

**Erewash Core Strategy Review**  
**Habitats Regulation Assessment (HRA)**  
**Screening Exercise**

**Erewash Borough Council**  
**March 2025**

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## **1 Background:**

1.1 Erewash Borough Council is undertaking a review of its adopted Core Strategy (March 2014). This began with an 'Options for Growth' (Regulation 18) document published in January 2020. It identified several potentially suitable locations for large-scale, strategic housing sites, each supported by accompanying draft Sustainability Appraisal (SA) helping to confirm the sites were located in spatially sustainable locations.

1.2 A further Regulation 18 consultation, a 'Revised Options for Growth', took place in March 2021. This presented a refined set of strategic housing allocations, with these intended to contribute towards the Council's long-term housing requirement established by the Government's Standard Method formula and which subsequently has been translated into a local housing need (LHN) figure.

1.3 A combination of the adopted plan being out-of-date and a pressing need to address continuing under-delivery of new housing sees the Council committed to making ambitious, yet realistic, progress over replacing the Erewash Core Strategy. A Publication (Regulation 19) consultation was held in May 2022, whilst submission of the Core Strategy Review document occurred in November 2022.

1.4 To support the land-based proposals within the Publication stage, and as advised by [Government guidance](#) concerning the production of Habitats Regulation Assessment, the Council sought the specific views of Natural England in its capacity as a statutory nature conservation body (SNCB). The Council specifically sought views over the suitability and robustness of the work carried out to date and the conclusions reached in regard to the screening exercise presented by this document. In response, which also covers the progression of the Core Strategy Review to Examination, no objections were received - either from Natural England or anyone else commenting upon the robustness of the HRA screening document.

1.5 Independent examination of the Core Strategy Review has been ongoing since November 2022, leading to Hearing Sessions into the Plan's soundness being held during June 2024.

1.6 In response to the Hearing Sessions, the Council was required to undertake additional work to, amongst other tasks, identify further housing land in order to confirm the availability in Erewash of both a sufficient five-year and plan-wide housing supply. As a consequence, several new housing allocations have been proposed around the Borough. It is therefore necessary to consider any potential impacts of these sites on protected European sites within the wider context of the HRA.

## 2 Previous Habitats Regulation Assessment work:

2.1 The adopted 2014 Erewash Core Strategy was supported by a Habitats Regulation Assessment (HRA) undertaken by the ecological consultants David Tyldesley Associates (DTA). The HRA, published in 2012, was jointly commissioned by the five Nottingham Core Housing Market Area (HMA) councils who at the time were working together to produce an aligned set of Local Plans as a way of coordinating major growth proposals across Greater Nottingham.

2.2 The HRA flagged a proposed housing allocation in Gedling Borough in the north of the Greater Nottingham area as having a potential effect on a nearby area of woodland associated with the Sherwood Forest candidate Special Protection Area (cSPA). Further screening/assessment focused on the impacts of several potential housing sites elsewhere around Gedling Borough, and in particular, the scale of growth planned at the settlement of Calverton. The HRA concluded that specified mitigation measures on identified sites in Gedling Borough were necessary to reduce the assessed impact of future development to an allowable level.

2.3 For Erewash Borough, the 2012 HRA concluded that none of the provisions made by its Core Strategy for housing or employment development would result in a detrimental impact on any protected European sites. As such, the policies in the adopted Core Strategy were unaltered by the HRA screening process.

2.4 Copies of both the Nottingham Core HMA HRA and the David Tyldesley Associates work can be made available on request.

## 3 Legal requirements and the current plan-making position:

3.1 Notwithstanding the conclusions of the 2012 HRA in respect of planned growth within Erewash, the current review of the Borough's Local Plan requires the Council to assess whether the emerging policies would result in significant harm to the designated features of a European site. A HRA is required by **the Conservation of Habitats and Species Regulations 2017 (as amended)** ('the Habitats Regulations') and the Council, fulfilling its legal obligations as a 'competent authority', must assess via HRA whether the emerging policies it is preparing would significantly harm the designated features of a European site.

3.2 The Erewash Core Strategy review sits separately from the [Greater Nottingham Strategic Plan \(GNSP\)](#) currently being prepared by three of the other four Core HMA authorities (Broxtowe, Nottingham City and Rushcliffe). For the avoidance of doubt, this HRA is therefore being pursued independently from any equivalent work being undertaken by the other Greater Nottingham councils in support of the GNSP.

## **4 Habitats Regulation Assessment (HRA):**

4.1 Article 6 of the Habitats Regulations requires assessment where a plan or project (the Erewash Core Strategy Review is considered an example of the former) may give rise to significant effects upon European sites. These sites comprise a network of sensitive areas and environments where natural habitats and species require careful conservation due to their rare, endangered or vulnerable condition.

4.2 European sites span the following environmental designations:

- **Special Areas of Conservation (SACs);**
- **Possible Special Areas of Conservation (pSAC);**
- **Special Protection Areas (SPAs);**
- **Potential Special Protection Areas (pSPA); and**
- **Ramsar sites (wetlands of international importance)**
- **Marine Conservation Zones (MCZ)<sup>1</sup>**

4.3 HRA involves three stages. The need to complete all three is dependent on the level of effect the Council establishes through its assessment. A first stage involves a screening exercise to check if the plan is likely to have a significant effect on any European site's conservation objectives. If this cannot be demonstrated then no further work is necessary – although this should be confirmed in conjunction with Natural England. However, if screening cannot rule out the risk of the plan having a significant effect then a second stage, Appropriate Assessment (AA), should be undertaken to explore the linkages between the plan and any identified European sites in more detail. A third stage considers the grounds for a plan's exemption owing to it carrying such sufficient importance that it justifies the possibility (or certainty) of damage occurring to a European site(s).

4.4 A vital principle underpinning HRA is the need for the Council to follow a precautionary approach at each required stage. The Council, as a competent authority, must be sure that the plan will have no adverse effect on site integrity (which also includes any potential cumulative effects).

## **5 Stage One (Screening):**

5.1 Stage one of the HRA comprises a screening exercise. This enables the Council to understand which (if any) sites falling under the above designations listed at **4.2** can be found either within or in close proximity to the administrative boundaries the plan will apply to. To reiterate, the Core Strategy Review document will apply only to the administrative area of Erewash Borough.

5.2 In the absence of prescriptive advice or guidance that sets out a defined geographical scope of a HRA that supports a Local Plan, the assessment has

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<sup>1</sup> Due to the Borough's central, inland location it is unlikely any scale of planned development proposed by the replacement Local Plan would affect such zones.

instead been influenced by identified impact pathways rather than arbitrary distance radiuses. Distance alone should not be seen as the sole metric influencing whether a plan's proposals would affect the conservation objectives of any European site. Notwithstanding this, information on distances remains key to understand the strength of relationship between the plan's area of coverage and the nearest identified European site. Some designations may also have an impact risk zone (IRZ). This provides helpful guidance to steer the work of a HRA in understanding the sensitivities of certain designations, with any relevant IRZs highlighted by the screening exercise.

5.3 Utilising spatial mapping obtained from DEFRA's MAGIC map portal, the Council has been able to locate each of the nearest European site designations listed at **4.2**.

5.4 The following table (Table 1) presents two relevant distances. For each identified European site designation, the table shows its distance to a) the edge of the area the Local Plan applies to (i.e. the closest part of Erewash Borough), and b) the nearest draft strategic housing and employment allocation being included within the plan. A schedule of these allocation sites can be found at **Appendix A**. Both distances are measured using direct lines as opposed to following physical features found at ground level (roads, rights of way, watercourses etc.). The details presented by Table 1 have been mapped and are shown at **Appendix B**. Further information looking into impact pathways for the identified European sites is presented later in this document.

**Table 1: Closest European sites to Erewash Borough**

<b>Distance</b>	<b>SACs</b>	<b>cSAC</b>	<b>SPAs</b>	<b>cSPA</b>	<b>Ramsar</b>
<b>To edge of Borough</b>	Gang Mine - 13.8km	None within 50km of Borough	Peak District Moors (South Pennine Moors – Phase 1) - 23.2km	None within 50km of Borough	Midland Meres & Mosses - 36.9km
<b>To nearest strategic allocation</b>	Breadsall Hilltop (SGA3) – 18.3km	None within 50km of an allocation	North of West Hallam – 27.5km	None within 50km of an allocation	Breadsall Hilltop (SGA3) – 34.8km

5.5 Table 1 confirms the existence of consistently long distances between the identified European sites and the Borough's boundary. No recorded distance is lower

when a European site is measured to the closest draft Core Strategy review allocation inside Erewash.

5.6 The information presented by Table 1 usefully provides context on the distance between European sites and the Local Plan's area of coverage. Analysis of other HRA screening exercises undertaken in support of local authority plan-making shows noticeable variations in the zones of scope used as a guide to determine the level of effect a plan may have on designations. The absence of a consistently applied, fixed distance the Council can rely upon to benchmark a realistic area of influence demonstrates the importance of understanding impact pathways to scope any effects.

5.7 In addition to proposed residential and employment site allocations, it is also necessary to assess any possible impacts to European sites arising from the content of topic-based policies included within the Core Strategy Review. The diverse range of policies cover spatial planning matters from the incorporation of good design at housing allocation sites to the identification of key Green Infrastructure assets across the Borough. The Screening Exercise will look at each draft policy in turn and consider what, if any, impact on those European sites identified at Table 1 above.

5.8 Table 2 introduces the seven non-site specific policies and offers commentary on any identifiable links and connections between the scope of the policy, its intended implementation and the closest European sites to Erewash Borough. It is encouraged that the table is read alongside the Core Strategy Review version which includes all draft policies in full.

**Table 2: Assessment of non-site specific policies on European sites:**

<b>Policy</b>	<b>Scope of Policy</b>	<b>Perceived impacts</b>
<b>Strategic Policy 0 – The Settlement Hierarchy</b>	This policy sets out the settlement hierarchy across the Borough. It establishes the locations across Erewash where development is deemed to be sustainable.	The identification of sustainable locations in which housing and employment growth is most appropriately directed to across the Borough will result in only substantially low impacts to European sites given the sizeable distances between locations of growth and protected sites.
<b>Strategic Policy 1 - Housing</b>	This policy sets out the number of homes the Plan is required to deliver and then presents how these will be distributed around the Borough.	Similarly to the above, with housing and employment growth being directed to the most sustainable locations within the Borough where land is available for development, this provides balance to where new growth will occur – with distribution occurring all around

		Erewash, removing any single large concentration of development when looked at as a whole. The sizeable distances between where development is occurring and identified European sites will result in negligible levels of impact on conditions at protected sites.
<b>Strategic Policy 1.1 – Allocated Housing Sites</b>	This policy introduces a set of design principles that all of the housing site allocations should introduce to embed sustainability into each of the developments.	The introduction of design-based principles that development at each of the housing sites should follow is not thought to impact in any way on conditions at those identified European sites in Table 1.
<b>Strategic Policy 2 – Employment</b>	This policy establishes the required scale of new employment land needed to meet assessed needs in the Borough. It also identifies several key strategic employment zones that require long-term protection.	The provision of new employment land is expected to be met at the Stanton North allocation. Similarly to the strategic housing sites, the distance between the Stanton North site and European sites is extremely unlikely to result in any detrimental effects to conservation objectives of each identified site. The identification of strategically important employment zones merely acts to protect existing concentrations of economic activity, thus also not impacting on distant European sites.
<b>Strategic Policy 3 – Town, Local &amp; Village Centres</b>	This policy sets out a hierarchy of retail centres across the Borough whilst identifying what preferred town centres uses with identified centres are.	The identification and consolidation of the Borough's retail centres largely maintains the current hierarchy with the addition of several village centres at the lowest end of the hierarchy. As such, this would not impact on conditions at any of the identified European sites.
<b>Strategic Policy 4 – Transport</b>	This policy establishes three specific transport-orientated	The three transport infrastructure projects that are explicitly identified within this



	<p>projects required to create the necessary transport infrastructure to support the anticipated level of residential and employment growth in the Borough.</p>	<p>policy are necessary to ensure sustainable travel and movement can occur across the Borough. The construction of a relief road to the south west of Kirk Hallam is necessary to absorb the additional trips created as a result of Policy 1.5's development of 1,000 homes. Whilst this will result in the net addition of private car journeys, the relief road, planned public transport provision and walkable neighbourhood principles embedded in the site's layout should help to mitigate the impacts of this development – preventing any effects to the conservation objectives or conditions at any of the European sites.</p>
<p><b>Strategic Policy 5 – Green Infrastructure</b></p>	<p>This policy identifies four specific zones which recognise significant assets of the Green Infrastructure network in Erewash, whilst setting out objectives for their improvement and also the management of land-uses with the zones.</p>	<p>Given the policy merely aims to identify and strengthen the role played by a strategic Green Infrastructure network across the Borough with minimal, if any, built development; it is extremely unlikely that such an action would result in any detrimental effects to any of the European designation sites.</p>

## **6 Conservation objectives:**

6.1 **Regulation 35** of the Habitats Regulations establishes that the statutory nature conservation body (Natural England) has a duty to inform what conservation objectives are to a relevant/competent authority responsible for a European site. This includes a need to provide advice detailing what, if any, operations may cause deterioration in the features which has prompted the site to be originally designated.

6.2 Conservation objectives for a European site represent the aims of the Habitats and Birds Directives<sup>2</sup> in relation to that site. This allows plan-makers and other interested parties to understand how habitats and species of European Community importance should be maintained or restored to 'favourable conservation status' (FCS) as defined by Article 1 of the Habitats Directive. This is further explained below.

6.3 The conservation status of a natural habitat and a species will be regarded as 'favourable' when the following conditions can be shown:

### **Natural habitat:**

- Its natural range, and the area it covers within that range, are stable or increasing;
- The specific structure and functions which are necessary to support the species long-term maintenance exist and are likely to exist for the foreseeable future;
- Conservation status of typical species is favourable as defined in Article 1(i); and
- Data can show the species is maintaining itself on a long-term basis as a viable component of its natural habitat.

### **Species:**

- Species data demonstrates that it is maintaining itself on a long-term basis as a viable component of its natural habitat;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

6.4 Guidance indicates the Habitats Directive intends FCS to be applied at a singular site level, as well as to habitats and species across their entire recorded European range. Consequently, to adequately express the aims of Habitats Directive for an individual site, its conservation objectives are essentially to maintain (or restore) the habitats and species of the site at (or to) FCS.

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<sup>2</sup> The Birds Directive was transposed into English law via the 2017 Regulations.

6.5 The Conservation Objectives for European sites identified within Table 1 are available to view at Natural England's website and summaries are provided at **Appendix C**. The following table (Table 3) provides more geographic and technical information on each European site identified as part of this screening exercise.

**Table 3: Further information about nearest European sites:**

European site	Identification number	Broad location	Type of designation
Gang Mine	UK 0012817	North of Wirksworth	SAC
Peak District Moors (South Pennine Moors – Phase 1)	UK 0030280	Extending northwards of Darley Dale	SPA
Midland Meres & Mosses	UK 11043	South-west of Uttoxeter	Ramsar

## **7 Threats and vulnerabilities:**

7.1 As part of its role as the country's statutory nature conservation body, Natural England publish Site Improvement Plans (SIPs) for each European site. These specify the qualifying features displayed by a site and identify the distinct biodiversity characteristics which has led to the granting of one of SAC, SPA or Ramsar status.

7.2 Each qualifying feature is naturally susceptible to a diverse range of threats and pressures and these are flagged by each site's SIP. Should threats and pressures to the qualifying features be exacerbated then a site's conservation status may be weakened and undermined with a risk that it may be subjected to a likely significant effect.

7.3 Details of the qualifying features and identified threats/pressures for European sites flagged by this screening exercise can be obtained from Natural England's website. Summaries of these can be found at **Appendix D** to this document.

## **8 Initial screening and impact pathways:**

8.1 The importance of understanding and exploring any impacts created as a result of the policies within a Plan (and their subsequent implementation) affecting sensitive and qualifying features at designated European sites is a vital element of the HRA process.

8.2 Such relationships are known as **impact pathways** and can arise from issues connected to increased recreational pressures, air quality impacts, changes to the quality of water and the general influence of urbanisation and all consequential forms of human activity. The threats which are likely to affect conditions at European sites

are set out by individual SIPs and these will principally help the Council to understand what, if any, effect may arise from the selection of draft strategic development sites in the Borough.

8.3 Residential development of both minor and major scale is often cited, justifiably in many instances, as the most invasive and influential act which can affect a pathway and present a threat to a European site(s). The amended Core Strategy Review presents twelve strategic housing locations, eight of which are new and entered the Plan as part of the Core Strategy Review amendment (April 2025). These locations are geographically dispersed around the Borough and see allocations at most of the key village settlements and extensions to the urban conurbations of Derby and Nottingham on each side of Erewash. The two Ilkeston sites project the town outwards in a west and southerly direction. This reaffirms that no major concentrations of new homes comprising several thousand new homes are arising from where the draft allocation sites are located.

8.4 Analysing the distances between the nearest recorded SAC, SPA and Ramsar European sites and Erewash, it is clear the sizeable gaps present no realistic prospects of one or more (in combination) impact pathways being identifiable. The Borough's closest proposed strategic housing site (Breadsall Hilltop) to any European site is 18.3km away and sees two neighbouring local authorities (Derby City and Amber Valley) positioned in-between Erewash and Derbyshire Dales - the latter being the administrative council area that Gang Mine SAC is located within.

8.5 The general composition of land-uses between the Borough and the various European sites nearest Erewash should help to demonstrate that there is little, if any, prospect of development at any of the draft allocation sites influencing in a meaningful way on the condition of European sites. Significant and extensively urbanised areas and built environments can be found between the edge of the Local Plan's area of coverage and designations at Gang Mines, Peak District Moors and Midland Meres & Mosses.

8.6 Gang Mine SAC has previously been subject of extensive lead mining operations. This has resulted in the formation of spoil heaps, hummocks and hollows across the site. Varying levels of heavy metal is contained within ground soils, contributing to a mosaic of plant communities reflecting these inconsistencies. Unworked land supports neutral grasslands and scrub habitat on deeper soils. The risk to this Special Area of Conservation is posed by air pollution, and more specifically the impact of atmospheric nitrogen deposition.

8.7 The South Pennine Moors Special Protection Area covers a substantial area of land stretching northwards from Matlock. It covers extensive tracts of semi-natural moorland habitats including upland heath and blanket mire. A diverse mosaic of habitats contributes to the ornithological interests, which comprises birds of prey and waders. As expected with any European site extending across such a vast

geography, a sizeable number of issues each with the potential to effect conditions at the SPA have been identified within the SIP.

8.8 Midland Meres and Mosses Ramsar site incorporates a large number of sites collectively sized at over 500 hectares. These sites display lowland open water and peatland habitat characteristics that support an abundance of rare species of plants and invertebrates.

## **9 Conclusion:**

9.1 This HRA screening exercise has examined the geographic relationship between the closest European sites to Erewash Borough and the sites the Council wish to progress as allocations in its emerging Local Plan.

9.2 As highlighted by section 5.0, one of the more noticeable elements of this HRA screening is the identification of long distances between the Borough generally and the nearest designated European sites. While these offer a strong indication that the strength of relationship between potential development and areas of great environmental sensitivity are likely to be weak, an understanding of the site characteristics of each of the designations helps to confirm the rather limited degree of association.

9.3 On an individual basis, the Council believes that no single strategic allocation site has the ability to directly or indirectly compromise the characteristics of any of the European sites cited by the HRA by influencing impact pathways. However, it is necessary to also consider the 'in combination' effects development at each of the 12 housing allocations and the single employment allocation may have on the three European sites. As explained at 8.3, the largest concentration of new development is proposed to take place around the town of Ilkeston. In total, approximately 2,000 new homes are planned at two locations around the settlement. With a site allocation situated at the southern and western end of Ilkeston, this serves to disperse growth away from any one single location – helping to reduce the combined impacts associated with major sources of new development. Eight new housing allocations, incorporated into the Local Plan as part of the Core Strategy Review amendment, are also dispersed around the Borough in line with a sustainable pattern of growth. This follows the same principle as that explained above, reducing the impact of over-concentrating new development in any one area – lessening the in-combination effects.

9.4 In conclusion, the Borough Council is of the view that no significant effects on the nearest identified European sites would arise because of development at any individual, or as a combination of several proposed strategic allocations. Also helping to arrive at this conclusion is the contributory factor of the Council's Sustainability Appraisal (SA). This has been developed in an iterative manner helping to steer the production of draft planning policies – both topic-based and site-based, through the various statutory stages of the Local Plan.

9.5 The main role of the SA in plan-making is to ensure the development of policies that contribute to positive sustainability outcomes in relation to a wide range of environmental, social and economic objectives. Overall, the SA is able to show that the allocation sites relevant to this HRA, both individually and in combination, are sustainable growth options. Where negative effects have been identified, the SA has shown what mitigation is necessary to minimise, and in some instances, remove these in order to improve the sustainability of its land-use policies.

9.6 In addition to the effects from individual allocations, it is also important to consider any implications arising from the general, non-site specific policies scoped and assessed at Table 2. As the commentary within the table demonstrates, the nature of these policies is not expected to either individually or collectively impact adversely on conditions to be found at any of the identified European sites. In most instances, the policies help to offer protection to elements of the built and natural environment that would not directly lead to new development. The construction of a Kirk Hallam relief road to help link the South West Kirk Hallam strategic housing allocation would likely be the catalyst for additional vehicular trips being made across the local road network. However, other than providing highway access to the allocation, another notable attribute of the road would be to relieve local 'hotspots' of congestion in and around that part of the Borough (South Ilkeston). The proposed road's influence in reducing instances of standing traffic and waiting times at major junctions is likely to offset any impacts on environmental factors that the road's construction would bring.

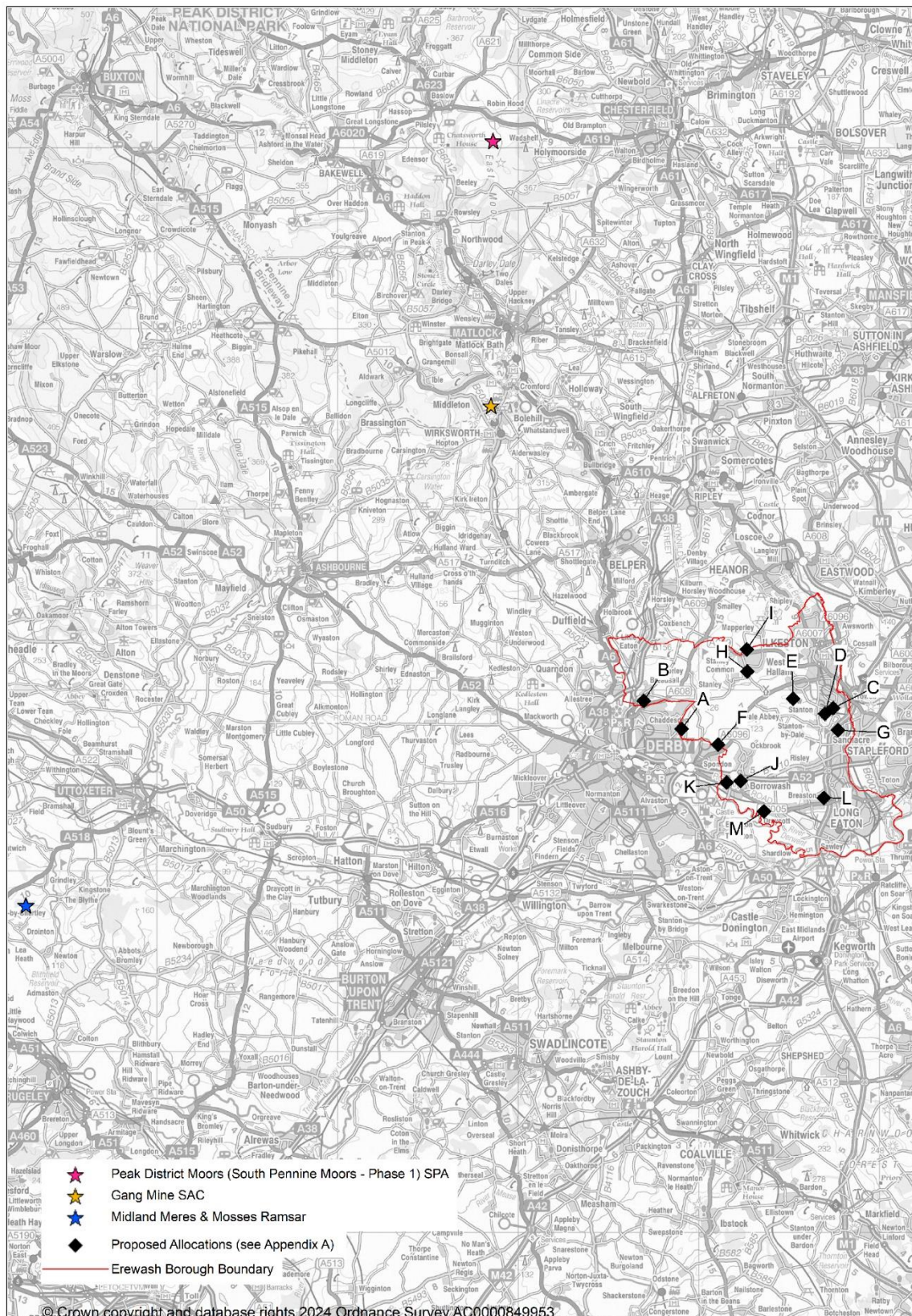
9.7 The conclusions reached by the SA also help to reaffirm the Council's view that no significant effects on European sites are likely. As such, it is not proposed, nor is it necessary for the HRA to progress to any of the subsequent stages outlined at **4.3**.

## Appendix A: Schedule of site allocations in Core Strategy Review

Site	Name	Land-use	Size (Ha)	Proposed capacity
<b>A</b>	<b>Acorn Way (SGA1)</b> Strategic Policy 1.3	Housing	24	550
<b>B</b>	<b>North of Breadsall Hilltop (SGA1)</b> Strategic Policy 1.8	Housing	8.2	160
<b>C</b>	<b>Stanton North</b> Strategic Policy 2.1	Employment	80	N/A
<b>D</b>	<b>Stanton South (SGA21)</b> Strategic Policy 1.2	Housing	47	1,000
<b>E</b>	<b>South-west of Kirk Hallam (SGA25)</b> Strategic Policy 1.5	Housing	50	1,000
<b>F</b>	<b>North of Spondon (SGA26)</b> Strategic Policy 1.4	Housing	12.3	200
<b>G</b>	<b>West of Sandiacre</b> Strategic Policy 1.7	Housing	4.8	180
<b>H</b>	<b>South of West Hallam</b> Strategic Policy 1.9	Housing	3.9	90
<b>I</b>	<b>North of West Hallam</b> Strategic Policy 1.10	Housing	1.6	35
<b>J</b>	<b>North of Borrowash</b> Strategic Policy 1.11	Housing	2	60
<b>K</b>	<b>West of Borrowash</b> Strategic Policy 1.12	Housing	14	280
<b>L</b>	<b>East of Breaston</b> Strategic Policy 1.13	Housing	2.6	50
<b>M</b>	<b>South-west of Draycott</b> Strategic Policy 1.14	Housing	8.3	190



## Appendix B: Relationship between Plan allocations and European sites





## Appendix C: Main protected characteristics of European sites

- **Gang Mine (Special Area for Conservation – SAC):**

**Annex I habitats that are a primary reason for selection of this site:**

### **6130 Calaminarian grasslands of the *Violetalia calaminariae***

Gang Mine is an example of **Calaminarian grasslands** in an anthropogenic context in northern England. Natural limestone outcrops supporting species typical of calaminarian grasslands are rare and small, with a very impoverished flora. This site is included to provide an example of the habitat type on sedimentary rocks; it has colonised the large area of mine workings and spoil heaps on limestone. These are notable for the wide variations in slope, aspect and soil toxicity. Floristically the site contains the richest anthropogenic Calaminarian grasslands in the UK, with abundant spring sandwort *Minuartia verna* and alpine penny-cress *Thlaspi caerulescens*. Other species of grassland vegetation present include early-purple orchid *Orchis mascula* and dyer's greenweed *Genista tinctoria*. Many of these species are likely to be distinct genotypes adapted to soils rich in heavy metals.

Full details can be found at the following link:

[Gang Mine - Special Areas of Conservation \(jncc.gov.uk\)](http://jncc.gov.uk)

- **Peak District Moors (South Pennine Moors – Phase 1) (Special Protection Area – SPA):**

**Annex I habitats that are a primary reason for selection of this site:**

### **4030 European dry heaths**

The site is representative of upland dry heath at the southern end of the Pennine range, the habitat's most south-easterly upland location in the UK. Dry heath covers extensive areas, occupies the lower slopes of the moors on mineral soils or where peat is thin, and occurs in transitions to acid grassland, wet heath and 7130 blanket bogs. The upland heath of the South Pennines is strongly dominated by heather *Calluna vulgaris*. Its main NVC types are H9 *Calluna vulgaris* – *Deschampsia flexuosa* heath and H12 *Calluna vulgaris* – *Vaccinium myrtillus* heath. More rarely H8 *Calluna vulgaris* – *Ulex gallii* heath and H10 *Calluna vulgaris* – *Erica cinerea* heath are found. On the higher, more exposed ground H18 *Vaccinium myrtillus* – *Deschampsia flexuosa* heath becomes more prominent. In the cloughs, or valleys, which extend into the heather moorlands, a greater mix of dwarf shrubs can be found together with more lichens and mosses. The moors support a rich invertebrate fauna, especially moths, and important bird assemblages.

### **7130 Blanket bogs (\* if active bog) \* Priority feature**

This site represents blanket bog in the south Pennines, the most south-easterly occurrence of the habitat in Europe. The bog vegetation communities are botanically

poor. Hare's-tail cottongrass *Eriophorum vaginatum* is often overwhelmingly dominant and the usual bog-building *Sphagnum* mosses are scarce. Where the blanket peats are slightly drier, heather *Calluna vulgaris*, crowberry *Empetrum nigrum* and bilberry *Vaccinium myrtillus* become more prominent. The uncommon cloudberry *Rubus chamaemorus* is locally abundant in bog vegetation. Bog pools provide diversity and are often characterised by common cottongrass *E. angustifolium*. Substantial areas of the bog surface are eroding, and there are extensive areas of bare peat. In some areas erosion may be a natural process reflecting the great age (9000 years) of the south Pennine peats.

#### **91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles**

Around the fringes of the upland heath and bog of the south Pennines are blocks of old sessile oak woods, usually on slopes. These tend to be dryer than those further north and west, such that the bryophyte communities are less developed (although this lowered diversity may in some instances have been exaggerated by the effects of 19<sup>th</sup> century air pollution). Other components of the ground flora such as grasses, dwarf shrubs and ferns are common. Small areas of alder woodland along stream-sides add to the overall richness of the woods.

**Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:**

**4010** Northern Atlantic wet heaths with *Erica tetralix*

**7140** Transition mires and quaking bogs

Full details can be found at the following link:

[South Pennine Moors - Special Areas of Conservation \(jncc.gov.uk\)](https://jncc.gov.uk/south-pennine-moors-special-areas-of-conservation)

- **Midland Meres and Mosses (Ramsar):**

#### **Ramsar criterion 1:**

The site comprises a diverse range of habitats from open water to raised bog.

#### **Ramsar criterion 2:**

Supports a number of rare species of plants associated with wetlands, including the nationally scarce cowbane *Cicuta virosa* and, elongated sedge *Carex elongata*. Also present are the nationally scarce bryophytes *Dicranum affine* and *Sphagnum pulchrum*. Also supports an assemblage of invertebrates including several rare species. There are 16 species of British Red Data Book insect listed for this site including the following endangered species: the moth *Glyphipteryx lathamella*, the caddisfly *Hagenella clathrata* and the sawfly *Trichiosoma vitellinae*.

Full details can be found at the following link:

[Midland Meres and Mosses - Ramsar \(jncc.gov.uk\)](https://jncc.gov.uk/midland-meres-and-mosses-ramsar)

## Appendix D: Qualifying features, identified threats and pressures

- **Gang Mine (Special Area for Conservation – SAC):**

**Threat:** Air Pollution: Impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds the site relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in a favourable condition on this site. This requires further investigation.

**Action:** 1A

Further investigate potential atmospheric nitrogen impacts on the site based on application of guidance from Chief Scientist's Group Nitrogen Task & Finish Group.

- **Peak District Moors (South Pennine Moors – Phase 1) (Special Protection Area – SPA):**

Qualifying features of the SPA:

A222(B) *Asio flammeus*: Short-eared owl

A098(B) *Falco columbarius*: Merlin

A140(B) *Pluvialis apricaria* : European golden plover

The site improvement plan (SIP) which is in place for the above SPA is a comprehensive and lengthy document that sets out 15 separate priorities and issues spanning a diverse range of activities which are identified as being a pressure or threat (or both) to the condition of habitats across the SPA.

A detailed Issues & Action Plan sets out 53 separate actions across the 15 priorities as a means to ensure the maintenance of acceptable habitat across the SPA.

Further details can be accessed from the following link:

[Site Improvement Plan: South Pennine Moors - SIP225 \(naturalengland.org.uk\)](https://naturalengland.org.uk/site-improvement-plan-south-pennine-moors-sip225)

- **Midland Meres and Mosses (Ramsar):**

**Principal Features:** The Meres and Mosses of the Clwyd-Shropshire-Cheshire-Staffordshire plain form an internationally important series of open water and peatland sites. "Meres" refer to pools, while "mosses" are mires or peatland sites. There are more than 60 meres and a smaller number of mosses. The meres range in depth from about one metre to 27m and vary between less than one hectare to 70ha, in area. The origin of most of the hollows can be accounted for by glaciation, which left depressions in the plain as ice sheets receded. However, a small number have been formed, at least in part, by more recent subsidence resulting from the removal in solution of underlying salt deposits. Although the majority of the meres are

naturally nutrient rich (eutrophic), the water chemistry is very variable reflecting the heterogeneous nature of the surrounding drift deposits. Associated fringing habitats such as reedswamp, fen, carr and damp pasture add to the value of the meres. The development of these habitats is associated with peat accumulation which in some cases has led to the complete infilling of the basin. During this process the nutrient status of the peat surface changed and typically became nutrient poor (oligotrophic) and acidic, thus allowing species such as *Sphagnum* spp. to colonise. In a few cases colonisation of the water surface by floating vegetation has resulted in the formation of a "quaking bog" also known as a "schwingmoor". The site is also home to a number of rare species of plants associated with wetlands. The site contains the nationally scarce *Elatine hexandra*, *Eleocharis acicularis*, *Cicuta virosa*, *Thelypteris palustris* and *Carex elongata*. The site also contains an assemblage of invertebrates, including the following rare wetland species. There are three species listed for the site which are considered to be endangered in Britain, these are the caddis fly *Hagenella clathrata*, the fly *Limnophila fasciata* and the spider *Cararita limnaea*. Other listed wetland Red Data Book species are: the beetles *Lathrobium rufipenne* and *Donacia aquatica*, the flies *Prionocera pubescens* and *Gonomyia abbreviata* and the spider *Sitticus floricola*. (Criteria 2a).

**Conservation Issues:** Various broad activities recorded for the site include agriculture and grazing, fishing, hunting, recreation, research and conservation. This complex site has undergone partial eutrophication from human activities (although some of the mires are naturally eutrophic). Excess nutrients come from intensification of agriculture, fertilizer runoff and domestic and agricultural effluent.