Report. Site selection within the Minerals and Waste Local Plan is a separate stage of the process, and will consider information within other evidence documents, including the Sustainability Appraisal, and the needs of the plan area.</p>
<p>The Minerals and Waste Plan site selection does not follow the recommendations of the Mineral Sites Selection Report.</p>	<p>The Minerals Site Selection Report provides one part of the evidence base for site allocations within the Minerals and Waste Local plan.</p>
<p>Inconsistencies between Sustainability Appraisal (SA) and Minerals Site Selection Report.</p>	<p>Information in the updated Minerals Site Selection Report will be used to update the SA prepared in support of the Minerals and Waste Local Plan.</p>
<p>Scoring within Minerals Site Selection Report does not fully take account of all impacts across stages of development. Further account should be made of impacts that may occur during extraction.</p>	<p>The Minerals Site Selection Report considers the potential impacts across the lifetime of any potential site. The Minerals and Waste Local Plan will provide detailed consideration of the potential impacts at each stage of minerals development.</p>
<p>Additional information provided in support of sites:</p> <ul style="list-style-type: none"> • information relating to planning applications and status of sites; • potential resources; and • site boundaries. 	<p>Additional information provided through representations has been considered as part of the updated site assessments. Information in relation to site boundaries has been added to the relevant maps and considered in the appraisal process. Information relating to potential resources and the status of sites has been reviewed against the latest available Annual Monitoring Report and Local Aggregate Assessment.</p>