

Herefordshire Minerals and Waste Local Plan



Adopted March 2024

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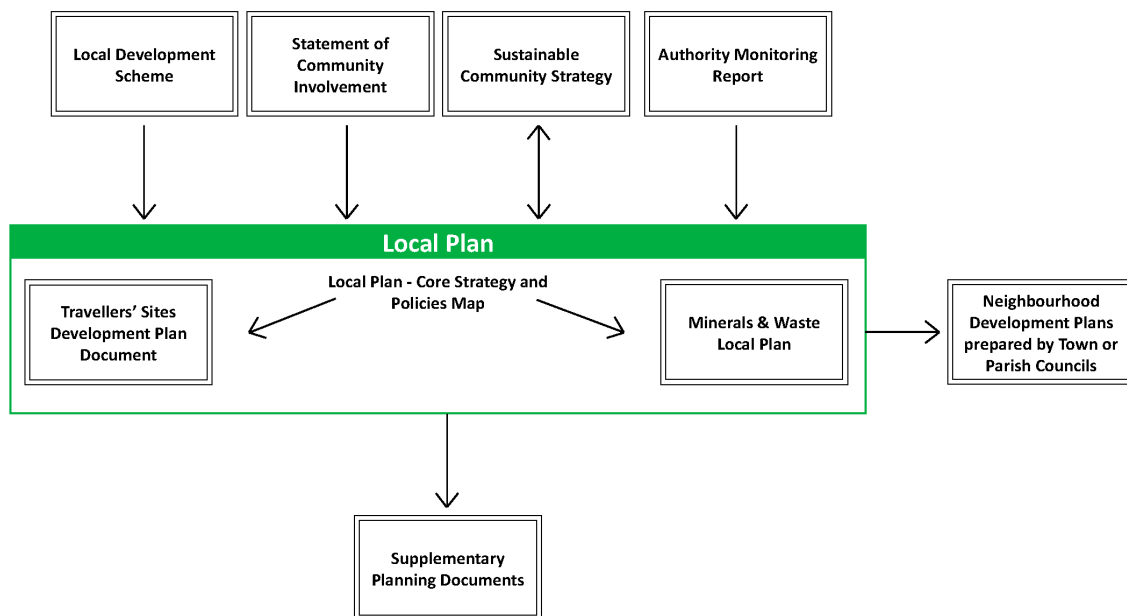
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1. Introduction and Background

1.1 The Herefordshire Local Plan

- 1.1.1 The council has prepared a Local Plan, to comprise of a number of documents including the Core Strategy, to guide development and change in the county up to 2031. A list of all the Local Plan documents and the timetable for their preparation are set out in the Local Development Scheme.
- 1.1.2 This first document in the production of the Local Plan, and adopted in October 2015, is the Core Strategy¹. This development plan document shapes future development and sets the overall strategic planning framework for the county.
- 1.1.3 The Minerals and Waste Local Plan is another element of the Herefordshire Local Plan as shown in Figure 1.

Figure 1 Structure of the Herefordshire Local Plan



- 1.1.4 As set out in the Core Strategy (paragraph 1.10), this MWLP establishes targets and planning policies relating to minerals and waste activities and associated development in Herefordshire. The plan period has been extended to 2041 to provide for the timeframe sought in the National Planning Policy Framework² and to sit alongside the updated Core Strategy.
- 1.1.5 The MWLP has been produced taking account of the National Planning Policy Framework³, Planning Practice Guidance⁴, up-to-date evidence base studies and ensuring close co-operation with neighbouring local authorities on cross-boundary issues. Regard has also been given to other plans and strategies produced by the council (particularly the Core Strategy, including its review and update) and other organisations.

¹ https://www.herefordshire.gov.uk/info/200185/local_plan/137/adopted_core_strategy

² Page 9, paragraph 22, National Planning Policy Framework, July 2021.

³ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁴ <https://www.gov.uk/government/collections/planning-practice-guidance>

- 1.1.6 The MWLP has been subject to independent assessment:
- Sustainability Appraisal, which is assessing the social, economic and environmental impacts of the MWLP throughout the development of the document;
 - Habitats Regulations Assessment, which has assessed any impacts on protected National Network Sites; and
 - Strategic Flood Risk Assessment (SFRA), to assess flood risk in the plan area, and the risks to and from surrounding areas as a result of minerals and waste development.

1.2 Timeframe, scope and purpose of the MWLP

- 1.2.1 The MWLP covers the period up to 31 December 2041 and applies across the administrative area of Herefordshire. More detail regarding the plan area and the consequent spatial strategy is set out in section 4.
- 1.2.2 The main purpose of the MWLP is to provide guidance to developers, local communities and other interested parties on where and when minerals and waste development may be expected over the plan period, as well as how it will be managed to reduce adverse impacts and maximise benefits. Minerals development includes activities such as mining, quarrying and gas extraction. Waste development includes activities such as waste recycling and the treatment and disposal of waste.
- 1.2.3 The MWLP forms part of the statutory development plan and the council will use it, along with the Core Strategy, as the starting point for decisions on planning applications for development relating to these activities. Where the MWLP contains relevant policies, decisions will be made in accordance with those policies, unless there are other material considerations related to planning, which indicate otherwise.
- 1.2.4 The MWLP must be read as a whole. Whilst the specific policies in the MWLP are particularly significant in setting out the key principles on which decisions will be based, the supporting text explains in more detail how the individual policies will be interpreted and applied. It will therefore be used by the council, in conjunction with the policies, to guide its approach to decision-making.

1.3 Why does Herefordshire need to plan for minerals and waste?

Minerals

- 1.3.1 Minerals and waste management infrastructure are essential to support a modern economy.
- 1.3.2 Minerals are important as they provide many of the raw materials necessary for construction, energy and industry. They are therefore essential in helping to sustain economic growth. For these reasons, Government attaches importance to planning for their supply, whilst at the same time requiring that the impacts of extracting them are kept within acceptable limits. An important consideration in planning for minerals is that they can only be worked where they occur in sufficient quantity and quality, and this fundamental geological constraint will always be a key influence on minerals planning.
- 1.3.3 Minerals gained from across the UK are required throughout the construction, manufacturing, chemicals and energy industries; for example: sand and gravel are used to build houses; silica sand is used to make glass; and hydrocarbons are used to make energy. However, within

Herefordshire minerals are primarily used in the construction industry, for example local building stone is used to repair historic buildings.

- 1.3.4 The geology of Herefordshire incorporates the: dramatic contortions of the ancient Malvern Hills (the oldest in England); internationally renowned fossil records of Silurian limestones; and glacial remains and river gravels revealing ice age history and astonishing changes of drainage patterns among the tributaries of the River Wye. Mineral extraction can provide good opportunities for geological and archaeological research and net benefits following reclamation.

Waste

- 1.3.5 Dealing with waste is a major challenge for society and needs to be addressed alongside other initiatives to improve the sustainability of our environment and economy. Many items discarded as waste have the potential to be re-used, recycled or used as a resource.
- 1.3.6 Managing waste in these ways has benefits in reducing the amount of natural resources that are consumed. For example, re-using or recycling materials generated during demolition activity can reduce the need for extraction of new minerals. At the same time, it can reduce the need for landfilling of waste. Treating waste as a resource can also lead to new opportunities for the economy, with the outputs of modern waste management processes acting as inputs to businesses that can use them. The circular economy encapsulates this approach, seeking to keep materials at their highest value for the longest period of time.
- 1.3.7 A network of waste management facilities is required to ensure that the appropriate infrastructure is in place to maximise its potential use as a resource and to avoid significant adverse impacts on the environment and communities. For example, there is a network of household waste recycling centres across Herefordshire, which enables householders to deposit items no longer required at a location where they can be reused, recycled or disposed of safely.

Policy

- 1.3.8 Whilst any minerals or waste development proposal would be subject to the Core Strategy, that development plan document does not specifically address these sectors. The MWLP provides the strategic direction and development management policies necessary to enable sustainable minerals and waste development.
- 1.3.9 Minerals and waste policy is currently contained in the Unitary Development Plan, adopted in 2007. Much of the Unitary Development Plan has been replaced by the Core Strategy, with just the minerals and waste policies being saved. These policies are replaced by the MWLP; it is important to update the minerals and waste policies to ensure a modern policy framework is in place.

1.4 Evidence Base

British Geological Survey⁵

- 1.4.1 British Geological Survey is the standard provider of objective and authoritative geoscientific data, information and knowledge to help society to:

⁵ <http://www.bgs.ac.uk>

- use its natural resources responsibly;
 - manage environmental change; and
 - be resilient to environmental hazards.
- 1.4.2 British Geological Survey was commissioned to prepare comprehensive mapping of the geology and mineral resource across Herefordshire. This information became available in early 2017 and has been used in the sites analysis.
- 1.4.3 The British Geological Society also prepares data on sand and gravel and aggregate production and consumption, with the latest available dataset based on 2014. This data has been used to inform the Minerals Need Assessment; whilst it is recognised to have its limitations as a dataset, it is the most credible data available. The information has also been reviewed against more strategic minerals relevant reporting, including 'Collation of the results of the 2014 Aggregate Minerals Survey for England and Wales' (March 2016)⁶.

Coal Authority⁷

- 1.4.4 The Coal Authority is an executive non-departmental public body, sponsored by the Department for Business, Energy & Industrial Strategy. It manages the effects of past coal mining, including subsidence damage claims that are not the responsibility of licensed coal mine operators. It also deals with mine water pollution and other mining legacy issues.
- 1.4.5 The Coal Authority prepares a series of maps that have been referred to in preparing the MWLP.

Call for Sites

- 1.4.6 In 2016 and 2017, Herefordshire Council made a 'call for sites', asking minerals and waste site operators and landowners to put forward site proposals to consider for future minerals or waste development and to outline future aspirations for existing sites.
- 1.4.7 These have been considered in the Spatial Context and Sites Report.
- 1.4.8 Respondents were invited to comment on the sites proposed to be allocated and to put forward any additional suggestions. One new site was put forward and has been considered in the Supplementary Sites Report.

Minerals and Waste Need Assessments

- 1.4.9 The need assessments seek both to identify current supply of minerals and waste management capacity and to forecast demand. They provide the essential evidence to determine what future requirements for both mineral supply and waste management capacity can reasonably be expected to be, such that this can be planned for in the MWLP.
- 1.4.10 Separate minerals and waste need assessments were prepared in February 2017 and accompanied the Issues and Options consultation. Each assessment was then updated, to reflect comments made in the consultation responses and to incorporate new data that had become available. The updated need assessments were finalised in November 2018 and accompanied the consultation on the Draft MWLP.

⁶ <https://www.gov.uk/government/publications/aggregate-minerals-survey-for-england-and-wales-2014>

⁷ <https://www.gov.uk/government/organisations/the-coal-authority>

1.4.11 Both minerals and waste need assessments were undertaken again in late 2019 using the latest available information. These are reported in the: Minerals Need Assessment 2019 ('MNA 2019'); and Waste Need Assessment 2019 ('WNA 2019'). Additional assessments were published in May 2022, to consider data from years 2019 and 202. These are reported in the: Minerals Need Assessment 2021 ('MNA 2021'); the MNA Sensitivity Paper; and Waste Need Assessment 2021 ('WNA 2021').

Local Aggregate Assessment

1.4.12 Mineral planning authorities are required to prepare a Local Aggregates Assessment (LAA) on an annual basis. They should be based on a rolling average of 10 years sales data and other relevant local information and include an assessment of all supply options for aggregates minerals.

1.4.13 In preparing the 2018 LAA, the relevant data and historical entries were comprehensively reviewed, such that it provided a robust baseline for the mineral need assessment and for monitoring the MWLP.

1.4.14 The LAA was updated again in late 2019 and 2022 ('LAA 2021').

Minerals Safeguarding Studies

1.4.15 The National Planning Policy Framework requires planning authorities to define Minerals Safeguarding Area(s), to protect resources from sterilisation by other forms of development. The analysis of the British Geological Survey data is presented in the Spatial Context and Sites Report. This data, and responses to consultation, have informed the approach to mineral safeguarding within the MWLP.

Sustainability Appraisal, Habitats Regulation Assessment and Strategic Flood Risk Assessment

1.4.16 Sustainability Appraisal is a requirement for all development plan documents. Sustainability is about ensuring the long-term maintenance of well-being and the environment for our present and future communities. The process assesses the impact of the MWLP on the environment, people and the economy. It incorporates the requirements of the European Directive on Strategic Environmental Assessment.

1.4.17 Following consultation with key local, regional and national organisations such as the Environment Agency, Natural England and Historic England, sustainability criteria were agreed covering issues such as: air quality; water quality and quantity; landscape; health and economic performance.

1.4.18 Habitats Regulations Assessment (HRA) was used to assess the emerging MWLP to assess whether there would be likely significant effects on sites of international importance for wildlife (National Network Sites). Where a land use plan is likely to have a significant effect on such sites, an appropriate assessment must be carried out of the implications in respect of their conservation objectives.

1.4.19 Strategic Flood Risk Assessment (SFRA) for Herefordshire has been carried out at Levels 1 and 2, focussing on key development areas. This informed the emerging MWLP prior to a SFRA being completed on the plan. In early 2020, a Level 2 SFRA was undertaken of the MWLP, which informed preparation of the Publication Draft MWLP.

1.5 Flexibility

- 1.5.1 The MWLP has been prepared to enable appropriate development to occur within the context of change likely to occur both nationally and within Herefordshire. This might be driven by amendments to national policy and updates to the evidence base, or by external impacts such as new waste management practices and mineral demand. More specifically, situations which may arise are: new minerals or waste management resources failing to come forward as planned; infrastructure not being provided at the same time as development; or market changes adversely affecting the viability of development.
- 1.5.2 The evidence base will be kept up to date and specific studies e.g. the LAA will be reviewed annually. All of the policies are written to refer to national policy and the evidence base rather than repeat them. This allows the policies to be effective even where there are minor changes to higher level policies or the evidence base.

2. Context

2.1 Spatial portrait of the plan area

Overview

- 2.1.1 A detailed portrait of the plan area can be found within evidence supporting the MWLP and the Core Strategy, all of which can be viewed at www.herefordshire.gov.uk/local-plan-1/minerals-waste-local-plan.
- 2.1.2 The plan area for the MWLP comprises the administrative area of Herefordshire Council; a large, predominately rural, landlocked county situated in the south western corner of the West Midlands region and on the eastern border of Wales.

Figure 2 The Plan Area



Minerals

- 2.1.3 Known mineral resources in Herefordshire are relatively limited in range, primarily consisting of aggregates for use in construction but also a small amount of building stone. Aggregates comprise: sand and gravel; crushed rock (limestone); and secondary or recycled materials gained from quarry and waste operations.

- 2.1.4 Key areas for minerals in Herefordshire are:
- Sand and gravel:
 - river terrace deposits are mainly found in the river valleys of the Wye, Lugg and Arrow; and
 - glacial deposits are present in the north and west of Herefordshire.
 - Crushed rock:
 - silurian limestone is found on the western side of the Malvern Hills and Ledbury, the Woolhope dome and in the north-west of the county in the Presteigne/Aymestrey areas;
 - carboniferous limestone is present to the south-west of Ross-on-Wye on the northern flanks of the Forest of Dean; and
 - igneous and metamorphic rock occurs in the Malvern Hills.
 - Sandstone occurs extensively throughout much of Herefordshire and several operational quarries exist in the north, west and south of the county. The output is of particular importance for heritage restoration and in creating authentic character for new-build properties.
- 2.1.5 Coal is no longer extracted in Herefordshire, but was formerly worked in two locations:
- the southern tip of the Wyre Forest Coalfield, which extended into the north of the county, near the boundary with Worcestershire and Shropshire; and
 - a small outlier site of the Forest of Dean Coalfield, which extended into southern Herefordshire.
- 2.1.6 In 1999, the British Geological Survey reported⁸ that the hydrocarbon prospectivity of the county was low. Wells drilled to test the oil and gas potential of sandstones in the Worcestershire Basin and rocks in the Woolhope Inlier failed to discover hydrocarbons.
- 2.1.7 In December 2015, a small block of land in the south of the county was offered for onshore hydrocarbon exploration, appraisal and extraction in relation to coalbed methane. This offer was declined by the energy company to which it was offered and has not been made available again.
- 2.1.8 It is considered highly unlikely that there will be any activities relating to the exploration or extraction of hydrocarbons within Herefordshire in the short term. In the medium to long term, it is possible that this situation may change but, recognising current policy on minimising carbon emissions this is considered to be unlikely.
- 2.1.9 There are currently eleven consented mineral workings in Herefordshire that could be worked during the plan period:
- Sand and gravel:
 - Shobdon Quarry (inactive at the time of preparing the MWLP)

⁸ Mineral Resource Information for Development Plans: Phase One Herefordshire and Worcestershire: Resources and Constraints, British Geological Survey and the Department of the Environment Transport and the Regions, 1999

- Upper Lyde Quarry
- Wellington Quarry
- Limestone/Crushed rock:
 - Leinthall Quarry
 - Perton Quarry
- Sandstone:
 - Callow Delve
 - Black Hill Delve
 - Llandraw Delve
 - Pennsylvani Delves
 - Sunnybank Delve
 - Westonhill Wood Delves

2.1.10 There are also a number of quarries that are mothballed, closed or abandoned.

2.1.11 All the sites are shown on Figure 3, which is presented below and is also available in its original A3 format at Annex A.

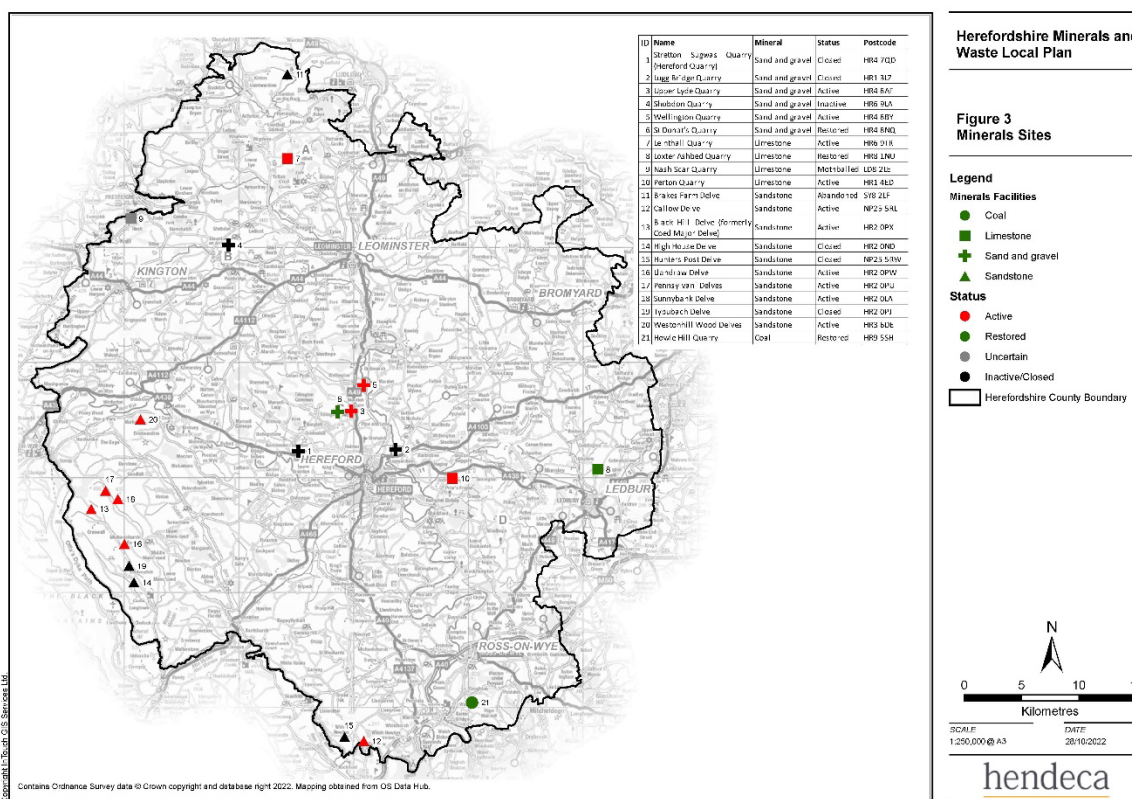
2.1.12 Data (from 2014) that has been made available from the British Geological Survey, though not verified by the organisation, indicates that Herefordshire provides 40% to 50% of its own sand and gravel demand, but only 20% to 30% of its crushed rock demand. This may be due to the particular quality of the limestone, which representatives on site describe as quite soft and not suitable for road building. According to the British Geological Survey data, the most significant import of sand and gravel is from Staffordshire (30% to 40%) and of crushed rock is from Powys (40% to 50%).

2.1.13 There are no known viable resources within Herefordshire for silica sand, clay or any other mineral. These are not considered further.

2.1.14 Herefordshire hosts some key elements of ancillary infrastructure, notably the Moreton-on-Lugg railhead used to transport mineral from Wellington Quarry to the south east of England, predominantly London. However, the mineral travelling by rail freight is mainly crushed rock from quarries located in Wales. Otherwise, minerals travel by road as there is no other transport mode available within Herefordshire. Concrete batching plant, concrete block making plant and coating plant operate on working quarries and industrial estates around Herefordshire.

2.1.15 Secondary and recycled materials have an important role to play in the overall supply of aggregates. Secondary aggregates are minerals that are produced as a by-product of other mining or quarrying activities or as a by-product of an industrial process. Recycled aggregates arise from several sources, notably from the demolition of buildings or from civil engineering works such as asphalt planings from road resurfacing and railway track ballast. Recycling aggregates usually involves the removal of unwanted or inappropriate material such as fines, wood, plastic and metal, and some form of treatment (crushing, washing and/or screening) to reach industry standards for its re-use.

Figure 3 Minerals Sites in Herefordshire



Waste

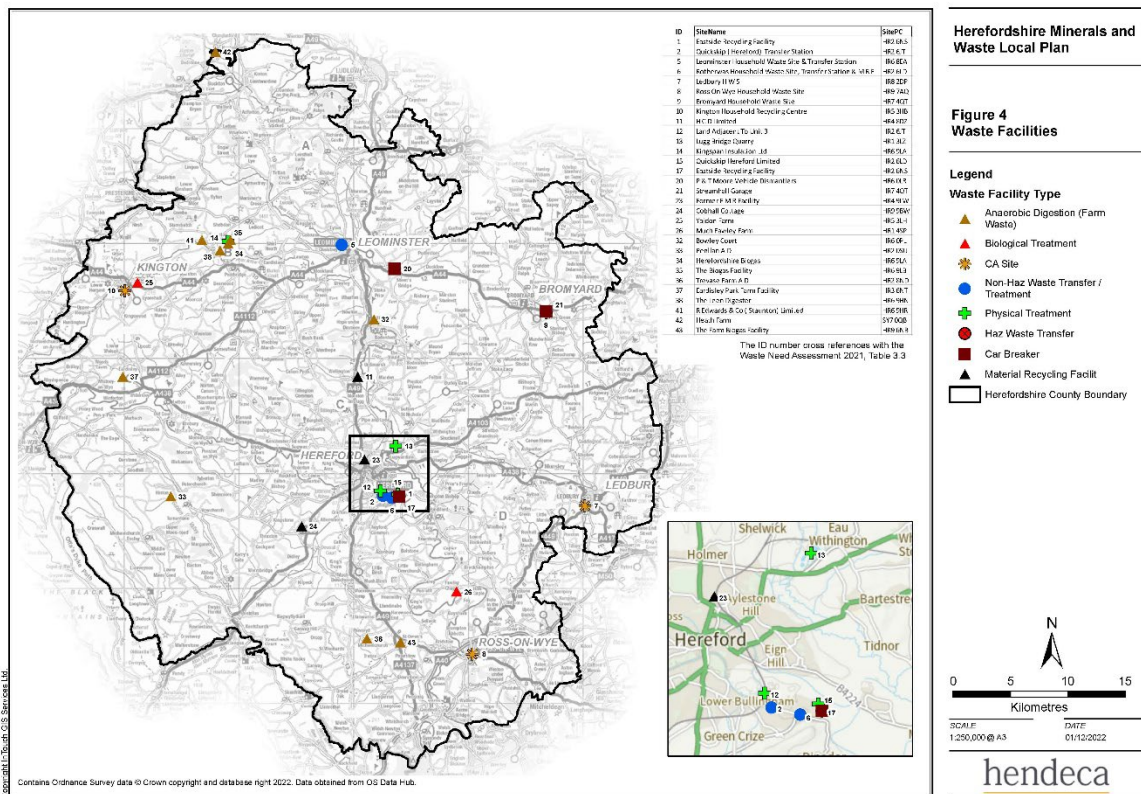
2.1.16 Waste is generated from a wide range of domestic, commercial and industrial activities. The main waste types are:

- Local Authority Collected Waste (LACW) which includes household waste and other wastes collected by local authorities;
- Commercial and industrial (C&I) waste; this includes waste from businesses and manufacturing companies;
- Construction, demolition and excavation (CD&E) waste; these wastes can be produced through a wide range of building projects, from home renovations to major redevelopments;
- Hazardous waste; waste is generally considered hazardous if it is harmful to humans or the environment, particularly through being toxic, corrosive or an irritant - examples of hazardous waste include asbestos, chemicals such as brake fluid or print toner;
- Agricultural waste includes both natural, such as animal manure, animal bedding and crop waste, and non-natural, such as plastic wrapping or bottles;
- Low level (non-nuclear industry) radioactive waste, such as is used in research laboratories; and
- Wastewater; is used water from any combination of domestic, industrial, commercial or agricultural activities such as surface runoff or stormwater, and any sewer inflow or sewer

infiltration - in Herefordshire this waste stream is managed by Dwr Cymru/Welsh Water and Severn Trent Water.

- 2.1.17 The amount and type of waste produced, and the ways in which it is managed, partly reflects the environmental, social and economic characteristics of the area. Concentrated populations and commercial/industrial activities, as are found in Hereford and the five market towns are the largest producers of waste, and this is generally reflected in the pattern of waste management facilities within Herefordshire. The more interesting pattern in Herefordshire is the number of anaerobic digestion and biological treatment facilities dispersed around the county, reflecting its strong agricultural sector.
- 2.1.18 The waste need assessments identify that most of the waste (80% and more) managed in facilities operating in Herefordshire was generated in the county. These facilities also receive waste from other authorities, principally those in Wales, the West Midlands and Gloucestershire.
- 2.1.19 However, whilst there is a range of waste management facilities (including transfer, re-use and recycling) consented in Herefordshire that address a variety of wastes, there are no residual waste management facilities, such as energy from waste plant or landfill sites.
- 2.1.20 Herefordshire Council has historically worked with Worcestershire County Council to manage effectively the authorities' LACW. This collaboration has resulted in the production of a Joint Municipal Waste Management Strategy and joint procurement of strategic waste management capacity (EnviroSort and EnviRecover). Whilst these facilities are not located in Herefordshire, this arrangement means that long-term capacity is available to manage Herefordshire's LACW.
- 2.1.21 Wastes are exported from Herefordshire, predominantly for materials recovery, energy recovery and disposal to landfill, with the most significant exports made to the Vale of Glamorgan and Cardiff. This pattern of movement indicates a need for more residual waste management capacity in Herefordshire.
- 2.1.22 The waste facilities consented in Herefordshire in 2020 are all shown on Figure 4. Again, this Figure is available in its original A3 format at Annex A.

Figure 4 Permitted Waste Facilities in Herefordshire



Minerals and waste development

- 2.1.23 There are important links between minerals and waste development. The efficient use of materials such as recycled aggregate, as alternatives to primary minerals, can help to conserve natural resources. Quarries may have potential for the disposal of waste as part of the reclamation process, and in some cases, the disposal of inert waste by landfill or landraise can help to improve the quality of derelict or degraded land. These links are reflected in the content of the MWLP.
- 2.1.24 Both minerals and waste development has the potential to give rise to adverse impacts, for example effects on the landscape, through the impact of vehicle movements, or the generation of dust or other forms of pollution.
- 2.1.25 Just as importantly, minerals and waste developments can also deliver benefits. For example, through the careful design, operation and reclamation of mineral sites it can be possible to enhance wildlife habitats, improve the provision of floodwater storage capacity or deliver other environmental benefits to help support local businesses and the economy. Some waste developments are able to produce power or heat for use by local consumers. Through delivery of the circular economy, materials can be retained at their highest value for as long as possible; minimising the use of raw resources and reducing environmental impacts.
- 2.1.26 A key role for the MWLP is to develop planning policies that promote appropriate development that meets the recognised market needs, whilst ensuring that detrimental impacts are minimized and opportunities for betterment are optimized.

2.2 Working with other authorities

Local Authority Collected Waste

- 2.2.1 Herefordshire and Worcestershire's Joint Municipal Waste Management Strategy: Managing Waste for a Brighter Future⁹ (the Waste Strategy) was first published in 2004. It was prepared and adopted by the eight local authorities across Herefordshire and Worcestershire.
- 2.2.2 In July 2021, Herefordshire Council adopted a new Integrated Waste Management Strategy, which identified 6 targets:
1. Net zero carbon by 2030;
 2. Reduce residual household waste arisings to less than 330kg/household/year by 2035
 3. Achieve national municipal reuse and recycling rate targets of 55% by 2025, 60% by 2030 and 65% by 2035;
 4. To meet the requirements of the Environment Bill;
 5. No more than 1% of municipal waste to be sent to landfill from 2025 and zero waste to landfill by 2035;
 6. Improve reuse and recycling at all HWRC sites to achieve a reuse and recycling target of 85% by 2035.
- 2.2.3 The new Waste Strategy and the MWLP are aligned and policy of the MWLP will help to deliver these new strategic targets.

Duty to co-operate

- 2.2.4 Herefordshire is a landlocked county that does not exist in isolation from its neighbours; both minerals and waste are materials driven by market demand that consequently readily cross administrative boundaries. The MWLP takes account of these movements and the wider challenges, issues and opportunities presented by them.
- 2.2.5 Cross-boundary working is already in place through the joint waste management approach with Worcestershire County Council and discussions with other neighbouring authorities has taken place during the preparation of the MWLP. This has been undertaken through on-going liaison with neighbouring authorities, discussions at the regional level, and through the review of proposals within adjoining local plans and other development plan documents.
- 2.2.6 Herefordshire is an active member of both the Technical Advisory Body (considering waste matters) and the Aggregates Working Party (considering minerals) comprising authorities of the former West Midlands Region and other interested parties, including representatives from the Environment Agency and industries.
- 2.2.7 Herefordshire has sought to provide a positive policy framework to bring forward deliverable development to meet its own needs and to provide for those identified through these meetings.

2.3 Policy Context

European

⁹ https://www.herefordshire.gov.uk/downloads/file/1428/herefordshire_and_worcestershire_joint_waste_strategy

- 2.3.1 At the time of finalising the MWLP, whilst the UK had exited the EU it remained in a transition period. During this transition period, existing legislation remains in place and applicable across the UK.
- 2.3.2 The details of any final deal(s) made with the EU are not currently known. In relation to the wide ranging environmental legislation relevant to the MWLP, it is not unreasonable to expect that existing legislation will remain in place and this is the approach adopted in preparing the MWLP.
- 2.3.3 Consequently, existing EU legislation is referenced throughout the MWLP.

National policy

- 2.3.4 The National Planning Policy Framework (the 'NPPF', July 2021) contains the Government's overarching policies on minerals planning. The NPPF identifies a need to ensure that a continuous supply of minerals is available to support the economy and states that great weight should be given to the economic benefits of minerals extraction, whilst also making clear that minerals should be used sustainably. It identifies a range of minerals that are of '*local and national importance*' for which planning authorities should have policies. Minerals of 'local and national importance' that lie within Herefordshire are: aggregates; coal; gas; and building stone.
- 2.3.5 The NPPF sets out specific policies in relation to the supply of a number of types of minerals. Relevant to the MWLP, it requires the maintenance of landbanks of at least 7 years for sand and gravel, and at least 10 years for crushed rock and states that planning authorities should consider how to meet demand for minerals required for the repair of heritage assets.
- 2.3.6 In aiming to reduce the need to extract primary minerals and find uses for waste materials, the NPPF requires planning authorities to take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials. It also places an emphasis upon safeguarding mineral resources for future use and safeguarding minerals infrastructure.
- 2.3.7 The NPPF seeks to conserve important landscape and heritage assets by requiring that, as far as is practicable, landbanks for non-energy minerals are provided outside National Parks, Areas of Outstanding Natural Beauty¹⁰, Scheduled Monuments and World Heritage Sites.
- 2.3.8 The MWLP can enable a steady, adequate and sustainable supply of construction minerals to be delivered through a positive policy approach, identifying specific sites and preferred areas for mineral working.
- 2.3.9 A further important consideration, relevant to planning for both waste and minerals, is the Climate Change Act 2008¹¹ and an associated requirement at a national level to reduce greenhouse gas emissions by 80% below 1990 levels by 2050.
- 2.3.10 In 2019, this legislative framework was extended by the UK wide target to bring all greenhouse gas emissions to net zero by 2050. Net zero means any emissions would be

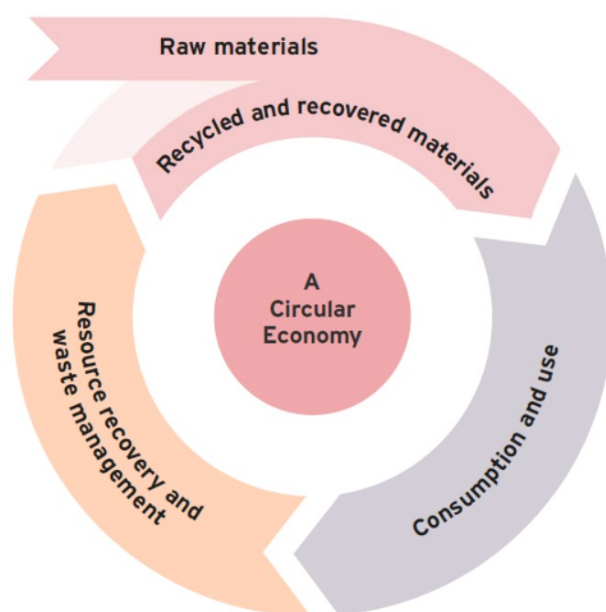
¹⁰ Areas of Outstanding Beauty in England, Wales and Northern Ireland have been renamed National Landscapes

¹¹ <https://www.legislation.gov.uk/ukpga/2008/27/contents>

balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.¹²

- 2.3.11 The Government's 25 Year Environment Plan¹³ (2018) presents policy relevant to both minerals and waste development as it sets out the priority actions intended to '*help the natural world regain and retain good health.*'
- 2.3.12 The NPPF does not contain specific policies on planning for waste management. National waste planning policy is informed by European waste policy such as the Directive 2018/851 of the European Parliament and of the Council¹⁴ (the 'rWFD', which came into force on 4 July 2018, and amends Directive 2008/98/EC on waste). The rWFD introduces the legislation relevant to delivery of the circular economy and clarifies the concepts of waste hierarchy, self-sufficiency and nearest appropriate installation.
- 2.3.13 In December 2018, Defra published 'Our Waste, Our Resources: A Strategy for England'¹⁵ (the 'Resources and Waste Strategy'). This was the first significant waste policy intervention by the Government in over a decade; delivery of the circular economy is a core focus of the document. Figure 5 is taken from the Resources and Waste Strategy.

Figure 5 The circular economy, Resources and Waste Strategy



- 2.3.14 National Planning Policy for Waste¹⁶ ('NPPW') was published in October 2014 and should be read alongside the Waste Management Plan for England.

¹² <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>

¹³ A Green Future: Our 25 Year Plan to Improve the Environment, 2018, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

¹⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.150.01.0109.01.ENG

¹⁵ <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

¹⁶ <https://www.gov.uk/government/publications/national-planning-policy-for-waste>

- 2.3.15 NPPW states that planning strategies should help to drive waste up the waste hierarchy, deliver sustainable development and resource efficiency, provide appropriate infrastructure and enable businesses and communities to take more responsibility for their own waste without harming human health or the environment. The waste hierarchy places priority on the prevention of waste, followed by re-use, then recycling, then other recovery (which can include recovering energy from waste) and finally disposal as a last resort.
- 2.3.16 Enabling the management of waste at higher levels of the waste hierarchy will require actions by a wide range of businesses, other organisations and the public, as well as Herefordshire Council.
- 2.3.17 The MWLP can play a role in moving waste up the hierarchy by encouraging and supporting proposals which facilitate reuse, recycling and recovery and discourage incineration without energy recovery and landfill. However, landfill can play an important role in the reclamation of mineral workings and therefore, in some circumstances, can be justified.
- 2.3.18 Currently, waste management is evolving to deliver the concept of the circular economy. A circular economy is about valuing our products differently and creating a more robust economy in the process. By assessing how we design, make, sell, re-use and recycle products we can determine how to get the maximum value from them, both in use and at the end of their life.¹⁷
- 2.3.19 The concept of the circular economy is considered to incorporate the key priorities of the waste hierarchy and develop these to provide a positive environment within which new, innovative resource use and waste management solutions can be developed. Much of the circular economy priorities will be achieved outwith the MWLP, for example through improved product design. However, the MWLP can contribute through encouraging development of complementary sectors alongside each other and enabling new facilities to support the retention of waste at its highest value. The MWLP has been developed to help the circular economy thrive in Herefordshire, with policy focussed on keeping resources at their highest value for as long as possible.
- 2.3.20 Self-sufficiency is an important principle, but cannot always be delivered. For example, the minerals evidence base suggests that the county simply does not have all the types of minerals required to support all the development that is likely to occur over the plan period. This limitation can be counterbalanced by optimising those factors that can be influenced. For example, through encouraging innovative solutions to maximise recycled products to replace virgin materials.
- 2.3.21 The management of waste is also not constrained by local authority boundaries. As explained above, Herefordshire Council has a joint contract with Worcestershire County Council. Evidence suggests that there are both imports and exports of waste across the West Midlands region, as well as imports of waste from authorities in Wales. Whilst some of these movements may be part of well-established patterns of waste management, other movements may take place in a more ad hoc way, depending on shorter term commercial and market considerations. There is nothing in legislation or policy that says accepting waste from

¹⁷ WRAP, formerly a government agency is now a charity that works with governments, businesses and communities to deliver practical solutions to improve resource efficiency.
<http://www.wrap.org.uk/content/how-wrap-supports-circular-economy>

another authority or region is a bad thing and, indeed, in many cases it may be the best economic and environmental solution.

- 2.3.22 The approach followed by authorities across the West Midlands is to seek to achieve 'equivalent self-sufficiency', which means that the capacity provided in any authority would be adequate to treat waste that arises in that authority, but allows for the inevitable cross-boundary movements that occur.
- 2.3.23 Similarly, the authorities in the West Midlands seek to deliver the Managed Aggregate Supply System (MASS), the underpinning concept of which is that mineral planning authorities that have adequate resources of aggregates make an appropriate contribution to national as well as local supply, while making due allowance for the need to reduce environmental damage to an acceptable level.
- 2.3.24 The National Model Design Code (NMDC, January 2021) presents a framework for creating healthy, greener, environmentally responsive, sustainable and distinctive places, with a consistent and high-quality standard of design. It is primarily focussed on built forms of development, but the underlying principles can be applied to minerals and waste projects.

Local policies and strategies

- 2.3.25 The Core Strategy and Joint Municipal Waste Management Strategy are important context documents for the MWLP; these have been outlined above.
- 2.3.26 In March 2019 Herefordshire Council unanimously declared recognition of the climate emergency. In September 2019 the council formally committed to becoming a net zero carbon council by 2030 and working with strategic partners, residents and local organisations to help the county as a whole achieve carbon neutrality by 2030. Herefordshire Council's third Carbon Management Plan is titled 'Pathway to Carbon Neutral Carbon Management Plan 2020/21-2025/26'. It sets out the council's targets and achievements towards being carbon neutral by 2030. In addition, the council has since early 2019 been working in partnership with a group of stakeholders from environment, business and community sectors on an action plan to help Herefordshire achieve carbon neutrality by 2030.
- 2.3.27 The aim of Invest Herefordshire, Herefordshire's Economic Vision¹⁸ is to realise the full economic potential of the county through a coordinated plan. The Strategic Economic Plan¹⁹ (the 'SEP', 2019), published by the Marches Local Enterprise Partnership, seeks to grow the local economy from £8.78 billion 2016 to 23.8 billion by 2038; equivalent to an average annual growth of 2.3% per annum in GVA. The MWLP will help to deliver these key economic priorities, supporting the growth of Herefordshire, and attracting investment to Herefordshire.
- 2.3.28 There are two Areas of Outstanding Natural Beauty (AONB) in Herefordshire: the Malvern Hills; and the Wye Valley. The Malvern Hills AONB Management Plan 2019-2024²⁰ recognises that the striking scenery in the AONB is ultimately dependent on the rocks that lie beneath the ground surface and has a consequent aim to preserve, promote and wisely use the

¹⁸ https://www.herefordshire.gov.uk/info/200145/business/754/invest_herefordshire/1

¹⁹ https://www.marcheslep.org.uk/download/economic_plans/strategic-economic-plan-update-2019/The-Marches-LEP-Strategic-Economic-Plan-2019.pdf [30.11.2019@16:19]

²⁰ <http://www.malvernhillsaonb.org.uk/wp-content/uploads/2019/04/64217-Malvern-Hills-AONB-Management-Plan-2019-24-v06.pdf>

geodiversity of the AONB. The Wye Valley AONB Management Plan 2021-2026²¹ recognises the variety of geological outcrops and rich wildlife habitats, not least as reflected in the presence of separate Special Areas of Conservation. Conserving and, where necessary, enhancing the natural beauty of this unique landscape is a primary theme. These will be revised throughout the lifetime of the MWLP.

- 2.3.29 The Green Infrastructure Strategy²² (2010) was prepared as part of the evidence base for the Core Strategy. It provides a baseline of green infrastructure assets within Herefordshire and establishes a vision for their future, including producing guidelines for developer and identifying projects to achieve improvements across the county. The MWLP will help to deliver some of these objectives, principally through site reclamation.
- 2.3.30 The Renewable Energy Study²³ (2010) presents baseline data and identifies future renewable and low carbon energy resources. It recognises biomass (incorporating waste wood, municipal waste and agricultural waste) as a potential generation source for heat and electricity and identifies the strategic urban extensions as potentially appropriate locations for combined heat and power facilities and/or district heating networks. The MWLP will help to drive waste recovery facilities to these locations such that a beneficial contribution can be made to delivering renewable/low carbon energy to Herefordshire. Taking waste out of landfill is one the most effective ways that the MWLP will contribute to reducing Herefordshire's carbon emissions.
- 2.3.31 The Local Transport Plan 2016-2031²⁴ was redrafted to reflect the Core Strategy and sets out the council's strategy for supporting economic growth, improving health and wellbeing and reducing the environmental impacts of transport. These principles have been incorporated into the MWLP.
- 2.3.32 Dwr Cymru/Welsh Water's Water Resources Management Plan²⁵ (2019) provides an overview of water resources across its delivery area, including Herefordshire, presents its approach to management the supply and demand balance and identifies deficit zones. The aim of achieving Good Ecological Status as required by the European Water Framework Directive is a key element of the company's environmental sustainability commitments..
- 2.3.33 In May 2014, the Environment Agency and Natural England published the River Wye SAC Nutrient Management Plan, Evidence base and options appraisal²⁶ (the River Wye SAC NMP). This identified that phosphate loss to watercourses is a particular issue in rural catchments with a high degree of agricultural activity, such as in the upper River Wye and River Lugg sub-catchments. This document will undergo review and updates through the lifetime of the MWLP.
- 2.3.34 The Rivers Wye, Lugg, Teme and Clun are identified as Sites of Special Scientific Interest and that the River Wye, including part of the River Lugg, part of the River Clun and Downton Gorge on the River Teme are also designated as Special Areas of Conservation.

²¹ https://www.wyevalleyaonb.org.uk/wp-content/uploads/dlm_uploads/Wye-Valley-AONB-Management-Plan-2021-26-finalised.pdf

²² <https://www.herefordshire.gov.uk/greeninfrastructure>

²³ https://www.herefordshire.gov.uk/downloads/file/1689/renewable_energy_study

²⁴ https://www.herefordshire.gov.uk/downloads/file/2912/local_transport_plan_2016-2031_strategy

²⁵ <https://www.dwrcymru.com/en/My-Water/Water-Resources/Final-Water-Resources-Management-Plan-2019.aspx>

²⁶ <https://www.gov.uk/government/publications/nutrient-management-plan-river-wye>

- 2.3.35 The water quality of Herefordshire’s main rivers and their tributaries is of strategic importance. High levels of phosphates have been identified as a particular problem, with concentration levels exceeding targets along part of the rivers.
- 2.3.36 In November 2018, judgement was handed down from the Court of Justice of the European Union in the case of *Cooperatie Mobilisatie* (Joined Cases C-293/17 and C-294/17, the ‘Dutch Case’). The Dutch Case concluded that where a site is failing in its water quality objectives, and is therefore classed as being in an unfavourable condition, there is limited scope for the approval of additional damaging effects and that the future benefit of mitigation measures cannot be relied upon at Appropriate Assessment, where those benefits are uncertain at the time of the assessment.
- 2.3.37 In response to this judgement, and discussion with Natural England, the council concluded that the measures set out in the River Wye SAC NMP could no longer be relied upon and in March 2020 issued three documents relevant to development that could affect the River Wye SAC titled:
- Position Statement – Development in the River Lugg Catchment Area;
 - Guidance Note and Checklist for applicants/agents relating to HRA and planning applications; and
 - Frequently Asked Questions Relating to the Development in the River Lugg Catchment.
- 2.3.38 In April 2021, the council issued ‘Position Statement - Development in the River Lugg Catchment Area, April 2021 An Update’²⁷ (River Lugg Catchment Position Statement (April 2021)) that confirmed the River Wye SAC NMP is under review with the intention to provide an increased level of certainty around phosphate reduction and timescales. The River Lugg Catchment Position Statement (April 2021) reports on the Interim Phosphate Delivery Plan that is being developed in consultation with Natural England and provides a revised position in relation to discharges to drainage fields.
- 2.3.39 The River Lugg Catchment Position Statement (April 2021) (under title ‘In the Interim’) reiterates previous advice that:
- ‘On Natural England’s advice, there remains potential for a positive appropriate assessment, where it can be demonstrated that development is nutrient neutral or would lead to betterment to enable development to proceed. Proposals will need to provide appropriate evidence of avoidance/mitigation measures. (Refer to Stage 2 of the Interim Plan for guidance).’*
- 2.3.40 It is clear that the details around phosphate reduction and the protection of the River Wye SAC will change over the plan period; however, the fundamental aim remains to be that any new development with a connection to the River Wye SAC will need to demonstrate at least nutrient neutrality in order to gain planning permission.
- 2.3.41 The MWLP incorporates the requirements of these documents in policy designed to help deliver nutrient neutrality or betterment within the River Wye SAC.

Future change in policy

²⁷ [https://www.herefordshire.gov.uk/downloads/download/2039/development in the river lugg catchment](https://www.herefordshire.gov.uk/downloads/download/2039/development%20in%20the%20river%20lugg%20catchment)

- 2.3.42 It is recognised that any or all of the policies outlined above will change over the course of the MWLP plan period. To seek to avoid the MWLP going out of alignment with these other policies and strategies, focus has been on the matters of strategic importance, rather than detail.
- 2.3.43 This section is provided for context only and reference should always be made to the most recently published document.

2.4 Issues and Challenges

- 2.4.1 The issues and challenges considered to be of most significance are summarised below. These are addressed in more detail in the relevant sections of the MWLP.

Minerals

- Ensuring a continuity of minerals supply to meet the social and economic needs of the county to 2041, taking account of cross-boundary supply challenges.
- Maximising the use of alternative sources of supply of minerals such as secondary and recycled aggregate to reduce the demand for aggregate supply from primary land won minerals.
- Maintaining the required landbanks for sand and gravel and crushed rock, but as far as practicable providing for these outside of the AONB.
- Continuing to provide a supply of building stone for the repair and maintenance of Herefordshire's traditional buildings and for new built development.
- Addressing the potential positive and negative impacts of exploiting unconventional hydrocarbon resources such as shale gas as well as planning for conventional forms of energy minerals.
- Safeguarding important minerals resources and infrastructure from sterilisation by other uses in order to meet local and regional needs by current and future generations.
- Ensuring there are sufficient safeguards in place to minimise the impacts of minerals extraction on communities, the environment and other important assets.
- Providing for a range of enhancements, including ecological services and biodiversity, particularly through reclamation of workings.
- Developing an appropriate locational strategy for minerals supply, reflecting where practicable the likely levels of economic and housing growth and future requirements for minerals.

Waste

- Enabling a circular economy to develop within Herefordshire and considering opportunities to co-locate waste management facilities with complementary uses.
- Promoting the management of waste further up the waste hierarchy i.e. reducing the amount going to landfill and encouraging the re-use, recycling, composting and recovery of waste, as well as supporting an overall reduction in the generation of waste.

- Developing an appropriate locational strategy for new waste management facilities, reflecting where practicable the likely levels of economic and housing growth and future requirements.
- Supporting the delivery of the additional waste management capacity expected to be required, taking account of cross-boundary movements where relevant.
- Incorporating flexibility to reflect uncertainties resulting from waste data limitations and evolving technologies and practice.
- Ensuring there are sufficient safeguards in place to minimise the local impacts of waste management on communities, the environment and other important assets.

General

- Establishing policies that are appropriate across the diverse characteristics of the plan area.
- Developing an appropriate approach to the protection and enhancement of the plan area's important landscapes, and natural and heritage assets, including the two Areas of Outstanding Natural Beauty, numerous Conservation Areas, Sites of Special Scientific Interest, Special Areas of Conservation, Ramsar Sites, Special Protection Areas, Sites of Importance for Nature Conservation, nature reserves and listed buildings and ground and surface water supply and quality; as well as the wide range of non-designated assets which are important for their own intrinsic value.
- Ensuring minerals and waste development contributes to and supports economic growth both within the plan area and nationally, including the employment opportunities that they provide.
- Seeking to reduce carbon emissions, particularly in relation to the transportation of minerals and waste, promoting re-use and recycling of materials and recovery of energy from waste; and providing opportunities to assist in adapting to the effects of climate change, such as reducing flood risk and enhancing habitat connectivity.
- Considering accessibility to major transportation networks and sustainable transport infrastructure, recognising the constraints on opportunities for the movement of minerals or waste.
- Recognising the potential for mutually beneficial links between minerals and waste activities, such as utilising specific waste streams in the sustainable reclamation of mineral workings.
- Ensuring an element of flexibility and adaptive management is built into the MWLP.

3. Vision, Objectives and Spatial Strategy

3.1 Vision

- 3.1.1 Having a vision and objectives gives direction to the policies of a plan, identifying the priorities to be achieved through policy, and focussing attention on how this should be achieved.
- 3.1.2 The vision and objectives of the MWLP will not stand alone; they are complementary to those set out in the Core Strategy, providing a minerals and waste focus. Both minerals and waste are considered to be important assets within Herefordshire; being resources that should be used sustainably and to their full potential.
- 3.1.3 The Core Strategy vision is focussed on achieving sustainable development that is based upon success across society, economy and the environment; it also seeks to achieve self-reliance and resilience. These are all principles that are readily transferable to minerals and waste.
- 3.1.4 Key policy principles for minerals and waste include the following matters:
- Efficient use of minerals:
 - ensuring mineral resource is not prejudiced by other development; and
 - ensuring mineral is extracted and used efficiently, primarily achieved through the method of working and restoration.
 - Effective minimisation and use of wastes:
 - delivering a circular economy - in which we keep resources for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.
 - achieving the Waste Hierarchy - giving priority to preventing waste in the first place; when waste is created, giving priority to preparing it for re-use, then recycling, then recovery, and last of all disposal (e.g. landfill); and
 - Enabling self-sufficiency:
 - through the provision of infrastructure and development to deliver the resources required, enabling sustainable communities to be developed and avoiding placing unnecessary demands on other authorities; and
 - minerals and waste move freely in the market according to the needs and characteristics of the sectors, Herefordshire will therefore seek to deliver 'equivalent self-sufficiency' by providing opportunities for mineral working and waste management for dealing with the forecast demands within the plan period and contributing to meeting some of the challenges faced by neighbouring authorities.
 - Enabling resilience:
 - minerals development can enable resilience through: flood and water management opportunities; site betterment; and new opportunities for green infrastructure, public open space and recreation.

- waste development can enable resilience through: improved infrastructure provision; delivery of the circular economy; renewable energy generation; improved air quality and climate change measures; improved food and agricultural waste management measures that provide the opportunity to sequester carbon.

3.1.5 The Vision for the MWLP should be ambitious and aspirational, it is the point to be achieved several years from now; it would be a stretch, but ultimately deliverable. Starting with the Core Strategy Vision and making it relevant to minerals and waste, the Vision for the MWLP is:

Vision

Over the period to 2041, Herefordshire will deliver sustainable provision of minerals supply and waste management, balancing development needs whilst supporting the county’s communities, protecting, conserving and enhancing environmental, heritage and cultural assets and strengthening the local economy.

Sustainable provision within Herefordshire will be achieved through efficient use and effective protection of mineral resources; efficient waste management infrastructure including delivery of the circular economy; taking a strategic approach to achieving high quality reclamation that provides site betterment; and optimising self-sufficiency and resilience.

3.2 Strategic Objectives

3.2.1 The Core Strategy has 13 strategic objectives. These have been the starting point for the objectives of the MWLP, which have been developed through reference to national policy, local priorities and responses from consultation.

3.2.2 Table 1 presents the objectives developed for the MWLP.

Table 1 MWLP objectives

Objectives		Policies	
		Core Strategy	MWLP
Social Progress			
1	To enable minerals and waste development to make an appropriate contribution to improve the health, well-being and quality of life of residents, through best practice operations, open space provision, educational and cultural information, green infrastructure and delivery of strategic, landscape scale site reclamation.	OS1, OS2, OS3, SD1	SP2, SP4
2	To prioritise the long-term conservation of primary minerals through enabling provision of sustainable alternatives, effective use of mineral resources, and promoting efficient use of minerals in new development.	SD1	SP1

3	To safeguard appropriate mineral and waste resources, and associated infrastructure, within Herefordshire.	SD1	M1, M2, W1
4	To enable the management of waste in accordance with the waste hierarchy and to deliver a circular economy within Herefordshire.	SD1, SD2, SD3, SD4,	SP1, W1, W2, W3, W5, W6, W7
Economic Prosperity			
5	To optimise the contribution that mineral working and waste management makes to Herefordshire's economy as land-based industries, balanced with effective protection of people, places and businesses from adverse impacts.	E1, SD1, SD3, SD2, SD3, SD4, LD1, LD2, LD3, LD4, ID1	ALL
6	To plan for the steady, adequate and sustainable supply of minerals present within Herefordshire, to contribute to the county's economic growth, development and local distinctiveness and to make a reasonable contribution to the MASS.	E1, SD1	M1, M2, M3, M4, M5,
7	To deliver new waste management infrastructure to enable Herefordshire to achieve equivalent self-sufficiency and to contribute to the county's economic growth, innovation development and energy demands.	E1, SD1, SD2	W1, W2, W3, W4, W5, W6, W7
8	To reduce the need to travel and lessen the harmful impacts from traffic growth, promoting the use of alternatives to road transport and ensuring that new development is served by suitable transport networks.	SS1, SS2, SS4, MT1	SP3
Environmental Quality			
9	To identify suitable locations for minerals and waste development.	SS1, SS4, SS5	M3, M4, M5, W3, W4, W5, W6
10	To achieve sustainable communities and protect the environment by delivering well-designed and well-operated minerals and waste development that use land efficiently, reinforce local distinctiveness, and are supported by the necessary infrastructure, including green infrastructure.	SD1, SD3, SD4, LD1, LD2, LD3, ID1	ALL
11	To address the causes and impacts of climate change relating to minerals and waste development activity, including using opportunities arising from minerals and waste operations and reclamation activity to decarbonise, to mitigate and adapt to climate change and to leave a positive legacy.	SS7, SD1, SD2, SD3, SD4, LD3	SP1, SP3, SP4, M1, M6, W1, W3, W7
12	To address the causes and impacts of climate change relating to minerals and waste development activity, including using opportunities arising from minerals and	SS7, SD1, SD2, SD3, SD4, LD3	SP1, SP3, SP4, M1, M6, W1, W3, W7

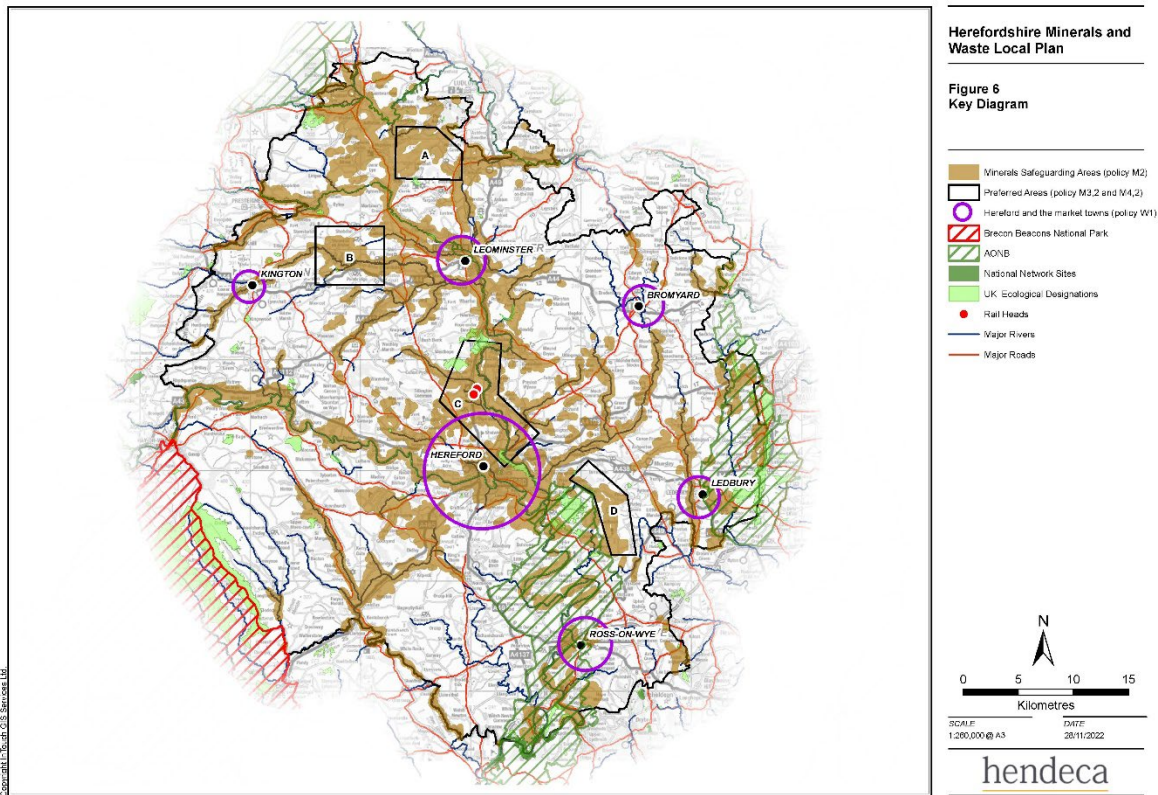
	waste operations and reclamation activity to mitigate and adapt to climate change and to leave a positive legacy.		
13	To conserve, promote, utilise and enjoy our natural, built, heritage and cultural assets for the fullest benefits to the whole community, by: safeguarding the county's current stock of valued heritage and significant environmental assets from loss and damage, and seeking enhancement; reversing negative trends; ensuring good quality landscape design and condition; delivering site betterment; and appropriately managing future assets.	SS6, SS7, LD1, LD2, LD3, LD4	SP2, SP3, SP4 and the key development criteria

3.3 Spatial Strategy

- 3.3.1 The overarching spatial strategy of the Core Strategy is relevant to the MWLP and forms the backbone to its spatial strategy. Consequently, waste development will be focussed at Hereford and the market towns, Bromyard, Kington, Ledbury, Leominster and Ross-on-Wye. However, it is recognised that some waste management development will likely be more dispersed; principally this is to deliver a locally identified demand such as agricultural or construction and demolition waste management. In line with the spatial strategy, such development will not be promoted in policy but may be acceptable on a specific site basis.
- 3.3.2 Minerals extraction can only take place where the mineral occurs; consequently, this urban focus cannot generally be followed for minerals development. The review of the underlying geology and natural and built environment of Herefordshire has identified both key areas of search for minerals development and those areas that should be constrained from future development. Not surprisingly, these areas generally follow the approach to development set out in both the NPPF and the Core Strategy, such as giving great weight to conserving landscape and scenic beauty in Areas of Outstanding Natural Beauty.
- 3.3.3 Sand and gravel working is to be focussed within the large expanse of resource that wraps around the northern and eastern sides of Hereford and at Shobdon, to the north-west of Hereford. These resources are well located to supply aggregate for the growth proposed in Hereford and having two areas brings resilience to supply.
- 3.3.4 Focusing future sand and gravel workings within these areas provides the industry with access to a large area of resource, but means that a proliferation of minerals development across the county can be avoided. Optimal extraction can be promoted at these areas before new reserves are opened.
- 3.3.5 Limestone working will be preferred within the resources located to the north of the county and to the east of Hereford. The two areas provide resilience to supply and provide more local supply potential to the main settlements of Herefordshire.
- 3.3.6 No preferred areas are identified for sandstone, clay, coal or gas. Sandstone is worked as low-key development in small delves; the potential for harm is limited. There is little evidence to suggest that clay, coal or gas will be exploited over the plan period.
- 3.3.7 The Key Diagram is at Figure 6 presenting the spatial strategy for minerals and waste development in Herefordshire. Figure 6 is also available in its original A3 format at Annex A.

The key policy elements, including the allocated sites, are also available to view on the interactive mapping provided on the Herefordshire Council website.

Figure 6 Key Diagram



4. Strategic Policy and General Principles

4.1 Principles

- 4.1.1 It is a basic tenet of planning law that any adopted development plan must be read as a whole; development proposals will be considered in relation to all relevant policies. In addition, proposals for minerals or waste development must be assessed not just in relation to the MWLP, but also against all parts of the development plan.
- 4.1.2 Under the Planning and Compulsory Purchase Act 2004 the development plan for proposals in Herefordshire comprises:
- the Core Strategy;
 - the MWLP; and
 - other documents that comprise the Herefordshire Local Plan as relevant to the development proposed.
- 4.1.3 Some Core Strategy policies are directly relevant to minerals and waste development. They are necessarily written at a strategic level of detail and their interpretation for minerals and waste development can be enhanced through further explanation, which is provided in this section of the MWLP.
- 4.1.4 This section of the MWLP also presents policy of a strategic nature specifically prepared for minerals and waste development.
- 4.1.5 Mineral working and waste management may also require an Environmental Permit, gained from the Environment Agency, the application for which will also include consideration of potential impacts from the operations of such development. In determining planning applications, the council will focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves, where these are subject to approval under pollution control regimes.
- 4.1.6 Any new dewatering activity will require an abstraction licence, which is gained from the Environment Agency.
- 4.1.7 It is generally beneficial to submit the Environmental Permit and/or abstraction licences application(s) at the same time as the planning application, so that all the relevant details can be understood by the determining authorities, consultees and local communities. This approach is strongly encouraged by Herefordshire Council.
- 4.1.8 Each of the site allocations made in policy of the MWLP is accompanied by key development criteria. To avoid repetition and for clarity in the MWLP, these criteria are provided in the Site Allocation appendix and set out at section 9 of the MWLP; however, they are referenced within and form a part of each policy within which they are referenced.

4.2 Sustainable Development – Core Strategy policy SS1

- 4.2.1 Minerals and waste developments can make a positive contribution to each of the three objectives of sustainable development:

- social – for example through job creation, the supply of virgin and secondary materials required for building houses, and providing outdoor public access;
- economic – for example through inward investment, underpinning communities with essential infrastructure, and supporting growth and innovation, such as delivery of the circular economy; and
- environmental – for example through avoided landfill, the provision of renewable/low carbon energy or a new priority habitat.

4.2.2 It can also cause harm:

- social – for example through disrupting access to the countryside or creating a poor quality built environment;
- economic – for example affecting tourism and agriculture (two of Herefordshire’s key industries) through development in the wrong place; and
- environmental – for example through adverse landscape or cultural impacts or disturbance to habitats.

4.2.3 Many minerals and waste developments will be subject to the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as may be amended) but not all. As identified in the Core Strategy, a sufficient level of information should be submitted with each planning application to enable the council to determine the effect.

4.2.4 Planning applications should also consider the potential for cumulative impacts to occur. It may be that impacts from an individual proposal would be acceptable, but that the effects of one or more existing or planned developments in the same vicinity could, cumulatively, have impacts that would not be acceptable, even after mitigation. Opportunities to maximise positive impacts should be identified and implemented.

4.2.5 Whilst they can bring local benefit, minerals and waste development can be a source of concern to local communities (people, places or business). The potential for both beneficial and adverse impacts will vary according to the nature, size, location and duration of the development, and can change over its lifetime. Taking local circumstances into account, to consider the potential for effect on people, businesses and the natural environment, will enable minerals and waste developments to respond to the different opportunities for achieving sustainable development.

4.2.6 Early consultation will enable good design throughout the life of the site to be enhanced, especially for larger scale proposals. It is expected that developers will consult²⁸ with local communities and other stakeholders on proposals for mineral and waste development before the planning application is submitted. Positive consideration shall be given to development proposals that demonstrably take account of a local community’s response.

4.3 Movement and transportation

Core Strategy policies SS4 and MT1

4.3.1 A large percentage of the vehicle movements associated with minerals and waste development are heavy goods vehicles, which are likely to be significant in volume. It may not

²⁸ The Statement of Community Involvement provides details of basic expectations.

always be possible to gain access directly to the strategic highway network from a site, but the proposed route should avoid local roads and settlements wherever feasible. In addition, the railheads at Moreton-on-Lugg (operational) and at Moreton Business Park (not-operational) provide the opportunity to increase non-road based transport.

4.3.2 Any required improvements, alterations or agreed routes may be secured through the use of planning obligations, as set out in Core Strategy policy ID1.

4.3.3 Larger scale development, including new or extended mineral workings and strategic waste management facilities, will operate over a relatively long period of time, such that significant transport effects might be felt for many years. Such development proposals should demonstrate how green infrastructure would be incorporated in the working schemes. The following examples could be appropriate:

1. site access arrangements, or routes of conveyors or pipelines being:
 - a. designed/laid out to avoid damage to sensitive habitats or heritage assets;
 - b. designed/laid out to provide cycle links or footpaths upon reclamation of the site;
 - c. landscaped and/or enhanced to promote biodiversity; and
 - d. drained using SuDs methods;
2. providing nature reserves and/or floristically rich roadside verges and sidings;
3. implementing flood compensation measures or balancing ponds within an ecological framework.

4.3.4 Appropriate planting enables carbon sequestration, air pollutant absorption, aesthetic improvement and increased biodiversity and wildlife habitat. Wetland areas, used to store and slow down storm water and run-off, can also absorb carbon dioxide and reduce the pollutant load in road runoff. Such elements can provide a contribution to offsetting carbon emissions caused by minerals and waste related traffic, and such measures should be included as appropriate in development proposals. These elements may be acceptably located off-site.

4.3.5 Considering the whole life of the site at the application stage will enable a sustainable transport strategy to be put in place at the earliest opportunity. This approach can influence the overall design of the site, for example identifying appropriate locations for footpaths or parking areas for the proposed after-use that can be incorporated as the site is developed.

4.4 Environmental Quality and Local Distinctiveness – Core Strategy policies SS6; LD1; LD2; LD3; and LD4

4.4.1 Good design requires full consideration of the surrounding environment, its constraints and the opportunities for enhancement, including change for the better. A comprehensive approach, addressing exploration, construction, operation, buildings and machinery and people and place, across the lifetime of the site and through its aftercare, will enable sustainable development to be realised.

4.4.2 A comprehensive approach will make good use of a wide range of reference documents, many of which are signposted within this MWLP. One that will be relevant across a number of development proposals is 'The ecological effects of air pollution from road transport: an updated review', as prepared for Natural England (reference NECR199).

- 4.4.3 The consideration of cumulative or in-combination effects can be a legal requirement, for example as in Environmental Impact and Habitats Regulations Assessments. Even where this level of assessment is not required, the council expects planning applications to include a proportionate consideration of cumulative impacts. Appropriate measures to optimise benefits and to avoid or mitigate harm should be made clear within the planning application.
- 4.4.4 All applications will be expected to incorporate robust measures to ensure that the proposed development does not cause an unacceptable adverse impact on either the environment or local communities, many of which can be overcome by implementing standard measures, such as:
- limiting working hours;
 - locating plant, machinery and haulage routes away from sensitive receptors;
 - advanced tree planting;
 - sensitive lighting design;
 - phasing so the development moves away from sensitive receptors;
 - acoustic screening measures;
 - enclosing plant and machinery;
 - plant being fitted with silencers and white noise alarms;
 - sheeting of lorries;
 - cleaning of lorry wheels before they exit the site;
 - good maintenance of bunds and stockpiles;
 - avoiding or minimising the use of blasting explosives; and
 - careful design of external lighting to confine its influence to the point of use.

Landscape and townscape – Core Strategy policy LD1

- 4.4.5 One of Herefordshire's elements of local distinctiveness is the extent of dark sky across the county. Analysis undertaken by the CRPE identifies Herefordshire as the third darkest county with 60% of the county lying in the darkest category and 88% of the county when combined with the next darkest category.²⁹ This matter should be considered in preparing development proposals, including a commitment that lighting will be kept to the minimum necessary to ensure safe working on site.
- 4.4.6 Due to their potential size, and location, minerals and waste sites have the potential to make landscape scale change; a term commonly used to refer to a large spatial scale, usually addressing a range of ecosystem processes, conservation objectives and land uses.
- 4.4.7 Landscape scale conservation is characterised by the pursuit of multiple benefits across a defined area (e.g. water quality, biodiversity and access). The best examples also make links to wider economic and social priorities, where enhancing nature can provide benefits to the local economy and quality of life. There are strong links between the landscape scale approach and an 'ecosystems approach', which encourages an integrated approach to land management,

²⁹ https://www.nightblight.cpre.org.uk/images/resources/Night_Blight_cpre.pdf

considering the costs and benefits of land use decisions, and pursuing those that minimise risks and maximise opportunities for people, for nature and for the economy.³⁰

4.4.8 This might include measures such as:

- protecting, enhancing or creating views;
- interpretation boards at publicly accessible areas to enable greater understanding of the landscape, local/historic landscape character and influence of the underlying geology;
- designing waterbodies to be of a type, shape and scale that fits with the local landscape character and optimises biodiversity gains;
- protecting or re-instating local/historic landscape features such as hedgerows or woodland; and
- ensuring any planting is appropriate to the landscape character, using locally present species to optimise biodiversity gains.

4.4.9 Developers should refer to the Landscape Character Assessment Supplementary Planning Guidance (2004)³¹.

Biodiversity and geodiversity – Core Strategy policy LD2

4.4.10 A management strategy associated with a minerals or waste development should include an Ecological Mitigation Plan appropriate to the development proposed. The Ecological Mitigation Plan should specify working methods, timings and buffers within the development site to protect vulnerable features, including National Network Sites. The size and shape of the buffer will be defined on a site-by-site basis dependent on the attributes of the feature. Conversely, where greater benefit would be realised, for example through improved connectivity between habitats, it may be appropriate to work close to identified features.

4.4.11 The Core Strategy recognises that its soils are an essential element of the geodiversity of Herefordshire. The soils and geodiversity of Herefordshire underpin the agriculture and tourism industries. Recognising that the winning and working of mineral in particular is likely to take place on greenfield sites, it is appropriate to consider soil quality in more detail.

4.4.12 Forest Research³² an organisation established for forestry related research advises that '*soil quality*' encompasses the physical, chemical and biological properties of soil.' Together, each of these properties determines the ability of the soil to perform a range of beneficial functions:

'Nutrient cycling – soil provides a habitat for the soil invertebrate and microbial communities required to break down organic materials and release the nutrients necessary to sustain growth. If the full range of invertebrates and microbes necessary to carry out these processes cannot function, plants and higher organisms will be unable to thrive within the ecosystem.'

³⁰ From, The Natural Choice, Natural Environment White Paper, 2011

³¹

https://www.herefordshire.gov.uk/download/downloads/id/2069/landscape_character_assessment_for_herefordshire.pdf

³² <https://www.forestresearch.gov.uk/>

Water balance – soil acts as a store for water. A healthy soil will retain the water necessary to support the ecosystem, allowing infiltration of excess water to groundwater and preventing surface run-off and waterlogging.

Physical structure – soil will provide the physical medium to support vegetation, allowing adequate root development and the medium in which to hold water.

Pollution mitigation – soil acts as a buffer to pollution entering the system. The organic matter and clay constituents of soil allow pollutants to be immobilised within the system, reducing the risk of them being transferred to water bodies, vegetation and soil fauna. ’

- 4.4.13 The Agricultural Land Classification provides a method for assessing the quality of farmland to enable sustainable choices to be made about its future use within the planning system. The system classifies land into five grades with the 'best and most versatile land' defined as grades 1, 2 and 3a. Development proposals should prioritise the use of areas of poorer quality land, especially where development of agricultural land is demonstrated to be necessary.
- 4.4.14 Planning applications should consider the following matters in demonstrating that mineral development on the best and most versatile agricultural land is necessary:
- whether there is an available alternative;
 - whether the need for development outweighs the adverse impact upon agricultural land quality;
 - whether proposals will affect the long term agricultural potential of the land or soils;
 - whether alternative land of lower agricultural value has considerations which outweigh the adverse impact upon agricultural land quality.
- 4.4.15 Protection of the original soils removed prior to mineral extraction should always be a priority. The stripping and storage of soils for reuse and restoration can lead to degradation, although best practice in soil management can minimise the impacts of this damage. Planning applications should demonstrate how best practice measures for soil handling and storage will be achieved on site, throughout the life of the development. Reference may be made to guidance published by Defra, including: 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'; and the series 'Good Practice Guide for Handling Soils'.
- 4.4.16 Reclamation schemes should incorporate remediation activities and after-use proposals that optimise the storage and use of best and most versatile soils. It is not necessary for high quality land to be restored to agricultural use, but restoration and land use following mineral development should safeguard a site's long-term agricultural potential. Alternatively, it may be more beneficial for an area previously identified as best and most versatile agricultural land to be restored to another purpose, if this enables improved reclamation elsewhere on site. Reference should be made to 'Guidance for the Successful Reclamation of Mineral and Waste Sites', Defra (2004).
- 4.4.17 The minerals and waste industries present significant opportunities to provide a net gain in biodiversity and to improve the coherence and resilience of habitats and ecological networks, enabling wildlife to respond to a range of environmental pressures. Agriculture and biodiversity enhancement need not be incompatible land uses. A balance should be achieved between current and future agricultural need, site-specific biodiversity value and/or potential, and other considerations, including flood alleviation. Well-designed agricultural restoration

can still deliver significant benefits for biodiversity in the form of hedgerows, lakes and ponds, habitat features and small woodlands

- 4.4.18 Site reclamation will be expected to contribute, at a landscape scale, to achieving nationally identified habitats of principal importance, taking account of the attributes of the site and of nearby areas, supporting coherent and resilient networks of habitats that link the site with relevant ecological features in the wider landscape. Water features in agricultural reclamation can contribute to agricultural irrigation, biodiversity, flood alleviation and storage, and landscape enhancement in a multi-functional way, and should all be considered.
- 4.4.19 Minerals and waste development proposals will be expected to avoid unacceptable impacts on geodiversity value. Planning applications should demonstrate how the proposed development will deliver objectives of UK and Herefordshire Geodiversity Action Plans, such that geodiversity features are successfully identified, investigated and incorporated with green infrastructure into reclamation and after-use, through measures such as:
- providing safe public access to geological features, whilst avoiding damage to them;
 - involving geologists, geodiversity groups and museums in advising on, recording and sampling geodiversity at all stages from pre-application through to reclamation and aftercare;
 - incorporating geodiversity considerations into site management plans to protect and maintain exposures and to support access at appropriate intervals for research and recording purposes, e.g. limited excavation of organic rich deposits that become exposed at the base of river gravels;
 - providing information to support understanding, interpretation and enjoyment of the features;
 - creating links beyond the site boundary into the wider landscape.
- 4.4.20 Mineral sites offer opportunities to enhance scientific and cultural understanding of geodiversity by revealing, recording or retaining features of geological conservation interest. Sand and gravel deposits cannot be preserved except by leaving parts of the site untouched, but features of interest, such as changes in lithology, discovery of conspicuous vertebrate remains or organic-rich fossil beds can be recognised and exploited as extraction progresses. Planned investigations of lithology might include collecting samples for dating purposes and material for education/interpretative purposes.
- 4.4.21 The sand and gravel sites at Shobdon and Upper Lyde are Local Geological Sites designated for their glacial and glacial-fluvial features respectively, whilst sub-alluvial gravels have been extracted at Wellington that may hold clues to the changing drainage patterns in Herefordshire in glacial times. The Silurian rocks obtained from Perton and Leinthall Quarries are rich sources of fossils.
- 4.4.22 There is potential for mineral extraction across Herefordshire, even in undesignated sites, to reveal important features. Consequently, a detailed approach to mitigate impact on geodiversity will be required for all development proposals.

Green infrastructure – Core Strategy policy LD3

- 4.4.23 As recognised in the Core Strategy, green infrastructure is a practical way to consider sustainable development. The preferred areas for minerals development and the spatial

strategy for waste development reflect the priority areas of the green infrastructure concept map (Green Infrastructure Strategy, Figure 4-3³³). This overlap means that minerals and waste development have a good reference and potential to deliver integrated benefits on site and at a landscape scale.

- 4.4.24 Incorporating green infrastructure objectives will enable proposals to make a positive contribution to Herefordshire's local character and distinctiveness, recognising the wider social, cultural and environmental benefits that multi-disciplined, integrated development can bring.
- 4.4.25 The delivery of green infrastructure can underpin the realisation of net gain from minerals and waste operations. This can be achieved at any time during the life of the site and should not be restricted to reclamation or after-use. The council will expect all opportunities for green infrastructure to be optimised and delivered throughout the life of the development proposed.

Historic environment and heritage assets – Core Strategy policy LD4

- 4.4.26 Minerals and waste development proposals should take account of the significance of heritage assets (whether above or below ground, designated or non-designated, and their setting) and include a clear strategy for enhancing the historic environment character. Wet working of mineral sites may not be a viable option where there are potential archaeological assets, as this can significantly restrict the delivery of appropriate mitigation measures.
- 4.4.27 Site reclamation and after-use may enable improved access to historic sites, enhance the setting of historic features (such as water meadows) reinstate historic features such as hedgerows, or provide on-site interpretation of the site and its history in association with publicly accessible areas.
- 4.4.28 The Herefordshire County Archaeology and Minerals Resource Assessment³⁴ (2014) confirms that the county has a wealth of archaeological assets. It is to be expected that more will be revealed with extended mineral working. There are well established procedures for the investigation and evaluation of archaeological assets that have been practiced to good effect within Herefordshire. In accordance with Core Strategy policy LD4 and requirements of the National Planning Policy Framework, these will continue to be implemented.
- 4.4.29 Historic England has published a number of documents useful to understand the significance of heritage assets and practical advice on how to incorporate the historic environment into sustainable mineral working. One such document is titled 'Mineral Extraction and Archaeology: A Practice Guide'.

4.5 Addressing Climate Change

Core Strategy policy SS7

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https://www.herefordshire.gov.uk/download/downloads/id/2063/herefordshire_green_infrastructure_strategy.pdf

³⁴ The report is available from the Archaeological Data Service, along with other documents reporting on the archaeology of Herefordshire.

<https://archaeologydataservice.ac.uk/library/browse/organisationDetails.xhtml?organisationId=400>

- 4.5.1 The built form of waste management facilities may more obviously align with the expectations of policy SS7, but minerals working can also make a significant impact.
- 4.5.2 Not least, minerals should be extracted efficiently. Development should propose to extract as much of the mineral as possible, whilst avoiding unacceptable harm and ensuring that a high quality of reclamation and afteruse can be achieved.
- 4.5.3 The winning and working of minerals, and some waste processing operations, is resource intensive. Reduced energy and water usage can be achieved through different ways, including good site design to reduce transport movements and circulating water within operations to reduce overall demand.
- 4.5.4 Buildings and plant can be designed to reduce resource requirements and consequent carbon emissions, for example through the use of ultra-low emission vehicles (including non-fossil fuels and electric vehicles) and renewable energy supply (including solar panels, open-loop ground source or surface water source heating and cooling systems). The council will expect increased resource efficiency measures in plant, buildings and operations in order to achieve climate change priorities.
- 4.5.5 Reclamation of sites also provides opportunities, for example in assisting ecological networks to be more resilient, enabling the movement of wildlife as it adapts to a changing climate. The after-use of a site can also deliver objectives to address climate change, for example creating a new habitat that also provides flood storage to alleviate risks elsewhere.

Resource Management, MWLP policy SP1

- 4.5.6 Spatial planning goes beyond traditional land use planning to bring together and integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they function. This will include policies that can impact on land use by influencing the demands on, or needs for, development, but which are not capable of being delivered solely or mainly through the granting or refusal of planning permission and which may be implemented by other means.
- 4.5.7 The Core Strategy proposes substantial new development that should be delivered sustainably. Minerals and waste are key resources, their use and management affecting how sustainably the new development will be delivered. Sustainable design principles make efficient use of resource through location, design, positioning, specification and sourcing of materials, as well as improving the quality of development and enhancing their environmental performance.
- 4.5.8 These principles, and policy SP1, is not limited to new build projects. It applies to all development including substantial refurbishment projects.

Waste prevention

- 4.5.9 Waste prevention has clear links to spatial planning policy. Examples of waste prevention include designing and buying goods without packaging, using/purchasing only the materials/services required and subsequently disposing of less waste. Longer life products reduce the need for replacements, which create waste in their own production. If communities are successful in reducing the amount of waste produced, then the need for additional waste management facilities can be reduced.
- 4.5.10 Maintaining engagement with local authorities, businesses and community groups enables each sector of the community to act together, raising levels of awareness and understanding

of waste issues. These initiatives can help inform investment and consumer decisions, helping to deliver the circular economy.

- 4.5.11 The MWLP can contribute positively through the promotion of waste prevention and reuse in new, waste and non-waste related, development, and in this way enable achievement of the circular economy in Herefordshire.
- 4.5.12 A circular economy is one where materials are retained in use at their highest value for as long as possible and are then re-used or recycled, leaving a minimum of residual waste. Herefordshire seeks to achieve a circular economy as this will save resources, increase the resource efficiency of the county's businesses, and help to reduce carbon emissions. The successful implementation of circular economy principles will help to reduce the volume of waste that Herefordshire produces. Waste management facilities are also an element of the circular economy, so long as the materials and/or energy recovered are put to beneficial uses.
- 4.5.13 Reuse has been practised throughout society for a long time and diverts materials from entering a waste stream. In recent years, the domestic reuse market has moved from the second-hand furniture/house clearance shops and returnable bottles, to charity shops and initiatives set up as small businesses. Car boot and jumble sales are probably the most common and well known form of reusing unwanted goods. Household Waste Recycling Centres and web-based exchange sites also provide opportunities for reuse. Exchange schemes could be developed on a multi-sector basis to encourage and increase reuse.

Resource audit

- 4.5.14 New development requires significant volumes of construction materials; how it is designed will affect waste generation and management options through its operational lifetime. The planning system has a role to play encouraging the use of secondary or recycled construction materials, reducing waste generated and in ensuring appropriate waste management solutions are provided.
- 4.5.15 Herefordshire Council will encourage waste prevention by:
- a. promoting a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest value for as long as possible;
 - b. maintaining engagement with businesses, community groups, and the general public to raise levels of awareness and understanding of waste issues;
 - c. working in partnership with other public bodies to ensure that waste prevention and the circular economy is addressed in all contracts for works and services; and
 - d. leading by example in its activities.
- 4.5.16 Any application for major development, as defined in the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as may be amended) that includes built development will be required to be accompanied by a comprehensive Resource Audit addressing all the matters set out in policy SP1. A proportionate approach will be applied to all other development proposals that include built development, which should at least provide commentary on waste prevention and management measures to be implemented. All submitted applications should make reference to the national and local zero-carbon plans in place at the time in order to inform best practice measures that can be incorporated into the proposed development.

- 4.5.17 Resource Audits will identify (quantifying where possible): the approach to materials used in construction; the quantity of construction aggregates to be used and clarity of whether these are raw, secondary or recycled; how waste will be minimised; what waste will be generated from the development and how this will be managed to promote the recovery of materials and/or energy from it. Finally, the Resource Audit will set out end of life considerations for the materials used in the development, including the ease of recovery of demolition materials to demonstrate how these might be put to beneficial use after the development is no longer required.
- 4.5.18 Such documents are expected to have an increasing role demonstrating how new development is delivered and managed in a sustainable manner, explicitly setting out: how the use of raw materials will be minimised; how waste created can be reused, with priority given to the reuse of materials on site; how the development will contribute to achieving local and national carbon reduction targets; and how the long term management of the development will contribute to delivering the circular economy.
- 4.5.19 All development should be designed to increase the potential for recycling waste. The details would be negotiated as relevant to each development proposal, but examples include new residential development required to provide space for facilities for segregating and recycling waste, or to contribute (financially or through the provision of land) towards a household waste recycling centre or composting facility. Industrial, commercial and retail development may be required to provide more substantial waste segregation and collection facilities as part of the built development.

Policy SP1: Resource Management

- 1. Development proposals will be supported that contribute positively to addressing climate change and delivering the circular economy through adopting sustainable design principles, construction methods and procurement policies. This includes using the minimal amount minimum quantity of primary materials, reusing or facilitating the recycling of wastes and materials generated on site and using alternative construction materials sourced from secondary and recycled aggregates. The level of contribution made will be demonstrated through submission of a Resource Audit that identifies:**
 - **the quantum required and approach to sourcing construction materials, the amount and type of waste that is expected to be produced by the development and end of life considerations for the development materials; and**
 - **how waste will be minimised and how it will be managed, both during the construction phase and once it is in use, in order to meet the strategic objective of driving waste management up the waste hierarchy.**
- 2. The Resource Audit, to be submitted with the planning application, should address the following matters, using an approach proportionate to the development proposed:**
 - a. the amount and type of construction aggregates required and their likely source;**
 - b. the steps to be taken to minimise the use of raw materials (including hazardous materials) in the construction phase, through sustainable design and the use of recycled or reprocessed materials;**

- c. **the steps to be taken to reduce, reuse and recycle waste (including hazardous wastes) that is produced through the construction phase;**
 - d. **the type and volume of waste that the development will generate (both through the construction and operational phases);**
 - e. **on-site waste recycling facilities to be provided (both through the construction and operational phases);**
 - f. **the steps to be taken to ensure the maximum diversion of waste from landfill (through recycling, composting and recovery) once the development is operational;**
 - g. **end of life considerations for the materials used in the development; and**
 - h. **embodied carbon and lifecycle carbon costs for the materials used in the development.**
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4.6 Access to open space and recreation from minerals and waste development

Core Strategy policies OS1 to OS3

- 4.6.1 As recognised in the Core Strategy, open spaces and areas of outdoor recreation are enjoyed across Herefordshire and are an important element to people's quality of life. Mineral workings, waste sites and restored sites have an important contribution to make to the protection and enhancement of outdoor public access and recreation resources within Herefordshire.
- 4.6.2 Particularly for mineral sites, due to their location, they also have the potential to affect public rights of way. Consequently, policy SP2 is relevant to minerals and waste development, in addition to Core Strategy policies OS1 to OS3.

Access to open space, MWLP policy SP2

- 4.6.3 Policy SP2 applies to all public rights of way and open spaces, whether definitive or permissive. Recreation assets will be expected to be natural or semi-natural, with a minimum of buildings and infrastructure; they might include community ownership areas (for example orchard or nature reserve) or mountain bike trails. Any potential for a greater level of built development is likely to require separate planning permission. The focus of policy SP2 is on providing outdoor facilities from mineral workings and waste sites that benefit both wildlife and local communities.
- 4.6.4 Public access and recreation need not be restricted to the restoration phase and, mindful of the need for safety, should be made available at the earliest opportunity. Incorporating green infrastructure, proposals might include:
- simply making open spaces available to the public, which might be seeded and managed for wildlife and pollinator species;
 - providing access to archaeological, geodiversity, or heritage assets, either across the site or as features along a route;
 - improving the route, surface or accessibility of rights of way or adding links to existing rights of way networks;

- making outdoor areas accessible and engaging for people with disabilities;
 - providing information about the area and its significance; or
 - through providing new recreational assets that respect the surrounding environment.
- 4.6.5 Conversely, public access may not be appropriate, or may need to be restricted in some areas, for example due to safety hazards or to protect a particular habitat. These areas, and the reasons why public access is not appropriate, or needs to be restricted, should be made clear within the planning application.
- 4.6.6 The need to access mineral reserve, or deposit restoration material, and to implement appropriate safety measures may result in footpaths being temporarily or permanently diverted or, in exceptional circumstances, closed. Temporary diversions should follow the shortest route that delivers a suitable replacement and only be in place for the shortest duration required, which may not be the lifetime of the consent.
- 4.6.7 Footpaths are rooted in their local context. A permanent diversion may sever important cultural links, but also brings the opportunity to improve a route that has been adversely affected, for example by flooding or a changed view. Permanent diversions should be well designed, reflecting the local cultural, historic and landscape context, to result in an enhancement to the rights of way network within Herefordshire. Enhancement can be achieved through improvements to the view from, surface of and/or route of the right of way, including making provision for disabled people. Improving access to open spaces includes the enhancement to existing facilities and provision of new routes and open spaces.
- 4.6.8 Any permanent impact on the right of way network, or existing open space, should be avoided. Where it is necessary, the council will expect compensatory provision to be made proportionate to the level of impact. This can include the provision of new or improved access or recreation facilities located off site. The council is clear that development should have the smallest impact as practicable and enhancement will be sought at every reasonable opportunity.

Policy SP2 Access to open space and recreation from minerals and waste development

- 1. Planning permission will be supported for mineral and waste development proposals that optimise opportunities to improve public access to open spaces, taking account of the local context and integrating green infrastructure as appropriate.**
- 2. Development that affects a right of way will only be supported where it is demonstrated that:**
 - a. any temporary diversion is designed to be for as short a distance and duration as practicable; and**
 - b. any permanent diversion is designed to achieve an enhanced route over that which was previously available.**
- 3. Development that affects an area of open space will only be supported where it is demonstrated that:**

- a. any temporary impact is over the smallest area and for the shortest duration as practicable; and
 - b. any permanent impact occurs only in exceptional circumstances and compensatory provision is made.
-

4.7 Sustainable design and energy efficiency – Core Strategy policy SD1

4.7.1 Policy SD1 applies to minerals and waste development. This section of the MWLP supplements the Core Strategy by considering topics that are more specialised in relation to minerals and waste development.

Aviation safety

4.7.2 Modern waste management operations and the process of mineral extraction itself are unlikely to attract bird populations. On site infrastructure, such as settlement lagoons or open water bodies and reclamation to a nature reserve all have the potential to attract birds. Bird strike can cause significant damage to civil aviation and military aircraft. Most bird strikes occur at low altitudes affecting either low flying aircraft or aircraft taking-off or approaching an airfield.

4.7.3 Proposals for site working, restoration and after-use will be required to consider aviation safety in demonstrating the appropriateness of water management and site reclamation schemes.

4.7.4 The Mineral Products Association document titled 'Mineral Sites and Bird Strike Hazard and Risk: Practice Guide for Mineral Development and Restoration within Aerodrome Safeguarding Areas', revised version published in May 2015, should be referenced.

Dust

4.7.5 Dust can arise from: mineral winning and working processes; the passage of vehicles over unpaved ground and dirt and debris tracked onto the public highway; handling dusty materials; mineral, soils and overburden movement; stockpiles and dusty surfaces.

4.7.6 If not properly controlled at source, dust can cause nuisance to people and businesses, and harm through deposition on property and farmland. Dust can also cause adverse ecological impacts to sensitive sites.

4.7.7 A dust assessment will be required where fugitive dust emissions are likely to cause a nuisance or significant adverse ecological impact; atmospheric dispersion modelling may be required to determine whether there is a risk of health effects due to dust emissions. A separate dust assessment is not required where dust is addressed within an air quality assessment and/or health impact assessment as appropriate.

4.7.8 Reference should be made to appropriate advice, including that produced by the Institute of Air Quality Management: Guidance on the Assessment of Minerals Dust Impacts for Planning, May 2016; Guidance on the assessment of dust from demolition and constructions; Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance, December 2011; and Guidance on Air Quality Monitoring in the Vicinity of Demolition and Construction Sites.

Land instability

- 4.7.9 Proposals should demonstrate the measures to be used to ensure that quarry sides and slopes are stable and will not result in landslip, either within the site or on adjoining land, both during and after the lifetime of the development. Waste stockpiles and mineral waste tips should be constructed and accessed so that they are unlikely to give rise to danger through instability; using suitable vegetation can assist with stability and bring environmental benefit.
- 4.7.10 Unsafe ground conditions can be caused by water movement including changes in groundwater levels through de-watering, and increases in flow velocity at times of flood, which can cause scouring of pit sides, breaches of flood protection measures or erode banks of restored lakes. Good water management will integrate safety and environmental objectives.
- 4.7.11 Where there is any likelihood of instability, a stability report should be provided setting out measures appropriate to ensure the continued stability and integrity of infrastructure adjoining or close to the development site. Ensuring stability may require leaving unworked areas or margins within or around the site.
- 4.7.12 Overburden, mineral waste materials, and any other material or waste to be used in restoration, should be placed within the site to ensure that differential settlement does not occur, which could lead to instability in the future.
- 4.7.13 Coal has historically been worked in Herefordshire, in the far south of the county with the resource largely contained within the Forest of Dean. It is the responsibility of the Coal Authority to map and monitor previous areas of extraction. Maps are available³⁵ on-line that show: surface coal resource areas; coal mining legacy areas; and coal mining risk areas. The area around Hope Mansell is identified as a high risk area and the Coal Authority should be consulted on certain types of development.

Noise

- 4.7.14 Minerals workings and waste management facilities can be noisy locations. The potential for adverse impacts can be substantially avoided through good site design and working practices, such as using local topography to contain sound within the site, keeping vehicles in good working condition and covering moving equipment.
- 4.7.15 The council will expect all planning applications to identify the potential sources of noise and to demonstrate how they will be managed effectively. Noise should be assessed using relevant British Standards (referencing the most recent publication) advise contained in national planning policy guidance and the Noise Policy Statement for England.

Odour

- 4.7.16 Particularly when handling biodegradable materials, waste management facilities can be a source of odour; though with good building design and operational practice it is readily capable of being controlled.
- 4.7.17 Mineral sites are unlikely to be a source of odour. However, there is potential for odour from water bodies on site, such as settlement and silt lagoons or restoration features, which are poorly designed or managed such that they become stagnant and odorous.

³⁵ <https://www.gov.uk/government/publications/coalfield-plans-herefordshire-county-and-district-council-area>

4.7.18 The council will expect all planning applications to identify any potential odour sources and to demonstrate how they will be managed effectively. The Environment Agency has issued guidance on odour that contains indicative benchmark levels for use in the assessment of potential impacts from industrial facilities subject to the Environmental Permitting (England and Wales) Regulations (2010). Further useful information may be gained from the Institute of Air Quality Management publication, Guidance on the Assessment of Odour for Planning, May 2014.

Utilities

4.7.19 Planning applications should identify all existing and proposed utility services that cross, abut, or are adjacent to the proposed development site. The submitted details should demonstrate how such infrastructure would be protected, to ensure it remains operational and safe.

4.7.20 LinesearchbeforeUdig³⁶ is a free to use online search service that any individual can use to check their works against utility assets including underground and overhead pipelines and cables in the electricity, gas, high pressure fuel/oil, heating, water and fibre optic networks.

4.7.21 Developers are encouraged to consult with the relevant utilities company prior to submitting a planning application. Where a proposed minerals or waste development site is crossed by or contains any utilities infrastructure, landowners/operators are likely to need to ensure that the asset is protected by way of an easement width, protection zone or diversion. Any required works are likely to be required to be undertaken at the expense of the landowner/operator.

4.7.22 At the time of writing the MWLP the relevant infrastructure providers are: Dwr Cymru/Welsh Water; Severn Trent Water; and Cadent Gas.

Vibration

4.7.23 Vibration associated with mineral operations is principally caused by lorry movements, particularly over uneven surfaces, or by blasting. Blasting can cause both ground vibration and air overpressure, which can be disturbing to the local community and harmful to wildlife habitats.

4.7.24 Where vibration, including air overpressure, is likely to occur, an assessment should be undertaken to demonstrate the extent of the impact and how it will be managed to an acceptable level. Vibration should be assessed using relevant British Standards (referencing the most recent publication) and advice contained in national planning policy guidance.

Visual intrusion

4.7.25 Separately to the potential for landscape and/or visual impact, larger scale minerals and waste development can cause visual intrusion, an amenity concern, or be distracting to drivers, posing a road safety hazard.

4.7.26 The council will expect proposals to incorporate best practice measures to minimise the effects of visual intrusion; care should be taken to ensure that screening measures are appropriate and are not, in themselves, a source of visual intrusion.

³⁶ <https://www.linesearchbeforeudig.co.uk/>

4.8 Renewable and low carbon energy generation – Core Strategy policy SD2

4.8.1 Waste management operations, including anaerobic digestion and incineration with energy recovery, are recognised as providing a supply of renewable/low carbon energy. The benefits can be optimised by providing heat as well as electricity. MWLP policy W7 makes clear the expectation that these opportunities should be pursued.

4.9 Sustainable water management and water resources – Core Strategy policy SD3

4.9.1 Quarrying is an activity that can physically remove aquifers and the usable groundwater resources contained within aquifers, which may lead to impacts on the water environment through altered groundwater flows. Waste processing facilities will require water supply and land reclamation can affect future water quantity and quality, including flow.

4.9.2 Proposals for minerals extraction and waste management should ensure protection of water resources, particularly when river abstraction and/or groundwater sources may be affected. The Environment Agency has defined Source Protection Zones for groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area; in short, the closer the activity, the greater the risk. Environment Agency mapping shows the three main zones (inner, outer and total catchment) and a fourth zone of special interest, which is occasionally applied.

4.9.3 Dewatering activities are likely to require an abstraction licence from the Environment Agency³⁷; a water audit can be used to consider sustainable water management options before, during and post construction.

4.9.4 The potential for impact on water quantity, quality and flow should be assessed through hydrological and hydro-geological assessments to establish the base line position and ensure operations are appropriately designed, monitored and managed. The council will seek to avoid:

- significant change to groundwater or surface water levels, for example, the process of ‘dewatering’ (when water is pumped out of a pit to allow dry working below the water table) must be carefully monitored, to ensure no adverse impacts on surrounding water availability; and
- pollution of ground and surface water by chemicals and other contaminants, for example a considerable amount of water can be used when processing wastes or aggregates; drainage during site operations and any discharge to local watercourses, must be controlled to comply with standards set by the Environment Agency.

4.9.5 More information can be found in the Environment Agency’s document titled ‘Hydrogeological impact appraisal for dewatering abstractions, Science Report –

³⁷ www.gov.uk/guidance/water-management-apply-for-a-water-abstraction-or-impoundment-licence

SC040020/SR1'³⁸ that should be referenced in preparing any relevant planning application. There is also summary guidance available, providing a methodology on how to assess the hydrogeological impact of groundwater abstractions in connection with dewatering operations at quarries, mines and engineering works. It is titled 'Assessing the impact of dewatering on water resources. Science Summary SC040020/SS' with summary product code of Summary Product Code: SCHO0407BMAF-E-P.³⁹

- 4.9.6 The Environment Agency also hosts the 'Catchment Data Explorer', supports and builds upon the data in the river basin management plans. The Catchment Data Explorer should be used to help developers understand the water environment in the vicinity of proposal sites. It is available at <https://environment.data.gov.uk/catchment-planning/>.

4.10 Transportation within sites – MWLP policy SP3

- 4.10.1 Minerals often need to be moved around within quarries, from the point at which they are extracted (the working face) to the processing plant, stockpiles, or areas where they will be treated or used to make product for sale. Other materials can be brought to site and may be deposited in one place for storage prior to their use.
- 4.10.2 A similar range of movements is also seen at landfill sites. This is particularly relevant in Herefordshire, where landfill is likely to be limited to inert wastes being used to restore former quarries.
- 4.10.3 All internal transport modes and routes need good design to reduce landscape, environmental and amenity impacts. The use of natural attributes, such as following an existing hedgerow, or wooded or lower lying area within the site, should be optimised, whilst sensitive or visually exposed land, or important landscape or historic features, should be avoided. Noise, dust and vibration can all have an adverse impact on both the environment and local communities. Flood risk on site should be considered to ensure there is a safe route from the working faces to the site exit or refuge point.
- 4.10.4 There are various options available to operators for the efficient movement of minerals and materials within sites, with resultant reductions in fuel use, carbon emissions, noise, dust and vibration effects. Electric vehicles, conveyors and pipelines offer environmental and amenity benefits over the use of fossil-fuelled vehicles as they are generally more energy efficient, generate reduced levels of emissions or fumes and tend to be quieter.
- 4.10.5 Considering the site in the context of green infrastructure principles can enable an appropriate solution to be found and help to deliver sustainable development; examples include:
1. internal transport routes designed and laid out to provide cycle links or footpaths upon reclamation of the site (and earlier where practicable);

³⁸

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/291080/scho0407bmae-e-e.pdf

³⁹

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/290526/scho0407bmaf-e-e.pdf

2. early landscaping of internal transport routes, to enable planting to mature pending reclamation of the site;
 3. transport routes designed to protect existing wildlife movement and to enhance wildlife corridors; and
 4. transport routes designed to reflect historic movement or landscape patterns.
- 4.10.6 Each site will have different spatial influences on transport design, requirements for the material to be moved, and receptors. An assessment should be undertaken to demonstrate that all relevant factors have been considered, with the level of detail within that assessment proportionate to the scale of development proposed. Development proposals should consider which transport mode (i.e. vehicular, conveyor, or pipeline) and route is most appropriate, minimising adverse impacts and finding the balance between practicability, energy and carbon efficiency, integrated design and safety.

Policy SP3 Transport within sites

Planning permission will be supported for minerals or waste development where it is demonstrated that the arrangements for the transport of mineral, waste or other materials within the site minimises the potential for adverse impacts, including greenhouse gas emissions, and optimises the opportunities for green infrastructure, for example the use of conveyors, pipelines and/or electric powered vehicles.

4.11 Reclamation of sites – MWLP policy SP4

- 4.11.1 Mineral and waste developments can make a particular contribution to the environmental quality and local distinctiveness of Herefordshire through site reclamation and restoration.
- 4.11.2 The NPPF states that land worked for minerals should be reclaimed at the earliest opportunity, taking account of aviation safety, and that high-quality restoration and aftercare of mineral sites should take place. It also states that bonds and other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances. These principles also apply to the reclamation of waste sites.
- 4.11.3 The nature of minerals development, which often involves permanent or long-term physical change to land, sometimes on a substantial scale, means that it is important that consideration is given to how sites are reclaimed and used once workings have finished. In contrast, many waste management facilities, particularly modern developments not involving landfill, are buildings located in urban areas that do not give rise to such considerations. However, the development of former mineral sites or greenfield sites for waste use, which may include landfill or temporary plant and buildings, can lead to the need for site reclamation. Whilst the main focus of this section is on minerals development, the policy it contains is also intended to be applied to relevant forms of waste development.
- 4.11.4 As waste is managed more sustainably, the traditional link between mineral working and reclamation back to original ground levels through landfill has been largely broken. There is no non-hazardous landfill in Herefordshire and this is likely to continue as new arrangements for managing residual waste arising in the plan area are implemented. Increasingly, inert material is also being diverted away from landfill, as it is subject to more re-use and recycling.

However, the quality of construction and demolition waste recovery is such that improved materials, which can meet quality protocols for soils, can now be used to reclaim former mineral workings and other sites to a higher standard overall.

- 4.11.5 All new mineral workings are only likely to receive planning permission where they provide for the restoration and aftercare of the site to a beneficial use, in a phased manner. The Town and Country Planning Act (as amended) gives the council, as the mineral planning authority, the ability to apply a restoration condition requiring such steps to be taken as may be necessary to bring the land to the required standard for use for agriculture, forestry or amenity. However, reclamation provides the opportunity for delivering a range of benefits to the environment and/or amenity and the council will welcome well-considered schemes that will deliver green infrastructure priorities on a landscape scale. The term 'landscape scale benefits' in policy SP4 is not focussed on the size of the benefits to be derived from the proposed reclamation scheme, but to the extent of the impact to be gained; i.e. that the proposals will incorporate the local cultural, historic and landscape features, re-integrating the site into the wider landscape, to deliver benefits beyond the site area. A number of examples have been provided throughout the MWLP.
- 4.11.6 Reclamation schemes should take into account the location and context of the site, including the implications of other significant consented or proposed development in the area and the range of environmental and other assets and infrastructure that may be affected, including any important interactions between those assets and infrastructure. Reclamation schemes should take account of the proximity and purpose of airfields and be designed accordingly. They should be developed following discussion with local communities and other relevant stakeholders and, where practicable, the proposals should reflect the outcome of those discussions.
- 4.11.7 It is recognised that there may be conflict between the priorities for restoration. For example the reclamation scheme for a site located in an area subject to flooding may focus on flood alleviation, ignoring that the site is also located within an historic landscape, or as part of the wider setting for an historic asset so that restoration to its former use may be more appropriate. Any proposed reclamation scheme should be accompanied by demonstration that the optimal design has been presented, and that all relevant factors have been duly considered.
- 4.11.8 Phased working and reclamation of the site will enable impacts to be reduced and benefits to be delivered sooner. Consequently, phasing is consequently expected to form a part of any mineral working programme and is seen as one element of site reclamation. Phased working and reclamation should take care to avoid sterilisation of any viable mineral resource.
- 4.11.9 The council will require planning applications to present evidence of a practicable, long-term reclamation strategy that will reduce adverse effects, optimise benefits and which may extend beyond the boundary of the former operational site. As a starting point, developers should refer to the particular issues identified in the key development criteria (section 9) established for each allocated site and the Green Infrastructure Strategy already in place. Reclamation schemes should be comprehensive, addressing all relevant details, for example: the removal of all plant and infrastructure; the retention of appropriate surface water features; the proposed reinstatement of soils; planting proposals; and the provision of information to enhance the experience of those enjoying the restored site.

4.11.10 In all cases a high standard of reclamation will be expected, that reflects the local cultural, historic and landscape context and integrates green infrastructure, leaving a positive legacy. Defra's Guidance for Successful Reclamation of Mineral and Waste Sites⁴⁰ is a useful reference document for designing reclamation schemes. Long-term management beyond the statutory five-year aftercare period will be required where appropriate, for example to establish a new habitat or to bring community benefit. Commitment for such provision will be gained through a planning obligation, as set out in Core Strategy policy ID1.

Policy SP4: Site Reclamation

Development that requires reclamation will only be supported where it is demonstrated that the proposal incorporates measures for safe working and satisfactory reclamation, including its delivery, at the earliest opportunity, and phasing where appropriate, to a beneficial after-use of the required standard. Satisfactory reclamation schemes shall accompany such applications and include the following:

- a. proposals that take account of the geography of the site, its surroundings, and any significant permitted or proposed development and development plan policies relevant to the area;**
- b. proposals that deliver landscape scale benefits, taking account of the local context and integrating green infrastructure appropriate to its location;**
- c. evidence to show that the scheme incorporates best practice advice, is practical to deliver and achievable;**
- d. demonstration that the proposal responds to the existing (or likely future) characteristics of the site, its context and surrounding area;**
- e. a Reclamation Plan, setting out the management requirements and process of returning the land to the agreed after-use and standard which includes both the restoration and the aftercare periods; and**
- f. provision for a 5-year period of aftercare, as a minimum.**

Where appropriate, a planning obligation will be sought in order to secure the after-use, long-term management and maintenance of the site.

⁴⁰ Guidance for Successful Reclamation of Mineral and Waste Sites, Defra, 2004.
<http://webarchive.nationalarchives.gov.uk/20090318074725/http://www.defra.gov.uk/farm/environment/land-use/reclamation/guidance-full.pdf>

5. Minerals

5.1 Minerals Strategy

- 5.1.1 At the time of plan preparation, Herefordshire hosted: two active sand and gravel quarries; two active crushed rock quarries; and six active building stone delves. Two areas had previously been worked for coal and there was one Petroleum Exploration and Development Licence Block (So51a) covering a small part of the south of the county.
- 5.1.2 Similar to the waste hierarchy, a minerals hierarchy presents the favoured approach to mineral supply. The most sustainable option is to reduce the amount of mineral used, followed by use of secondary and recycled minerals, with the extraction of primary mineral likely to have the greatest impact. The MWLP seeks to influence all development so that minerals provision can move up the hierarchy.
- 5.1.3 Secondary aggregates are minerals that are produced as a by-product of other mining or quarrying activities or as a by-product of an industrial process. There is little or no secondary aggregate production within Herefordshire. The limestone is predominantly crushed for use as a primary aggregate and building stone offcuts from the sandstone delves are used in their restoration.
- 5.1.4 Recycled aggregates arise from several sources, notably from the demolition of buildings or from civil engineering works, such as asphalt planings from road resurfacing and railway track ballast. Recycling aggregates usually involves the removal of unwanted or inappropriate material such as fines, wood, plastic and metal, and some form of treatment (crushing, washing and/or screening) to reach industry standards for its re-use. There is production of recycled aggregate, with expansion potential, and this is further promoted in waste policy.
- 5.1.5 Despite seeking to reduce demand, the extraction of primary minerals for construction is likely to continue to be required throughout the plan period, and policy M1 makes commitment to identifying those areas where such development should be directed. It is widely recognised that neither conventional nor unconventional hydrocarbon extraction is likely to occur over the plan period. Coal working in Herefordshire has ceased and shows little sign of recommencing. There is just one area of unconventional hydrocarbon resource in Herefordshire, located in the south of the county around Whitchurch, Welsh Newton, Goodrich, Kerne Bridge, Hope Mansell and Marstow. The area was identified for a Petroleum Exploration and Development Licence (PEDL) block SO51a by the Oil and Gas Authority and offered to the industry in 2015 as part of the 14th Onshore Licence Round. The PEDL was not taken up by the industry and has not been issued.
- 5.1.6 Block SO51a is classified as coalbed methane, although the PEDL is for any hydrocarbon and is not limited to this classification. Coalbed methane is produced during the process of coal formation. The gas is either adsorbed into the coal or dispersed into pore spaces around the coal seam. By drilling a network of wells, the gas can be extracted from coal seams that have not been mined. The gas is typically extracted via the well through natural pressure release, or through the pumping of water from the seam in order to reduce pressure. More information is available from at the GOV.UK website.⁴¹

⁴¹ www.gov.uk/government/publications/about-shale-gas-and-hydraulic-fracturing-fracking/developing-shale-oil-and-gas-in-the-uk

- 5.1.7 The extraction of fossil fuels does not fit easily with the climate change aspirations of European or national policy or the Core Strategy. Nevertheless, both conventional and unconventional hydrocarbons are included in policy M1, to retain flexibility should either resource become workable and of interest in the future. The council will expect any development proposal for the extraction of either coal or unconventional hydrocarbons to present a compelling case to demonstrate the environmental, economic and social benefits of the project.
- 5.1.8 Because mineral resources may be substantial, it is possible for more than one quarry to operate within a single area of resource, either through extensions or new quarries opening up in the vicinity of an existing site. This is generally seen to be advantageous, as it enables the resource to be worked efficiently and for infrastructure (conveyors, processing plant etc.) to be shared. Consequently, the policy priority will be to achieve efficient use of land, extracting the most mineral with the least adverse impact and avoiding a proliferation of built development.
- 5.1.9 The sterilisation of minerals occurs when other non-minerals developments take place on, or close to, mineral deposits and render them incapable of being worked. The council will seek to ensure that, where practicable, known mineral resources are not sterilised or encroached upon by other forms of development. Figure 7 (at Annex A, with key policy details included in the interactive mapping available on the Herefordshire Council website) presents the mineral resource and key elements of infrastructure safeguarded by policies M1 and M2.
- 5.1.10 The legislative requirements of the Planning and Compensation Act 1991 and the Environment Act 1995 enable the review of old mineral permissions, commonly referred to as 'ROMP'. The ROMP provides an opportunity for the mineral planning authority to ensure mineral sites continue to work under modern conditions that reflect sustainability aspirations and offer appropriate environmental protection. Subject to certain legal provisions, the ROMP determination process is conducted in a similar way to the processing of a planning application. Consequently, the development plan, including the MWLP, and other material considerations will apply in determining ROMP.

Policy M1: Minerals Strategy

The sustainable winning and working of mineral resources in Herefordshire will be delivered through:

- a. identifying sources of alternatives to primary mineral resources, and encouraging the development of facilities to process alternative materials either at the point of production or other suitable locations;**
- b. ensuring new-build and refurbishment developments contribute to the efficient use of resources, increasing the proportion of recycled materials used as an alternative to primary mineral where appropriate;**
- c. allocation of the Specific Sites and Preferred Areas that are considered appropriate in principle for construction minerals development;**
- d. restricting the extraction of hydrocarbons to within either the Surface Coal Resource areas or PEDL block SO51a (as appropriate to the mineral) and requiring compelling reasons to demonstrate that the use of any hydrocarbon is necessary, acceptable and provides**

national, local or community benefits which clearly outweigh the likely impacts, including to protected areas and local communities;

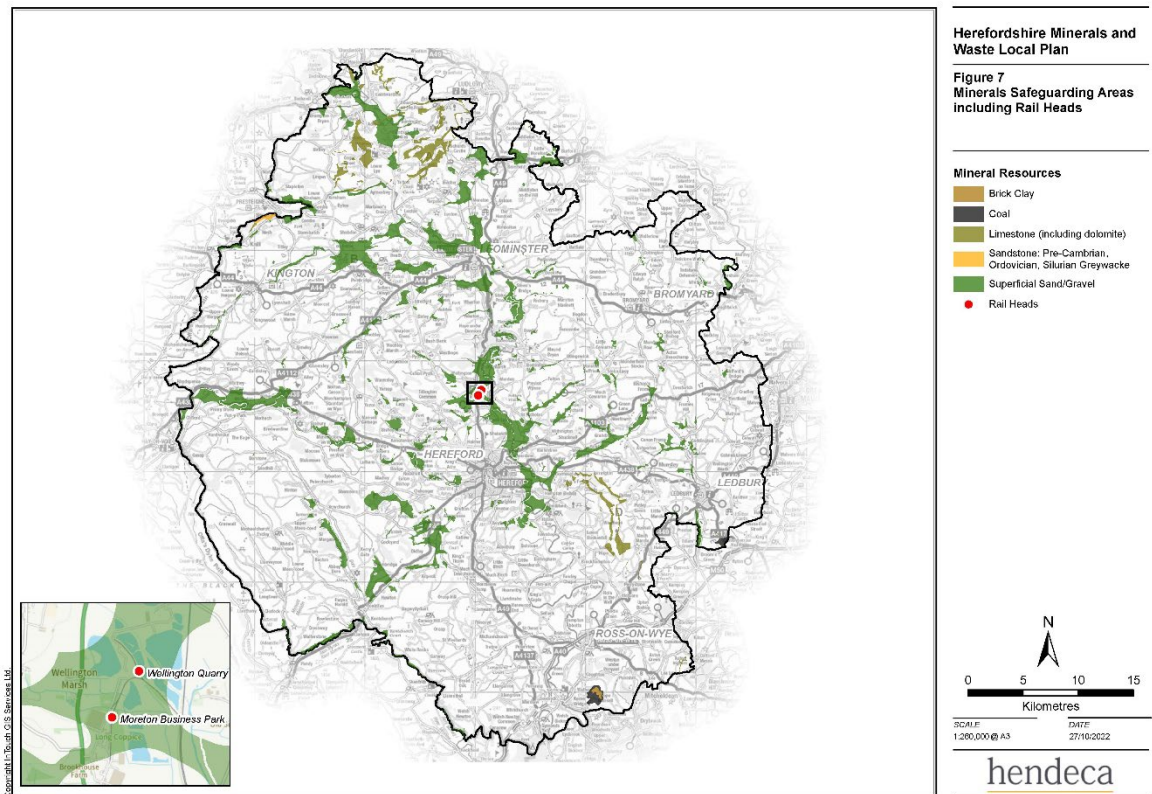
- e. the efficient use of land, including shared use of associated infrastructure where minerals are worked in close proximity; and**
- f. identifying mineral resources and infrastructure within Herefordshire and safeguarding them from the encroachment of incompatible uses and sterilisation by built development.**

Safeguarding

- 5.1.11 Because minerals are a finite natural resource, and can only be worked where they are found, it is important to make best use of them to secure their long-term conservation. The National Planning Policy Framework requires Minerals Safeguarding Areas to be defined in order that known locations of specific minerals resources of local and national importance are not needlessly sterilised by non-mineral development, whilst not creating a presumption that the resources so defined will be worked.
- 5.1.12 Figure 7 presents the Minerals Safeguarding Areas for Herefordshire, incorporating: areas of resource indicated by the British Geological Survey data; surface coal resource areas from the Coal Authority; currently permitted quarries and their associated infrastructure; the operating railhead at Moreton-on-Lugg; and the disused railhead at Moreton Business Park. Limited sandstone resource is shown on Figure 7, although this is not where any of the delves are located. The Minerals Safeguarding Areas include 250m buffers, to provide effective safeguarding for the resource and associated infrastructure. Policy M2 applies across the totality of the Minerals Safeguarding Areas as shown. Detailed information about the geology in Herefordshire can be gained from **Geology Viewer**, hosted by the British Geological Survey⁴².
- 5.1.13 Non-minerals development could potentially sterilise the minerals resource where it takes place over shallow deposits or where the nature of the non-minerals use is classed as a sensitive receptor when in close proximity to extraction activities. In such instances, extraction of the mineral prior to the proposed development will be encouraged, where this would not significantly adversely affect the timing and viability of the non-minerals development. Any such prior extraction proposals must themselves comply with national and development plan policy. Applicants for non-mineral development that fall within the minerals safeguarding areas will be required to submit an assessment of the effect of the proposed development on the mineral resource beneath or adjacent to the site of the development. This is often termed a mineral resource assessment. The assessment will provide the appropriate level of information to demonstrate to the council that the relevant mineral interests have been adequately considered and that known mineral resources will be appropriately protected from being sterilised or unduly restricted by other forms of development occurring on or close to the resource.

Figure 7 Minerals Safeguarding Areas including Rail Heads

⁴² <https://geologyviewer.bgs.ac.uk/>



- 5.1.14 The National Planning Policy Framework makes clear that local policy should also safeguard sites for infrastructure associated with mineral working. Within Herefordshire, these facilities are substantially located within operational mineral workings, and this is an approach that is expected to continue at appropriate sites. The two railheads are identified and safeguarded by policy M2 as they provide existing and potential alternatives to road movements.
- 5.1.15 Strategic development (policy M2(1,d)) is that which is either allocated in the local development plan or would constitute major development as defined in the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as may be amended). Exempt developments (policy M2(1,e)) are:
- a. applications for householder development;
 - b. applications for alterations and extensions to existing buildings and for change of use of existing development, unless intensifying activity on site;
 - c. applications for advertisement consent, for works to trees and for prior notifications (telecoms, forestry, agriculture, demolition);
 - d. any other development specified in the local development plan as exempt from the need for consideration on safeguarding grounds.
- 5.1.16 During the period 2020-2022 around half of all planning applications received in Herefordshire would have fallen within the Mineral Safeguarding Area. When applying the above criteria, around a quarter of all applications would have had to demonstrate how they would have protected the mineral resource and complied with Policy M2.

- 5.1.17 The National Planning Policy Framework extends the concept of minerals safeguarding to make clear that the applicant of a new development, the 'agent of change', should ensure that the intended project does not unreasonably restrict an existing business. Depending on the nature of the proposed development, such an outcome may be felt at different distances from the mineral resource or associated infrastructure. Recognising the importance of mineral resources and associated infrastructure, this principle has been incorporated into policy M2.
- 5.1.18 Policy M2 applies to all minerals resources, regardless of whether they have gained the necessary planning permission to be worked. Identification of these areas does not imply that any application for the working of minerals within them will be granted planning permission. Policy M2 also applies to the infrastructure associated with the mineral resource, including railheads.

Policy M2: Safeguarding of Minerals Resources and Associated Infrastructure from Sterilisation or Significant Adverse Effect

- 1. Within the minerals safeguarding areas, non-minerals development will only be supported in the following circumstances:**
 - a. the development would not sterilise or prejudice the future extraction of the mineral resource because it can be demonstrated that the resource: is not of economic value; occurs at depth and can be extracted in an economically viable alternative way; does not exist; or has been sufficiently depleted by previous extraction; or**
 - b. the mineral can be extracted satisfactorily prior to non-minerals development without materially affecting the timing and viability of the non-minerals development; or**
 - c. the non-mineral development is of a temporary nature that can be completed and the site returned to a condition that does not prevent mineral extraction or operation of the associated infrastructure within the timescale that the mineral is likely to be needed; or**
 - d. the non-mineral development is strategic and can be demonstrated to outweigh the need for the mineral resource and associated infrastructure; or**
 - e. it constitutes exempt development (see paragraph 5.1.15); and**
 - f. the development would not prejudice the operation of associated infrastructure, principally the identified railheads.**

- 2. Where the operation of an existing mineral working, including associated infrastructure, could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant shall be required to provide suitable mitigation before the new development is completed.**

5.2 Aggregates

- 5.2.1 Aggregate minerals are primarily used in construction, including concrete manufacture, road building and landscaping. The primary aggregate minerals extracted in Herefordshire are sand and gravel and crushed rock (limestone).

Sand and gravel

- 5.2.2 The MNA 2021 forecasts a range of future sand and gravel demand, indicating that the landbank at 2041 could be less than 7 years. In addition, at the time of preparing the MWLP, the two operational quarries Wellington and Upper Lyde are subject to planning conditions requiring that the winning and working of minerals must cease by 31 December 2026 and 30 September 2029 respectively.
- 5.2.3 Data released by the British Geological Survey for year 2014, indicates that Herefordshire was 40% to 50% self-sufficient in sand and gravel provision. This data is not verified, but provides the most comprehensive indication of mineral movements currently available. It would be advantageous for Herefordshire to increase its level of self-sufficiency (not least to reduce the environmental burdens from transport) and to make a reasonable contribution to the Managed Aggregate Supply System ('MASS').
- 5.2.4 The MNA 2021 considered a range of forecasts, addressing economic, population and housing growth and infrastructure demands, which resulted in a very wide range of future demand of 4 to 13 million tonnes when assuming 100% self-sufficiency. These forecasts were further tested through the MNA Sensitivity Paper, which resulted in very much less future demand. The provision of 5 million tonnes, as sought through policy M3, is considered to reflect a higher level of forecast that will increase self-sufficiency and enable Herefordshire to make a reasonable contribution to the MASS.
- 5.2.5 Recognising the level of uncertainty in forecasts, it can be reasonably expected that the demand forecast for sand and gravel may change over the plan period. Therefore, it is not considered appropriate to specify the precise level of further provision that may be needed in order to maintain a minimum 7-year landbank at 31 December 2041. This is a matter that is effectively and appropriately addressed by monitoring the MWLP, through annual reviews of the Local Aggregates Assessment and the five-year MWLP reviews, at which time the level of additional provision can be considered, with additional site allocations brought forward if necessary.
- 5.2.6 Recognising the advantages of working an area efficiently, specific sites for future sand and gravel extraction are allocated adjacent or near to existing sites with planning permission to be worked. Sand and gravel reserves at Upper Lyde (c.700,000 tonnes), Shobdon and Wellington (2.25 million tonnes) are allocated in the MWLP.
- 5.2.7 In addition, policy M3 identifies preferred areas for sand and gravel working; new operations in these areas would add to the robustness of sand and gravel supply within Herefordshire. Sand and gravel working is to be focussed within the large expanse of resource that wraps around the northern and eastern sides of Hereford and at Shobdon, to the north-west of Hereford.
- 5.2.8 Only where the Specific Sites or Preferred Areas cannot be demonstrated to fulfil a reasonable level of demand, will proposals for sand and gravel extraction outside of these areas be permitted. Mineral working outside Specific Sites and Preferred Areas is intended to be

limited in its operation and consequently in order to reduce the potential for adverse impacts mineral will be expected to be transported off-site for processing.

- 5.2.9 As made clear in Strategic Policy and General Principles; any adopted development plan must be read as a whole and development proposals will be considered against all relevant policies. The development plan for minerals includes the Core Strategy and its policies, not least those concerned with protection (and enhancement) of the environment. As part of this policy framework, the allocated sites are accompanied by key development criteria that present particular issues to be comprehensively addressed in association with any development proposal. There is no key development criteria for the preferred areas ; they are too extensive. However, this does not mean that development proposals within these areas will not be subject to the same level of scrutiny. Not least the Habitats Regulations Assessment undertaken of this plan recommends that any development proposal located within Area C should be accompanied by project level Habitats Regulation Assessment and targeted ecological surveys.
- 5.2.10 Whilst minerals development is not recognised as a key contributor of additional nutrient load, policy requires nutrient neutrality to be demonstrated for development proposals located within the River Wye SAC or River Clun SAC catchments. This may be demonstrated through the absence of a pathway or through the use of mitigation techniques such as: best practice soil stripping and storage; sediment storage; the use of riparian buffer habitats; and/or coppice plantations.
- 5.2.11 The order of preference set out at policy M3(2,a&b) is for the Specific Sites to be worked prior to the Preferred Areas; there is no order of preference within the locations identified under each of those categories. Planning permission will not be supported for proposals that do not respect the order of preference.

Policy M3: Winning and working of sand and gravel

- 1. Total provision for sand and gravel over the plan period to 31 December 2041 will be 5 million tonnes. Additional provision shall be made through the five-year reviews, if necessary, to maintain a landbank of at least seven years for sand and gravel at 31 December 2041, based on an annual rate of provision to be determined through the review.**
- 2. In order of preference, sand and gravel extraction shall be supported at the following locations:**
 - a. Specific Sites (presented in alphabetical order) subject to the key development criteria set out at section 9:**
 - **Shobdon Quarry;**
 - **Upper Lyde Quarry (c.700,000 tonnes);**
 - **Wellington Quarry (2.25 million tonnes).**
 - b. Preferred Areas:**
 - **Area B of the Key Diagram;**
 - **Area C of the Key Diagram.**

c. Only where it is demonstrated to be necessary to maintain an adequate landbank or there is a shortfall in production capacity available at the Specific Sites or Preferred Areas, will sand and gravel extraction be supported in any other area of resource.

Crushed rock (limestone)

- 5.2.12 The MNA 2021 makes two forecasts of future crushed rock demand, indicating that the landbank at 2041 could be less than 10 years. In addition, at the time of preparing the MWLP, there are two operational crushed rock quarries in Herefordshire, with the planning conditions for Leinthall Quarry requiring that the winning and working of minerals at that site must cease by 31 August 2027.
- 5.2.13 Data released by the British Geological Survey for year 2014, indicates that Herefordshire was 20% to 30% self-sufficient in crushed rock provision. This data is not verified, but provides the most comprehensive indication of mineral movements currently available. It would be advantageous for Herefordshire to increase its level of self-sufficiency (not least to reduce the environmental burdens from transport) and to make a reasonable contribution to the MASS.
- 5.2.14 The MNA 2021 considered two forecasts addressing population and household growth which resulted in a wide range of future demand of 9.5 to 19 million tonnes when assuming 100% self-sufficiency. These forecasts were further tested through the MNA Sensitivity Paper, which resulted in very much less future demand. The provision of 9 million tonnes, as sought through policy M4, is considered to reflect a higher level of forecast that will increase self-sufficiency and enable Herefordshire to make a reasonable contribution the MASS.
- 5.2.15 Recognising the level of uncertainty in forecasts it can be reasonably expected that the demand forecast for crushed rock may change over the plan period. Therefore, it is not considered appropriate to specify the precise level of further provision that may be needed in order to maintain a minimum 10 year landbank at 31 December 2041. This is a matter that is effectively and appropriately addressed by monitoring the MWLP, through annual reviews of the Local Aggregates Assessment and the five-year reviews of the MWLP, at which time the level of additional provision can be considered, with additional site allocations brought forward if necessary.
- 5.2.16 Recognising the advantages of working an area efficiently, specific sites for future crushed rock extraction are allocated adjacent or near to existing sites with planning permission to be worked. Crushed rock reserves at Leinthall Quarry (7 million tonnes) and Perton Quarry are allocated in the MWLP.
- 5.2.17 In addition, policy M4 identifies preferred areas for limestone working, new operations in these areas would add to the robustness of crushed rock supply within Herefordshire. Limestone working will be preferred within the resources located to the north of the county and to the east of Hereford. Mineral working should not take place within the Wye Valley Area of Outstanding Natural Beauty other than in exceptional circumstances.
- 5.2.18 Only where the Specific Sites or Preferred Areas cannot be demonstrated to fulfil a reasonable level of demand will proposals for limestone extraction outside of these areas be permitted. Mineral working outside Specific Sites and Preferred Areas is intended to be limited in its operation and consequently, in order to reduce the potential for adverse impacts, mineral will be expected to be transported off-site for processing.

- 5.2.19 As made clear in Strategic Policy and General Principles, any adopted development plan must be read as a whole and development proposals will be considered against all relevant policies. The development plan for minerals includes the Core Strategy and its policies, not least those concerned with protection (and enhancement) of the environment. As part of this policy framework, the allocated sites are accompanied by key development criteria that present particular issues to be comprehensively addressed in association with any development proposal.
- 5.2.20 Whilst minerals development is not recognised as a key contributor of additional nutrient load, policy requires nutrient neutrality to be demonstrated for development proposals located within the River Wye SAC or River Clun SAC catchments. This may be demonstrated through the absence of a pathway or through the use of mitigation techniques such as: best practice soil stripping and storage; sediment storage; the use of riparian buffer habitats; and/or coppice plantations.
- 5.2.21 The order of preference set out at policy M4(2,a&b) is for the Specific Sites to be worked prior to the Preferred Areas; there is no order of preference within the locations identified under each of those categories. Planning permission will not be supported for proposals that do not respect the order of preference.

Policy M4: Winning and working of crushed rock (limestone)

- 1. Total provision for crushed rock over the plan period to 31 December 2041 will be 9 million tonnes. Additional provision shall be made through the five-year reviews if necessary to maintain a landbank of at least ten years for crushed rock at 31 December 2041, based on an annual rate of provision to be determined through the review.**
- 2. In order of preference, crushed rock extraction shall be supported at the following locations:**
 - a. Specific Sites (presented in alphabetical order) subject to the key development criteria set out at section 9:**
 - **Leinthall Quarry (7 million tonnes);**
 - **Perton Quarry.**
 - b. Preferred Area:**
 - **Area A of the Key Diagram;**
 - **Area D of the Key Diagram.**
 - c. Only where it is demonstrated to be necessary in order to maintain an adequate landbank or there is a shortfall in production capacity available at the Specific Sites or Preferred Areas, will limestone extraction be supported in any other area of resource.**

5.3 Building Stone

- 5.3.1 Building stone includes material used for roofing, walling, flagstones or ornamental purposes. The primary building stone extracted in Herefordshire is sandstone.
- 5.3.2 The supply of building stone is important for the upkeep of traditional buildings and historic assets and for ensuring new development reflects the character of its surroundings. It is therefore important in maintaining and enhancing the overall quality of the environment in the plan area.
- 5.3.3 Within Herefordshire, sandstone is worked in small quarries called delves, generally by hand, with just one or a few workers on site. They are backfilled with the soils, overburden and mineral wastes such that their impact should be minimised. This approach should be continued, ensuring a sustainable supply of local building stone remains available throughout the plan period.
- 5.3.4 The available evidence suggests that 2,000 tonnes per year has been a consistent level of demand over the past few years. Some of the operators visited indicated that the current area of working was coming to a close and the delve would either be restored, or they would seek an extension. All of the delves are subject to conditions limiting their working period, some of which cease within the plan period. There are six building stone delves currently consented and active, all of which would be suitable in principle to gain an extension of time to enable extraction to be completed. Three of these sites would also be suitable, in principle, for a lateral extension or deepening of workings.
- 5.3.5 New sites may be appropriate where the proposed workings reflect the historic pattern of sandstone extraction in Herefordshire and the proposal is limited to the production of non-aggregate materials (principally building stone, dimension stone and roof tiles). Any overburden (the soil and rock layers overlying the sandstone) and spoil (the offcuts and residues remaining from working the building stone) shall be retained on site and used for its reclamation.
- 5.3.6 Whilst minerals development is not recognised as a key contributor of additional nutrient load, policy requires nutrient neutrality to be demonstrated for development proposals located within the River Wye SAC or River Clun SAC catchments. This may be demonstrated through the absence of a pathway or through the use of mitigation techniques such as: best practice soil stripping and storage; sediment storage; the use of riparian buffer habitats; and/or coppice plantations.
- 5.3.7 As made clear in Strategic Policy and General Principles; any adopted development plan must be read as a whole and development proposals will be considered against all relevant policies. The development plan for minerals includes the Core Strategy and its policies, not least those concerned with protection (and enhancement) of the environment. As part of this policy framework, the allocated sites are accompanied by key development criteria that present particular issues to be comprehensively addressed in association with any development proposal.

Policy M5: Winning and working of sandstone

- 1. In order to maintain an adequate supply of sandstone to preserve local distinctiveness within Herefordshire, proposals will be supported for:**

- a. **the extension of time for completion of extraction at the following permitted sandstone extraction sites, subject to the key development criteria set out at section 9:**
 - **Black Hill Delve;**
 - **Callow Delve;**
 - **Llandraw Delve;**
 - **Pennsylvania Delves;**
 - **Sunnybank Delve; and**
 - **Westonhill Wood Delve.**
 - b. **the lateral extension and/or deepening of workings at the following permitted sandstone extraction sites, subject to the key development criteria set out at section 9:**
 - **Black Hill Delve;**
 - **Llandraw Delve;**
 - **Westonhill Wood Delves;**
 - c. **the opening of new sites for sandstone extraction at appropriate locations, including micro-scale extraction on or adjacent to existing historic buildings or structures and new build developments, where the extracted materials will only be used in connection with the identified project.**
2. **The working of sandstone at the above locations will be supported where:**
- a. **the need for the material for the preservation of local distinctiveness, particularly features of local historic or architectural interest, listed and vernacular buildings or archaeological sites, outweighs any material harm extraction might cause to matters of acknowledged importance; and**
 - b. **the proposal is limited to the production of non-aggregate materials, with any overburden and spoils retained on-site and used for its reclamation.**
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5.4 Borrow Pits

- 5.4.1 In the course of large-scale civil engineering construction projects, there is often a need to develop off-site extraction for a variety of reasons. Following extraction, such excavations, known as borrow pits, are infilled with unusable materials from the construction project. It is often only possible to consider the suitability of areas for use as borrow pits once the nature, scale and timing of a project is known. Such uncertainties may extend into the construction phase itself; road building for instance often encounters unexpected problems.
- 5.4.2 Applications for borrow pits within Herefordshire are not expected to be numerous, but they are expected to result in a high quality of development. It is essential that borrow pits are controlled and subject to the same environmental considerations as other mineral workings. If permission is granted, such sites will be conditioned to ensure that their reclamation is achieved as part of the main construction project, and that their aftercare and after-use are properly controlled.

Policy M6: Borrow Pits

Proposals for the development of borrow pits will be supported where:

- a. granting planning permission would create significant environmental benefits that outweigh any material planning objections;**
 - b. the borrow pit lies on or adjacent to the proposed construction project and the extracted materials will only be used in connection with the specific construction project with which they are associated;**
 - c. the site can be restored to a state capable of beneficial after-use without the use of imported material, other than that generated on the associated construction project; and**
 - d. the life of the borrow pit is commensurate with the duration of the associated construction project.**
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6. Waste

6.1 Waste Strategy

- 6.1.1 Sustainable waste management in Herefordshire would deliver: a reduction in the amount of waste generated; an increase in the amount of waste re-used, recycled or used to recover energy; and a decrease in the amount of waste disposed to landfill.
- 6.1.2 At the time of plan preparation, Herefordshire hosted a robust waste transfer, re-use and recycling network, but had very little residual waste treatment or disposal capacity, particularly for commercial and industrial (C&I) and construction, demolition and excavation (CD&E) wastes. Local authority collected waste (LACW) is, primarily, managed through the jointly contracted residual waste management facilities located in Worcestershire, which will operate for the foreseeable future.
- 6.1.3 Other residual wastes were generally exported for recovery at facilities located beyond Herefordshire. This movement is a clear demonstration of the market forces at work within the waste sector, and is not necessarily a disadvantageous outcome. The most significant disadvantage is felt in Herefordshire, which would lose out on the potential for inward investment, jobs, secondary materials and renewable/low carbon sources of energy if new waste management infrastructure is not developed.
- 6.1.4 The plan area is very rural and relatively remote. Excluding CD&E wastes, the amount of residual wastes remaining to be managed are calculated to be in the region of 200,000 tonnes. This tonnage is relatively low, is generated from a number of different sources and is consequently not particularly attractive to waste management companies that operate nationally.
- 6.1.5 In preparing this MWLP, the local waste management industry was found to be dynamic. The evidence base found new sites being opened and previous waste management service businesses being restructured. Within the Core Strategy, Herefordshire has adopted a number of strategic employment sites, which include the specific growth areas of the Rotherwas Enterprise Zone and Leominster Enterprise Park. These locations have good potential to deliver the circular economy, where engineering, creative industry, manufacturing, waste and research sectors can combine resources to enable materials (including wastes) to be kept at their highest value for as long as possible. Then its simplest form, this might be the development of an incineration facility accepting residual waste from local businesses and which returns electricity and, ideally, heat, but also phosphorus for beneficial use. This energy supply would be decentralised, secure and low carbon, enabling national and local priorities on climate change to be realised. Recovering phosphorus would provide a supply of this essential mineral, whilst avoiding both its loss to the natural environment and extraction of the raw material.
- 6.1.6 An objective of the MWLP is to deliver a circular economy. Within Herefordshire there is a need to reduce phosphate emissions into the River Wye SAC, which means they will need to be captured prior to their release. Waste water treatment works improvements are being pursued by both Dwr Cymru/Welsh Water and Severn Trent Water; the latter of which has developed a pilot plant in Warwickshire, to evaluate energy neutral waste water treatment and the potential for materials recovery. The MWLP promotes the use of energy recovery for residual wastes, which gives the potential to recover phosphate from the fly ash. Anaerobic

digestion processes, that can be used at waste water treatment facilities and promoted on farm and are promoted in the MWLP, can also provide a source for phosphorus recovery.

- 6.1.7 There did not appear to be any currently viable locations for non-hazardous waste disposal facilities, and again, the tonnages calculated for disposal were low; the industry has made no submissions for new non-hazardous disposal facilities in Herefordshire. Submissions have been made for inert waste disposal to be used in the restoration of mineral workings and this is generally considered to be an acceptable approach.
- 6.1.8 Consequently, the policy priority is to provide a positive framework within which to deliver additional waste management capacity, addressing all levels of the waste hierarchy, except non-hazardous disposal, but making development opportunities for residual waste treatment facilities particularly attractive.
- 6.1.9 Effective diversion of waste from landfill means that proposed facility is able to demonstrate real benefit in the form of treatment proposed. Historically, some treatment options have, for example, simply changed the moisture content of waste but without resulting in a material that can be put to beneficial use. This type of facility does not effectively move waste up the hierarchy or deliver the circular economy, as the resultant material is still disposed to landfill.
- 6.1.10 National Planning Policy for Waste⁴³, paragraph 8 makes clear that non-waste development should not prejudice the implementation of the waste hierarchy or the efficient operation of waste management facilities. Similarly, the National Planning Policy Framework makes clear that the applicant of a new development, the 'agent of change', should ensure that the intended project does not unreasonably restrict an existing business. Depending on the nature of the proposed development, such an outcome may be felt at different distances from the waste management facility. Recognising the importance of waste infrastructure, this principle has been incorporated into policy W1.
- 6.1.11 It is recognised that there are some waste management facilities already operating within Herefordshire that would not satisfy policy of the MWLP; it is intended that these facilities are not protected by policy W1.

Policy W1: Waste Strategy

Sustainable waste management in Herefordshire will be delivered through:

- 1. supporting development that enables delivery of the circular economy;**
- 2. supporting the infrastructure necessary to recover phosphorus for beneficial purposes;**
- 3. supporting waste treatment development that effectively diverts waste from landfill;**
- 4. making provision for sufficient annual waste treatment capacity to enable equivalent self-sufficiency across all waste streams with development focussed within Hereford and the market towns of Bromyard, Kington, Ledbury, Leominster; and Ross on Wye;**
- 5. making provision for sufficient inert waste disposal capacity; and**

⁴³ National Planning Policy for Waste, DCLG, October 2014.

<https://www.gov.uk/government/publications/national-planning-policy-for-waste>

6. **ensuring that the continued operation of existing waste management facilities in locations that are consistent with the spatial strategy is safeguarded, including against the encroachment of incompatible uses. Where the operation of an existing waste management facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant shall be required to provide suitable mitigation before the new development is completed.**

6.2 Waste Management Requirements

Solid Wastes

- 6.2.1 The three most prevalent solid wastes received at consented facilities in Herefordshire are: municipal at around 45% (principally waste from households); construction and demolition wastes, at around 30%; and agriculture and processing wastes, at around 20%. This is quite different to the picture seen nationally, where construction and demolition wastes generally make up about 50% of total arisings, with C&I waste at around 25%, municipal waste at around 20% and other wastes making up the remainder.
- 6.2.2 The WNA 2019 calculated that additional waste management capacity will be required to manage these wastes throughout the plan period. This principally recognises that additional treatment capacity should be provided for the treatment of residual wastes and to balance out the lack of non-hazardous disposal opportunities within Herefordshire to enable equivalent self-sufficiency.
- 6.2.3 A flexible approach to the provision of waste management infrastructure is set out within the MWLP. This is deliberate, recognising both the lack of certainty that exists around forecasting future wastes and infrastructure demand, and that the provision of waste management infrastructure is market led and unlikely to result in the provision of too much capacity. Table 2 presents the maximum forecast capacity demand for each waste stream (as calculated in the WNA 2021). If food waste collection is provided across Herefordshire, this is considered likely to require additional capacity of some 10,000 tonnes. There does appear to be available capacity at recycling facilities particularly for LACW, consequently an additional 50,000 tonnes of capacity (as a minimum) is sought through policy W2, focussing on moving C&I wastes up the hierarchy. The largest need for new capacity is in the recovery of residual wastes (c.110,000 tonnes) and CD&E wastes (c.250,000 tonnes). Policy W4 presents a framework for delivery over the plan period for all management routes except disposal; this is a one-off requirement. A waste treatment facility providing 25,000tpa of capacity will be able to do this year on year, under standard operating procedures. However, a landfill void will be filled up every time a deposit is made, consequently an annual, or cumulative, tonnage is required.

Table 2 Forecast additional waste management infrastructure demand

Waste	Management route	Year 2025	Year 2030	Year 2035	Year 2041	Estimated Demand
LACW	Biological	None	10,000			10,000
	Recycling	None	22,500-30,000			30,000

	Residual Treatment	No additional capacity requirement identified				
Waste	Management route	Year 2025	Year 2030	Year 2035	Year 2041	Estimated Demand
C&I	Biological	50,000				50,000
	Recycling					
	Residual Treatment	63,000-94,500	61,200-86,800	58,400-78,400	64,700-81,500	87,000
Non-natural Agricultural	Residual Treatment	6,000-8,000				8,000
Hazardous	Residual Treatment	8,000-12,000				12,000
CD&E	Recovery (90% recovery)	194,400-207,000	208,800-223,200	221,400-236,700	238,500 - 255,600	255,600
	Disposal (90% recovery)	21,600-23,000	23,200-24,800	24,600-26,300	26,500-28,400	28,400 each year
	Disposal (70% recovery)	64,800-69,000	69,600-74,400	73,800-78,900	79,500-85,200	82,500 each year

6.2.4 Objective 4 of this MWLP seeks to move waste up the management hierarchy and deliver a circular economy. Within Herefordshire this means seeking to achieve future, aspirational waste management targets for municipal waste. At the time of preparing the MWLP these are:

- preparation for re-use and recycling (including composting/anaerobic digestion) target of 55% by 2025;
- preparation for re-use and recycling (including composting/anaerobic digestion) target of 60% by 2030;
- preparation for re-use and recycling (including composting/anaerobic digestion) target of 65% by 2035;
- gradual limitation on landfilling, to 10% by 2035; and
- requirement for the separate collection of bio-waste for recycling.

6.2.5 These may change over the lifetime of the MWLP, at the national and/or local level. The relevant targets in place at the time of submitting any planning application should be

applied and reference should be made to the contemporaneous national and local waste management strategies.

- 6.2.6 For CD&E wastes it has been assumed that a recovery rate of 90% will be achieved, which exceeds current policy expectations and would deliver management that aligns to the best practice currently found across England. Whilst higher rates of recovery are to be welcomed, it is also important to make provision for a reasonable level of disposal capacity, recognising that some wastes may not be recoverable and former mineral workings can be beneficially reclaimed. Recovery of CD&E wastes is used to refer collectively to re-use, recycling and other recovery operations.
- 6.2.7 Whilst these recycling rates are important context indicators, they are deliberately not written into policy. Apart from LACW, which already benefits from a well-established network of management facilities ensuring its diversion from landfill, the management route of wastes cannot be readily or reliably monitored.
- 6.2.8 National policy supports the location of waste activities within areas of new development, which may have a role to play in providing the required local waste management infrastructure. New development (including refurbishment) should provide for integrated waste management infrastructure where appropriate. In particular, in the early stages of planning major development, any scope for integrating waste treatment and heat generation should be exploited where practicable.
- 6.2.9 Hazardous and low level radioactive waste facilities are specialist facilities recognised as being facilities of regional and national importance. There is no identified strategic need for new hazardous or low level radioactive waste management capacity within the plan area; however, policies W2 and W5 provide the relevant framework to enable Herefordshire to meet equivalent self-sufficiency.
- 6.2.10 Developed in the right locations, modern waste management facilities can bring many benefits: sustainable infrastructure; renewable/low carbon energy supply; secondary materials; inward investment; and jobs. Consequently, the tonnages presented in policy W2 are intended as a guide, to enable monitoring over time. They are not presented as a limit on new waste management development that is well designed, appropriately situated and demonstrated to deliver a sustainable outcome.

Policy W2: Solid waste management requirements

Development for the following waste management priorities will be supported:

- 1. biological treatment of household waste of at least 10,000 tonnes per annum;**
- 2. recycling capacity of municipal, commercial and industrial and non-natural agricultural wastes of at least 50,000 tonnes per annum;**
- 3. recovery of materials and energy from municipal, commercial and industrial, non-natural agricultural and hazardous wastes of at least 110,000 tonnes per annum;**
- 4. recovery of materials from construction and demolition waste of at least 250,000 tonnes per annum; and**
- 5. inert waste disposal capacity in the order of 30,000 tonnes per annum.**

Agricultural Waste

- 6.2.11 Herefordshire is a large, predominantly rural county; the agriculture and food/drink processing sectors are recognised to have a material influence on waste arisings. Whilst natural agricultural waste is not usually appropriate as a matter for a waste local plan, due to the local distinctiveness of Herefordshire, policy W3 has been prepared to address both natural and non-natural agricultural wastes. Policy W3 does not support the development of anaerobic digestion facilities fed on crops grown for that purpose (commonly referred to as energy crops and often using maize/corn).
- 6.2.12 Natural wastes appropriate for anaerobic digestion (or other biological technologies) will be organic and likely to comprise: manures; poultry litter; spoilt crops; dirty water; and used bedding. Non-natural wastes are likely to comprise plastics, fencing materials, cleaning products and medicines that are likely to require treatment and/or disposal off-farm.
- 6.2.13 The water quality of Herefordshire's main rivers and their tributaries is a matter of strategic importance. Not least the River Wye and its tributaries are designated a Special Area for Conservation (SAC), recognised as being of international importance for their unique character and wildlife, requiring the highest level of protection, management, enhancement and, where appropriate, restoration.
- 6.2.14 At the time of preparing the MWLP, the River Lugg, a tributary of the River Wye and included within the River Wye SAC, is failing its conservation targets of phosphate levels as a result of water pollution from both: point sources, particularly sewage outlets; and diffuse sources, principally run-off from agricultural land. The key pollutants are phosphates, but also ammonia.
- 6.2.15 The River Wye SAC NMP makes clear that the farming community plays a crucial role in the River Wye SAC catchment. Published in 2014, the evidence base and options appraisal was developed to reduce phosphate levels in the River Wye catchment, including the River Lugg, to below the target level by 2027, in line with the Water Framework Directive. It incorporated a number of measures that should be implemented to promote the culture of environmental best practice.
- 6.2.16 Whilst the River Wye SAC NMP is being reviewed, the 'Top 5' recommendations for agriculture directly addressing waste management practices, remain relevant including:
- storing solid manure heaps on an impermeable base;
 - collecting effluent and dirty waters securely;
 - not spreading farmyard manure to fields at high-risk times;
 - incorporating manure into the soil; and
 - using dry cleaning techniques to remove solid waste from yards prior to cleaning.

- 6.2.17 Farming rules for water – getting full value from fertilisers and soil⁴⁴ is a policy paper produced by Defra, prepared to deliver a new approach to regulating the agriculture sector, including new rules⁴⁵ that are outcome focussed and risk based establishing a consistent baseline of good practice across the agricultural industry in England.
- 6.2.18 The rules fulfil obligations on diffuse pollution under the Water Framework Directive and came into force on 2 April 2018; they mean it is now mandatory for all farmers in England to maintain good practice to protect water quality and prevent water pollution incidents. The rules:
- promote good practice in managing fertilisers and manures;
 - encourage land managers to take reasonable precautions to prevent diffuse pollution from runoff or soil erosion;
 - require land managers to plan each application of manure or fertilisers, based on soil tests, to meet but not exceed crop and soil needs.
- 6.2.19 It is also important to recognise that the agricultural sector has a significant role to play as custodians of the land and that wider benefits can be achieved from applying best practice in managing agricultural wastes, critically in terms of reducing carbon emissions. The Committee on Climate Change’s 2019 Report⁴⁶ identifies that greenhouse gas emissions from agriculture represented about 10% of all UK emissions from 2016 to 2017 (page 26). *‘Emissions from managing agricultural soils, largely resulting from nitrogen fertiliser use, accounted for 25% of the sector’s emissions, with the remainder from waste management and on-farm energy use.’* The digestive processes of ruminants (cows and sheep) and the management of livestock waste and manures accounting for almost all the methane emitted in agriculture. Medium-term milestones include increasing the take-up of low carbon farming practices, which include greater on-farm energy efficiency, and improved nutrient, waste and manure management .
- 6.2.20 Consequently, policy W3 promotes the use of anaerobic digestion to manage natural agricultural wastes. Anaerobic digestion systems capture the methane from natural agricultural wastes, which can then be used as a source of energy or fuel, and produce a digestate that is more beneficial to soil than raw manure when put on the land at the appropriate time.
- 6.2.21 Agricultural units are dispersed across much of Herefordshire, consequently there is no spatial strategy proposed. It is expected that any waste treatment facilities proposed will primarily operate in association with the agricultural unit on which they are located. However, imports of natural or non-natural wastes from off-farm may be appropriate; each application will be considered against relevant policy of the development plan.
- 6.2.22 The waste management practices available to the agricultural sector are wide-ranging and varied, and can be expected to change over the plan period. Consequently, policy W3 is not prescriptive. There is a good support network available to farmers and landowners to gain advice in preparing their planning applications. This includes **FarmHerefordshire**,⁴⁷

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/695598/farming-rules-for-water-policy-paper-v2.pdf

⁴⁵ <https://www.gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution>

⁴⁶ <https://www.theccc.org.uk/publication/reducing-uk-emissions-2019-progress-report-to-parliament/>

⁴⁷ <https://www.cla.org.uk/your-area/midlands/regional-news/farm-herefordshire-launched>

established in 2015, to support the agricultural industry by promoting best practice, facilitating innovative approaches and ensuring that the county's farmers and growers have access to practical and user-friendly advice.

- 6.2.23 Implementing best practice for water protection and waste management should reduce the amount of nutrients and pollutants released to waterbodies and help to protect the environment. Whilst policy W3 is not prescriptive about how natural and non-natural wastes will be appropriately managed, Herefordshire Council will expect a level of demonstration proportionate to the development proposed and the agricultural holding at which it is located.
- 6.2.24 Policy W3 requires a waste management method statement to be submitted with all applications for livestock unit(s) on agricultural holdings. The statement will include clear details on the following matters as relevant for either the proposed development or the whole agricultural holding, dependent on the scale of development: the type and quantity of livestock; the type and quantity of by-products likely to arise; methods for dealing with inputs and outputs; pollution controls; transportation requirements; and any other reasonable matters as requested by Herefordshire Council. The waste management method statement may incorporate or cross refer to discrete Manure Management Plans, Transport Assessments and/or the operational details prepared to satisfy the farming rules for water or environmental permitting requirements.
- 6.2.25 It is important that the agricultural sector makes a real contribution to achieving at least nutrient neutrality, if not betterment, in the River Wye SAC. Through the existing legislative framework, monitoring undertaken by the Environment Agency and support provided through **FarmHere**fordshire, there are many opportunities for new approaches to be implemented within agricultural units to achieve this outcome. To accompany all development proposals, applicants will be required to demonstrate the approach to farming within that agricultural unit that contributes to achieving at least nutrient neutrality. The approach may take more than one form and might comprise either physical works and/or changes to the farming method within that unit.
- 6.2.26 The Agriculture and Horticulture Development Board⁴⁸ (AHDB) purpose is '*to inspire our farmers, growers and industry to succeed in a rapidly changing world. We equip the industry with easy to use, practical know-how, which they can apply straight away to make better decisions and improve their performance.*' It is operated as a statutory levy board and is funded by farmers, growers and others in the supply chain.
- 6.2.27 The AHDB provides a wide range of advice to farmers and has prepared a Nutrient Management Guide (RB209⁴⁹) to explain the value of nutrients, soil and why good nutrient management is about more than just fertiliser application. Updates are also available on the website. This advice (as may be amended over time) should be referenced in any development proposal.
- 6.2.28 The River Wye SAC NMP River Lugg Catchment Position Statement (April 2021⁵⁰) provides advice on new thresholds relevant to discharges made within the surface or groundwater

⁴⁸ <https://ahdb.org.uk/>

⁴⁹ <https://ahdb.org.uk/RB209>

⁵⁰ Advice regarding nutrient neutrality is likely to change throughout the plan period. Up to date guidance available on Herefordshire Council's website should be consulted in understanding the current approach to nutrient neutrality.

catchment of a designated site. This advice (as may be amended over time) should be referenced in any development proposal.

- 6.2.29 Any development proposal located within the catchment of the River Wye SAC can bring a risk of increased phosphate entering the designated site. It is likely that an appropriate assessment will be required to consider the likely significant effect of that project, along with any measures that may be implemented to address the risk.
- 6.2.30 Environmental impact assessment (EIA) is a statutory tool for assessing the environmental impacts of development projects and identifying measures that can be taken to reduce these impacts. The process of EIA in the context of town and country planning in England is governed by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (which may be amended). These Regulations specify which development requires EIA (referred to as 'EIA development') and should be referenced in applying this policy.
- 6.2.31 It is recognised that there are other organisations involved in the permitting and regulation of agricultural practices, it is not solely the responsibility of Herefordshire Council. Policy W3 has been prepared to provide a land use policy framework for the management of agricultural waste that will contribute to enabling objectives of the Water Framework Directive to be met. The aim of policy W3 is materially to reduce phosphate release in the River Wye SAC from agricultural sources.

Policy W3: Agricultural waste management including for livestock units

- 1. Waste management method statements will be required for proposals for livestock unit(s) on agricultural holdings that:**
 - a. for non-EIA development, demonstrates that both natural and non-natural wastes generated by the proposed development will be appropriately managed both on and off-site; or**
 - b. for EIA development, demonstrates that both natural and non-natural wastes generated by the whole agricultural unit will be appropriately managed both on and off-site.**
- 2. Anaerobic digestion will be supported where its use is to manage only natural wastes generated primarily on the agricultural unit within which it is located.**
- 3. All proposals for livestock unit(s) and anaerobic digestion and any other waste management proposals on agricultural holdings within the River Wye SAC or the River Clun SAC will be required to demonstrate at least nutrient neutrality.**

Wastewater

- 6.2.32 Dwr Cymru/Welsh Water and Severn Trent Water provide wastewater treatment services within Herefordshire, with both companies operating wastewater treatment works. These facilities and the associated pipelines need to be upgraded and extended periodically in order to meet improved standards, cope with increased flows from new developments in their

catchment area and to replace out of date equipment. The requirement within policy W4, to achieve at least nutrient neutrality, is applicable to the proposed development.

- 6.2.33 Both companies have recently adopted their business case for investment in sewage treatment and water supply facilities for the period from 2020 to 2025. As utility companies, their asset management plans are only ever prepared on a five-year rolling cycle. Consequently, their future development needs over the plan period are not capable of being fully understood and policy W4 can only set out guiding principles for new wastewater development, making clear the preference for existing works to be upgraded and expanded as appropriate.
- 6.2.34 The River Wye SAC NMP identifies that sewage treatment works discharges are a main contributor to the baseline source apportionment; more so in the upper River Wye sub-catchment compared with the River Lugg sub-catchment. More stringent discharge levels at the sewage treatment works across Herefordshire are likely to be required to achieve conservation targets.
- 6.2.35 In its AMP7, Dwr Cymru/Welsh Water proposes to undertake phosphorous removal at 11 of its waste water treatment works ('WwTW') that discharge into the rivers Wye or Lugg. The five waste water treatment works that are located within Herefordshire are:
- Hereford Eign WwTW;
 - Hereford Rotherwas WwTW;
 - Leominster WwTW;
 - Kingstone and Madley WwTW;
 - Weobley WwTW.
- 6.2.36 Further to these facilities, Dwr Cymru/Welsh Water also proposes to undertake phosphorous removal at the Pontrilas WwTW. Whilst this facility is in Herefordshire, it does not release waters into the River Wye SAC.
- 6.2.37 As with all development proposals, any proposal for wastewater management would also be subject to the other relevant development management policies. The principles of wastewater treatment requirements for new development are contained at Core Strategy policy SD4.

Policy W4: Wastewater management

Planning permission will be supported for the statutory water and sewerage undertaker to extend, upgrade, or make provision for new infrastructure necessary to ensure the statutory undertaker can continue to undertake its duty to supply potable water and treat foul flows. Works undertaken will be required to demonstrate at least nutrient neutrality within the River Wye SAC. Wherever practical and economical, biogas should be recovered for use as an energy source and phosphorus should be recovered for beneficial uses.

6.3 Spatial distribution of waste management sites

Solid Wastes

- 6.3.1 Most modern waste management facilities are enclosed within buildings and can be beneficially located on industrial or brownfield land within or near urban areas. In order to provide for the additional capacity identified above, sufficient land must be identified in suitable places. The preferred approach to the spatial distribution of new waste management facilities is in accordance with the Core Strategy, focussing the majority of development in Hereford and the market towns of Bromyard, Kington, Ledbury, Leominster and Ross on Wye.
- 6.3.2 Herefordshire has a number of well-established industrial estates and extensive strategic employment areas (see policy E1 of the Core Strategy) distributed within the market towns that lie within the spatial strategy. Developing at these locations will provide opportunities for symbiotic relationships between waste management, engineering, manufacturing and research industries and help to deliver the circular economy at a materials level. Promoting energy from waste facilities in these locations will enable a renewable/low carbon supply of electricity and potentially heat/cooling to be distributed to neighbouring uses, also contributing to the circular economy and achieving objectives of renewable energy supply.
- 6.3.3 Planning applications for waste management activities should provide an appropriate level of detail to inform a reasonable degree of certainty on the planning application and to ensure the principle of the development and use of the land is acceptable with cross reference to permitting constraints. Where development is also subject to approval under pollution control regimes, Herefordshire Council will continue to work closely with the Environment Agency to manage potential operational impacts where detailed assessment may be required.
- 6.3.4 Whilst it would not be appropriate to set an absolute threshold, as the development of land is site specific, the following guidelines are intended to apply:
- Small-scale facility is one of around or less than 50,000 tonnes per annum throughput and would be focussed on delivering a more local service, for example a household waste recycling centre, open windrow composting, or construction and demolition waste recycling facility.
 - Large-scale facility is one providing more than 50,000 tonnes per annum throughput and would be focussed on providing a more strategic service, for example a materials recycling facility or energy recovery facility (either biological or incineration) accepting waste from across Herefordshire and potentially beyond.
- An industrial estate is a site with a local plan allocation or planning permission for use under planning use classes B2 (general industrial) and B8 (storage and distribution).
- 6.3.5 The principles set out at policy W5 would be applicable to any waste stream, providing opportunities for new hazardous and low-level radioactive waste treatment facilities to be developed in Herefordshire, should there be a market demand. There is no order of preference within the locations identified at policy W5.

Policy W5: Preferred locations for solid waste treatment facilities

Sustainable waste treatment will be delivered through a combination of small and large-scale facilities focussed at the following locations:

- 1. small-scale facilities located at any industrial estate or strategic employment area;**

2. **large-scale facilities located at any strategic employment area; and**
 3. **at the following locations (presented in alphabetical order) subject to the key development criteria set out at section 9:**
 - **Former City Spares Site;**
 - **Kington Household Waste Recovery Centre;**
 - **Ledbury Household Waste Recovery Centre; and**
 - **Leominster HWS & HWRC.**
-

Construction, Demolition and Excavation Waste

- 6.3.6 There is an identified need for new waste management (recovery and disposal) capacity for CD&E wastes. Recovery of CD&E wastes is used to refer collectively to re-use, recycling and other recovery operations.
- 6.3.7 The CD&E waste recovery facility operating at Former Lugg Bridge Quarry has the potential for a substantial increase in capacity; this is the preferred location for additional CD&E waste recovery capacity. CD&E waste recovery facilities are often appropriately located on industrial estates and strategic employment areas (see policy E1 of the Core Strategy) where they may be close to substantial demolition and refurbishment projects. In addition, they can be located at minerals workings, where the same processing equipment can be shared.
- 6.3.8 Its relatively remote position geographically, its natural geology and geography of water resources significantly restrict opportunities for non-hazardous landfill in Herefordshire because of the potential for adverse impacts on groundwater. EU law and national guidance from the Environment Agency restrict or prevent landfill and land raising sites where there is a significant risk that water quality could be adversely affected. Consequently, there have been no sites identified for non-hazardous waste disposal facilities.
- 6.3.9 There remains an identified need for inert waste disposal and sites have been proposed for this purpose. The inert wastes remaining after CD&E waste recycling, and the recovered materials, can be put to good use in the reclamation of former mineral workings. There is no order of preference within the locations identified for the disposal of inert wastes.
- 6.3.10 The deposit of CD&E waste materials is likely to require an Environmental Permit, the application for which should be twin-tracked with the planning application. Only clean, uncontaminated, inert materials should be deposited and a hydrological impact assessment is likely to be required, to consider the impact on groundwater quality and quantity.
- 6.3.11 Reference should also be made to Directive 2006/21/EC of the European Parliament and the Council on the management of waste from extractive industries (as may be amended) commonly known as the Mining Waste Directive. Guidance on the application of the Mining Waste Directive is available from the Environment Agency.⁵¹
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⁵¹ <https://www.gov.uk/government/publications/environmental-permitting-guidance-the-mining-waste-directive>

Policy W6: Preferred locations for construction, demolition and excavation waste management facilities

- 1. Sustainable recovery of construction, demolition and excavation wastes will be delivered at the following locations:**
 - a. Former Lugg Bridge Quarry, subject to the key development criteria set out at section 9;**
 - b. strategic employment areas and industrial estates, subject to the key development criteria set out at section 9;**
 - c. active mineral workings, recognising that the lifetime of the waste treatment facility may be limited to the lifetime of the quarry.**
 - 2. The sustainable disposal of inert wastes will be delivered at the following locations (presented in alphabetical order) subject to the key development criteria set out at section 9:**
 - Shobdon Quarry (including the consented area);**
 - Upper Lyde Quarry (including the consented area);**
 - Wellington Quarry (including the consented area).**
-

6.4 Waste Management Operations

- 6.4.1 The MWLP is not technology specific, recognising that waste treatment facilities are wide ranging and incorporate:
- composting facilities;
 - recycling facilities;
 - mechanical processes that will recover materials; and
 - biological or incineration processes that will recover materials and/or energy, either as a gas, heat and/or electricity.
- 6.4.2 A waste treatment facility not designed to recover energy would be expected to produce a valued material, for example recovered recyclables such as glass and metal or secondary recovered fuel that would be used to generate heat or electricity elsewhere.
- 6.4.3 Energy recovery is placed beneath materials recovery in the waste hierarchy. However, it has a beneficial role to play and this is recognised in national policy, in terms of both sustainable waste management and provision of a decentralised, renewable and/or low carbon energy source. Furthermore, beneficial materials can also be recovered, including digestate from anaerobic digestion facilities and glass, metal and secondary aggregate after combustion. Proposals incorporating combined heat and power (CHP) or electricity generation will help national policy objectives and should be encouraged as such in the MWLP.
- 6.4.4 In order to assist both the developer and the council to determine that a proposed facility is for energy recovery and not for waste disposal, policy W7 seeks information on the level of energy recovery expected to be achieved and the market(s) for that energy (e.g. identifying an electricity connection or heat/power recipient). The application should demonstrate that the

proposed development has secured/will secure an appropriate recovery classification in the Environmental Permit.

- 6.4.5 The disposal of inert wastes can be put to good use in the reclamation and restoration of land, particularly former minerals workings. This is to be encouraged at appropriate locations, so long as a satisfactory form of reclamation is proposed, with suitable after-use and comprehensive restoration scheme.
- 6.4.6 Planning permission will not be granted for inert waste disposal unless satisfactory proposals have been made for the reclamation and after-use of the site, and means of securing these in the long-term.
- 6.4.7 Planning applications for waste management activities should provide an appropriate level of detail to inform a reasonable degree of certainty on the planning application and to ensure the principle of the development and use of the land is acceptable with cross reference to permitting constraints.

Policy W7: Waste management operations

- 1. Facilities for the reuse, recycling or recovery of materials will be supported where it is demonstrated that the proposed development will enable delivery of the waste hierarchy and/or make a positive contribution to achieving the circular economy in Herefordshire.**
- 2. Facilities for the recovery of energy will only be supported where it is demonstrated:**
 - a. that the proposed development will enable delivery of the waste hierarchy and/or make a positive contribution to achieving the circular economy in Herefordshire; and**
 - b. that phosphorus in the fly ash will be separately recovered and put to beneficial use; and**
 - c. that both the resultant heat and power will be utilised where viable.**
- 3. Proposals for new landfill or landraising facilities or extensions to existing facilities will be supported where it is demonstrated that:**
 - a. the proposed development will enable delivery of the waste hierarchy; and**
 - b. the proposed development incorporates measures for safe working and satisfactory reclamation, particularly in accordance with policy SP4.**
- 4. Planning permission may be supported if these expectations are demonstrated to be unachievable but that a material level of benefit is otherwise gained and no unacceptable adverse impact results from the proposed development.**

7. Delivery, Implementation and Monitoring

7.1 Delivery

- 7.1.1 As is made clear in the Core Strategy, infrastructure includes waste management and sewerage facilities. Even as elements of the infrastructure necessary to deliver sustainable development within Herefordshire, such development proposals are also subject to Core Strategy Policy ID1.
- 7.1.2 Mineral workings may also impact upon existing services and facilities in the area local to the site being worked and can also be subject to Core Strategy Policy ID1. Delivering sustainable mineral and waste disposal development requires a comprehensive approach, looking from the start of operations, through the life of the quarry/landfill, and beyond restoration, ensuring a positive legacy remains into the future.
- 7.1.3 Where it is necessary, relevant to planning, directly related to the proposed development, fairly and reasonably related in scale and kind to the proposed development, and reasonable in all other aspects, a planning obligation will be required in order to secure any or all of the following:
- a. infrastructure provision;
 - b. measures to mitigate the effects of development and provide monitoring;
 - c. long term management following the statutory 5 year aftercare period;
 - d. public access;
 - e. community benefits.
- 7.1.4 The planning obligation may either commit the developer to delivering the agreed provision directly or to make a suitable financial contribution to its delivery.
- 7.1.5 The council expects the developer to provide for all infrastructure works necessary to make the development proposal acceptable. Development should be phased appropriately to take account of critical infrastructure delivery and seek positively to contribute towards local infrastructure improvements, including the provision of green infrastructure, public access and community benefits.
- 7.1.6 Where necessary, routeing agreements and/or travel plans may be sought to control and alleviate the effects of traffic movements. For example, in order to avoid environmentally sensitive places or local conditions of congestion on the highway network.
- 7.1.7 Developers will be expected to provide for the recording, preserving and future management of important archaeological, heritage, geological, ecological and water features as appropriate to the development proposal. Monitoring may be required, for example of: water quality, quantity or flow; air quality; or site stability. The developer will be expected to provide for this monitoring and for any remedial action reasonably required.
- 7.1.8 The developer's accountability does not end with restoration and statutory aftercare. Reclamation schemes may require longer than five years to become fully established and recognised as functional. Planning obligations will be sought in order to secure the after-use, long-term management and maintenance of the site and any associated land.

- 7.1.9 Public access to the outdoors is important for quality of life and well-being; reclaimed minerals and waste sites can make a valuable contribution to this resource. Conversely, it may be necessary to restrict public access across some areas, for example due to safety hazards or to protect a particular habitat. Planning obligations will be sought in order to secure the long-term availability and maintenance of public access to appropriate areas within mineral workings and restored sites, this might include the ability to secure compensatory provision in the event that public rights of way or open spaces are subject to closure.
- 7.1.10 To help redress the burden placed on local communities throughout the life of mineral workings and landfill sites, such development will be expected to plan positively for the provision and use of shared space, community facilities and other local services to enhance the sustainability of communities and residential environments.
- 7.1.11 Wherever possible, development should add value by considering the opportunities or benefits that can be provided, for example through design, to help meet local community aspirations or contribute to addressing local infrastructure constraints identified within the Core Strategy or other development plan documents of the Herefordshire Local Plan.
- 7.1.12 Planning obligations may be sought to secure the provision, and where appropriate maintenance, of community benefits. Such contributions are not limited to the restoration phase and should be made at the earliest opportunity.

7.2 Implementation

- 7.2.1 Delivery of the objectives of the Minerals and Waste Local Plan will be highly reliant on the minerals and waste sectors.
- 7.2.2 Consequently, policy has been prepared with the intention of making Herefordshire an attractive place for these businesses to develop, whilst also providing clarity about where development is expected to be located and the standards to be achieved, so as to protect the interests of existing communities across the county.

7.3 Monitoring

- 7.3.1 The MWLP will sit beneath the Core Strategy and together these local plan documents present the development plan for minerals and waste development. Table 3 presents the key Core Strategy policies that are relevant to each MWLP policy in terms of implementation and identifies how each MWLP policy would be monitored over the plan period.
- 7.3.2 Throughout the lifetime of the MWLP, it will be necessary to monitor and review the policies to determine the extent to which each is being implemented, and the degree to which implementation is achieving objectives. Where any targets are not on track, the Annual Monitoring Report (AMR) should also include an assessment of the reasons why.
- 7.3.3 The AMR will gather relevant information and identify whether policy targets are being achieved or not. It will highlight any concerns about policy performance. If policies are shown to be failing to perform, Herefordshire Council will consider if it is appropriate to review the appropriate policy. The justification for this will be made clear in the AMR.
- 7.3.4 In the pre-submission plan, the monitoring framework also includes indicators to monitor the likely significant impacts of the MWLP, taken from the sustainability appraisal. One of the aims of monitoring as specified by the Strategic Environmental Assessment Directive is to

identify unforeseen adverse effects in order to be able to take appropriate remedial action. To enable this to be done, the indicators from the sustainability appraisal also include monitoring potential sustainability impacts which are not expected to occur as foreseen by the appraisal.

- 7.3.5 It should be remembered that not all the information will be readily available annually. For example, the Environment Agency is responsible for collating information on C&I⁵², CD&E⁵³ and hazardous waste and recording this it within the Waste Data Interrogator, with an annual update being made available.⁵⁴ However, this only reports on the quantities and types of waste that operators of regulated waste management facilities deal with ; it does not identify all wastes generated and cannot easily be used to identify levels of recycling or recovery.
- 7.3.6 The monitoring framework is restricted to the planning permissions granted because it is up to the minerals and waste industries to open or construct and operate the development for which planning permission has been gained. Similarly, the monitoring cannot readily take account of waste management facilities that may cease to operate during the plan period.
- 7.3.7 Clearly, the MWLP must be able to respond to changing needs and circumstances. This will include assessing the potential impacts of new or updated national and local policy and guidance. This will be addressed in the AMR.
- 7.3.8 There are three key policy areas addressed in the MWLP, identifiable at this stage, which could lead to a need for review. These are:
- To ensure that adequate landbanks of sand and gravel and/or crushed rock are maintained in the latter part of the MWLP period. This will be influenced by the actual level of demand for these minerals that arises during the earlier years of the MWLP and whether suitable proposals are brought forward on sites or areas identified in the MWLP. This matter will be kept under review, including through the preparation of an annual Local Aggregates Assessment, with review of the relevant policies and any further requirement for site allocations or areas carried out as necessary.
 - To ensure that equivalent self-sufficiency is achieved in terms of waste management capacity, delivering a circular economy in Herefordshire and ensuring that waste management makes its contribution to achieving sustainable communities. This matter will be kept under review through monitoring of the MWLP, including consideration of the type and tonnage of new waste management development.
 - To respond to new issues arising out of any further exploration activity for shale gas within Herefordshire.
- 7.3.9 It is intended that, in addition to annual monitoring, an intermediate and more comprehensive review of the MWLP is undertaken at least every five years. Not only will this enable compliance with Regulation 10A of The Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended), this approach will also deliver early identification of any need for action prior to the end of the plan period, and enable a good evidence base to be prepared such that any new policies can be adopted in a timely manner.
- 7.3.10 These elements are drawn together for each policy in Table 3.

⁵² Commercial and industrial

⁵³ Construction, demolition and excavation

⁵⁴ <https://www.gov.uk/guidance/how-to-access-waste-management-data-for-england>

Table 3 Delivery, Implementation and Monitoring

MWLP Policy	Key Core Strategy Policy	MWLP policy will be delivered by	Indicators to monitor effectiveness
Strategic			
SP1: Resource Management	SS1; SS7	Herefordshire Council continuing engagement with other public bodies, local businesses, community groups and the general public to raise awareness of the financial and environmental benefits of sustainable waste management. Development management process and sustainable resource use by developers.	Record of activities undertaken by Herefordshire Council, including indication of effect (qualitative or quantitative). Record of audits received and innovative solutions presented.
SP2: Access to open space and recreation from minerals and waste development	OS1; OS2; OS3	Development management process and sustainable solutions proposed by developers.	Record of new public access to outdoor spaces and impact on open spaces, historic context and rights of way.
SP3: Transport within sites	SS4 MT1	Development management process and sustainable solutions proposed by developers.	Record of on-site transport methods and associated green infrastructure.
SP4: Reclamation	SD1; SD2; SD3; SD4	Development management process and sustainable solutions proposed by developers.	Record of reclamation achieved and associated green infrastructure, including those relevant to historic context.
Minerals			
M1: Mineral Strategy	SS1; SS4; SS6; SS7 RA6; MT1; E1; ID1 LD1; LD2; LD3; LD4	Development management process making appropriate decisions considering the development plan and all other material considerations.	Record of alternative materials used to primary minerals.

MWLP Policy	Key Core Strategy Policy	MWLP policy will be delivered by	Indicators to monitor effectiveness
	SD1; SD2; SD3; SD4		Consented reserve of new mineral workings and record of their location.
M2: Safeguarding of mineral resources from sterilisation	SD1	Development management process making appropriate decisions, considering the development plan and all other material considerations.	Record of development undertaken within the Minerals Safeguarding Areas.
M3: The winning and working of sand and gravel	SS1; SS4; SS6; SS7 OS1; MT1; E1; ID1 LD1; LD2; LD3; LD4 SD1; SD3; SD4	Submission of planning applications and the development management process making appropriate decisions, considering the development plan and all other material considerations.	Consented reserve of new mineral workings and record of their location. Record of consented reserve worked annually and destination of mineral.
M4: The winning and working of crushed rock (limestone)	SS1; SS4; SS6; SS7 OS1; MT1; E1; ID1 LD1; LD2; LD3; LD4 SD1; SD3; SD4	Submission of planning applications and the development management process making appropriate decisions, considering the development plan and all other material considerations.	Consented reserve of new mineral workings and record of their location. Record of consented reserve worked annually and destination of mineral.
M5: The winning and working of building stone (sandstone)	SS1; SS4; SS6; SS7 OS1; MT1; E1; ID1 LD1; LD2; LD3; LD4 SD1; SD3; SD4	Submission of planning applications and the development management process making appropriate decisions, considering the development plan and all other material considerations.	Consented reserve of new mineral workings and record of their location. Record of consented reserve worked annually and destination of mineral.
M6: Borrow Pits	SS1; SS4; SS6; SS7 OS1; MT1; E1; ID1 LD1; LD2; LD3; LD4	Submission of planning applications and the development management process making appropriate decisions, considering the	Record of consented borrow pits, their location and level of interaction with associated construction project.

MWLP Policy	Key Core Strategy Policy	MWLP policy will be delivered by	Indicators to monitor effectiveness
	SD1; SD3; SD4	development plan and all other material considerations.	
Waste			
W1: Waste Strategy	SS1; SS4; SS6; SS7 RA5; RA6 MT1; E1; ID1 LD1; LD2; LD3; LD4 SD1; SD2; SD3; SD4	Development management process making appropriate decisions, considering the development plan and all other material considerations.	Data from Economic Development Team to indicate circular economy type activity. Capacity of new waste management facilities by type.
W2: Solid waste management requirements	SS1; SS4; SS6; SS7 OS1; MT1; E1; ID1 LD1; LD2; LD3; LD4 SD1; SD2; SD3; SD4	Submission of planning applications and the development management process making appropriate decisions, considering the development plan and all other material considerations.	Capacity of new waste management facilities by type as set out in policy. Record of source of waste.
W3: Agricultural waste management	SS1; SS4; SS6; SS7 MT1; ID1 LD1; LD2; LD3; LD4 SD1; SD2; SD3; SD4	Development management process making appropriate decisions, considering the development plan and all other material considerations. Sustainable waste management practices promoted by farmers and land owners.	Record of waste management practice(s) presented and water quality assessments of the River Wye and River Lugg.
W4: Wastewater management	SS1; SS4; SS6; SS7 MT1; E1 ; ID1 LD1; LD2; LD3; LD4	Development management process making appropriate decisions, considering the development plan and all other material considerations.	Record of waste management practice(s) presented and water quality assessments of the River Wye and River Lugg.

MWLP Policy	Key Core Strategy Policy	MWLP policy will be delivered by	Indicators to monitor effectiveness
	SD1; SD2; SD3; SD4	Sustainable waste management practices promoted by the relevant utility company.	
W5: Preferred locations for solid waste treatment facilities	SS1; SS4; SS5; SS6; SS7 HD1; HD5; HD6; HD7 BY1; KG1; LB1; LO1; LO2; RW1 OS1; MT1; E1; ID1 LD1; LD2; LD3; LD4 SD1; SD2; SD3; SD4	Submission of planning applications and the development management process making appropriate decisions, considering the development plan and all other material considerations.	Capacity of new waste treatment facilities by type, size and location.
W6: Preferred locations for construction, demolition and excavation waste facilities	SS1; SS4; SS5; SS6; SS7 HD1; HD5; HD6; HD7 BY1; KG1; LB1; LO1; LO2; RW1 OS1; MT1; E1; ID1 LD1; LD2; LD3; LD4 SD1; SD2; SD3; SD4	Submission of planning applications and the development management process making appropriate decisions, considering the development plan and all other material considerations.	Capacity of new waste management facilities by type, size and location.
W7: Waste management operational expectations	SS1; SS7 LD1; LD2; LD3; LD4 SD1; SD2; SD3; SD4 ID1	Submission of planning applications and the development management process making appropriate decisions, considering the development plan and all other material considerations.	Data from Economic Development Team to indicate circular economy type activity. Record of materials and/or energy recovered and indication of final destination. Record of reclamation progress and innovative/integrated solutions presented.

8. Key Development Criteria

8.1 Introduction

- 8.1.1 Each allocated site is subject to a number of key development criteria, which form part of the policy. These criteria identify key matters that will be required to be carefully and comprehensively considered in preparing any development project at an allocated site.
- 8.1.2 The key development criteria do not replace development management policy; they are a part of the policy within which they are referenced and are additive to the requirements of all other policies within the development plan relevant to the project being proposed.
- 8.1.3 This section presents the key development criteria relevant to each site; they apply irrespective of the policy allocation.
- 8.1.4 The key development criteria are also presented, along with site mapping, in the Allocated Sites Appendix. The Allocated Sites Appendix is unlikely to be suitable for users of assisted technology, whilst Table 9 has been prepared to be easier to read.
- 8.1.5 All of the information is available on the interactive mapping provided on the Herefordshire Council website.

8.2 Key Development Criteria

8.2.1 Table 9 presents the sites in alphabetical order.

8.2.2 The Allocated Sites Appendix presents the sites in alphabetical order and grouped under the relevant policy reference.

Table 9 Key Development Criteria

Site Name and Policy	Key Development Criteria
<p>Black Hill Delve Policy M5(1,a&b)</p>	<p>Archaeology and geodiversity: Need to demonstrate the potential for archaeological remains or geological features to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation.</p> <p>Black Mountains SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 8. Site design should deliver a net gain in biodiversity, linking priority habitats, and incorporate key features of the landscape character.</p> <p>Ground water: Located in the St. Maughans sandstone bedrock formation, classified a secondary aquifer. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs.</p> <p>MOD Low Fly Zone: Need to demonstrate the level of effect on the current and likely future operations within the MOD Low Fly Zone.</p> <p>River Monnow: Need to demonstrate the level of effect on water quality and hydrology of the River Monnow.</p> <p>Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.</p>

Site Name and Policy	Key Development Criteria
<p>Callow Delve Policy M5(1,a)</p>	<p>Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation.</p> <p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>Ground water: Located within the Brownstones formation, classified a secondary aquifer and adjacent to a groundwater spring source protection zone for public drinking water supply. Need to demonstrate potential risks to the water environment, including, including abstractions (public and private supply) wells and springs.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.</p> <p>Woodland at Welsh Newton & Callow Hill LWS: Need to demonstrate the likely effect on the key features of the designated site.</p> <p>Wye Valley Woodlands SAC and Wye Valley & Forest of Dean Bat Sites SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Need to demonstrate how habitat severance for horseshoe bats will be prevented (which may require the periphery woodland to be retained) and how noise and light impacts on this species will be avoided.</p>
<p>Former City Spares Site Policy W5(3)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Contaminated land: Recognising the site as a former car breakers' yard, there is a high potential for contaminated land. The site is located within a drinking water protected area. Need to demonstrate how any contamination on site will be identified and remediated, particularly with reference to protection of drinking water.</p>

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	<p>Landscape: The site is set at a lower level than surrounding land but occupies a position on the southern boundary of Hereford. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Veteran tree: Need to demonstrate level of effect on ancient black poplar located to the north of the site.</p>
<p>Former Lugg Bridge Quarry Policy W6(1,a)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 2, District Enhancement Zone 2 and Hereford Fringe Zone 1. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>Little Lugg River: Need to demonstrate the level of effect on water quality and hydrology of the Little Lugg River.</p> <p>River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Site reclamation: Due to the site having a mineral working history and rural location it is required to be reclaimed at the earliest opportunity should current operations cease (as consented under references: 131870/N, dated 22.07.2013; 151184, dated 10.11.2015; and 162032, dated 02.12.2016).</p> <p>Utilities: Utility infrastructure (gas) that cross the site may require diversion or a non-working buffer to enable the site to be worked.</p>

Site Name and Policy	Key Development Criteria
<p>Hereford Enterprise Zone (Rotherwas Industrial Estate) Policy W5(2)</p>	<p>Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation.</p> <p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Contaminated land: Recognising the site as a former munitions factory, there is a high potential for contaminated land. The site is located within a drinking water protected area. Need to demonstrate how any contamination on site will be identified and remediated, particularly with reference to protection of drinking water.</p> <p>Flood Risk: Site-specific flood risk assessment required to demonstrate compliance with Local Development Order. Reference should be made to the Drainage and Flood Management Strategy (2009 and as amended).</p> <p>Hampton Grange medical facility: Need to demonstrate the level of effect on the amenity, health & safety and environment of this medical facility.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly listed buildings and the scheduled monuments Rotherwas House and Rotherwas Chapel.</p> <p>Landscaping: Site design should deliver a net gain in biodiversity, linking priority habitat, and providing enhancement for priority habitats, and incorporate key features of the landscape character.</p> <p>Pool at Rotherwas LWS: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye: Need to demonstrate the level of effect on water quality and hydrology of the River Wye.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>River Wye SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>Veteran tree: Need to demonstrate level of effect on ancient black poplars located within the site, with a priority given to avoidance.</p>

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<p>Holmer Road Policy W5(2)</p>	<p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.</p> <p>Hereford AQMA: Need to demonstrate the level of effect on air quality, particularly within the Hereford AQMA.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p> <p>Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Road network: Need to demonstrate the level of effect on the local road network in the vicinity of the site.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing and schools).</p>
<p>Kington Household Waste and Recycling Centre Policy W5(3)</p>	<p>Landscape: The site is set at a lower level than surrounding land but occupies a position on the southern boundary of Kington. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p>
<p>Land between Little Marcle Road and Ross Road Policy W5(2)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p>

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	<p>on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p> <p>Landscape: The site is set at a lower level than surrounding land but occupies a position on the south western boundary of Ledbury. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Leadon: Need to demonstrate the level of effect on water quality and hydrology of the River Leadon.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing, hotel and picnic site).</p>
<p>Ledbury Household Waste and Recycling Centre Policy W5(3)</p>	<p>Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Leadon: Need to demonstrate the level of effect on water quality and hydrology of the River Leadon.</p>
<p>Leinthall Quarry Policy M4(2,a)</p>	<p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Downton Gorge SAC: An Appropriate Assessment is required to demonstrate the likely significant effect(s) on the SAC.</p> <p>Geodiversity: Need to demonstrate the level of effect on geodiversity and incorporate mitigation measures as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 9. Site design should deliver a net gain in biodiversity, linking priority habitats, and incorporate key features of the landscape character.</p> <p>Ground water: Located within the hard rock of the Silurian Aymestrey Limestone Formation, classified as a secondary aquifer. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage assets and their settings, particularly Croft Ambrey Hill Fort and Croft Castle Park.</p> <p>Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of</p>

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	<p>ancillary infrastructure will not be permitted. A consolidated application should be made, providing the opportunity to review working practices and reclamation across the whole site.</p> <p>River Teme SSSI and River Lugg SSSI: Need to demonstrate the level of effect on the key features of these designations.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing)</p> <p>Veteran tree: Need to demonstrate level of effect on ancient yew tree located to the south of the site.</p>
<p>Leominster Enterprise Park Policy W5(2)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p> <p>Landscape: The site is set at a lower level than surrounding land but occupies a position on the southern boundary of Leominster. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Lugg: Need to demonstrate the level of effect on water quality and hydrology of the River Lugg.</p> <p>River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (schools, cemetery and associated place of worship).</p> <p>Source Protection Zone 3: Need to demonstrate how any pathways for contamination will be identified and avoided.</p>
<p>Leominster Household Waste Site and Household Waste Recovery Centre</p>	<p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s).</p>

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Policy W5(3)	<p>Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Lugg: Need to demonstrate the level of effect on water quality and hydrology of the River Lugg.</p> <p>River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p>
<p>Llandraw Delve Policy M5(1,a&b)</p>	<p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 8. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>Ground water: Located in the St. Maughans sandstone bedrock formation, classified a secondary aquifer and proximate to the side of the Black Mountains where many springs and watercourses issue off the slopes. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs.</p> <p>MOD Danger Area and Low Fly Zone: Need to demonstrate the level of effect on the current and likely future operations within the MOD Danger Area and Low Fly Zone.</p> <p>River Monnow: Need to demonstrate the level of effect on water quality and hydrology of the River Monnow.</p> <p>Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.</p>
<p>Model Farm Policy W5(2)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p> <p>Landscape: The site is set at a lower level than surrounding land but occupies a position on the eastern side of Ross-on-Wye. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p>

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	<p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Wye Valley AONB: Need to demonstrate the level of effect on the AONB.</p> <p>Source Protection Zone 2: Need to demonstrate how any pathways for contamination will be identified and avoided.</p>
<p>Moreton Business Park Policy W5(2)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly Sutton Walls Fort, St Mary's Church and the historic core of Marden and other listed buildings.</p> <p>Landscape: The site is set at a lower level than surrounding land but occupies a rural position. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.</p> <p>Rail: Need to demonstrate the potential to use the rail network for the transport of materials or that the proposal does not prevent future use of the rail infrastructure available within the site.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Wellington Brook and Moreton Brook: Need to demonstrate the level of effect on water quality and hydrology of these watercourses.</p> <p>Wellington Marsh LWS: Need to demonstrate the level of effect on the key features of this designation.</p>
<p>Pennsylvania Delves</p>	<p>Caeron Meadow SSSI and Pikes Farm Meadows SSSI: Need to demonstrate the level of effect on the key features of these designations.</p>

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Policy M5(1,a)	<p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 8. Site design should deliver a net gain in biodiversity, linking priority habitats, and incorporate key features of the landscape character.</p> <p>MOD Danger Area and Low Fly Zone: Need to demonstrate the level of effect on the current and likely future operations within the MOD Danger Area and Low Fly Zone.</p> <p>Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.</p>
<p>Perton Quarry Policy M4(2,a)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Geodiversity, Perton Roadside Section and Quarry SSSI: Need to demonstrate the level of effect on geodiversity and incorporate mitigation measures as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 3. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>Ground water: Located within the Silurian Limestones and shales of the Woolhope Dome structure, classified as a secondary aquifer. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on Registered Park and Garden Stoke Edith</p> <p>Peregrine Falcons: This is a species protected under Schedule 1 of the Wildlife and Countryside Act 1981.</p> <p>Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will not be permitted. A consolidated application should be made, providing the opportunity to review working practices and reclamation across the whole site.</p>

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	<p>River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect(s) on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing).</p>
<p>Shobdon Quarry Policy M3(2,a) Policy W6(2)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation.</p> <p>Geodiversity: Need to demonstrate the level of effect on geodiversity and incorporate mitigation measures as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Green infrastructure and reclamation: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Enhancement Zone 2. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>Ground water: Glaciofluvial sand and gravel deposits represent a secondary aquifer in hydraulic continuity with watercourses. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs.</p> <p>Housing: Need to demonstrate the level of effect on residential amenity at nearby properties.</p> <p>Pinsley Brook: Need to demonstrate the level of effect on water quality and hydrology in Pinsley Brook.</p> <p>Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will not be permitted. A consolidated application should be made, providing the opportunity to review working practices and reclamation across the whole site.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p>

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	<p>Shobdon Airfield: Need to demonstrate the level of effect on the current and likely future operations of Shobdon Airfield.</p>
<p>Southern Avenue Policy W5(2)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p> <p>Landscape: The site is set at a lower level than surrounding land but occupies a position on the southern boundary of Leominster. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>River Lugg: Need to demonstrate the level of effect on water quality and hydrology of the River Lugg.</p> <p>River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (schools, cemetery and associated place of worship).</p> <p>Source Protection Zones 1 and 2: Need to demonstrate how any pathways for contamination will be identified and avoided.</p>
<p>Sunnybank Delve Policy M5(1,a)</p>	<p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 8. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>Housing: Need to demonstrate the level of effect on residential amenity at nearby properties.</p> <p>MOD Danger Area and Low Fly Zone: Need to demonstrate the level of effect on the current and likely future operations within the MOD Danger Area and Low Fly Zone.</p>

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	<p>Pikes Farm Meadows SSSI: Need to demonstrate the level of effect on the key features of this designation.</p>
<p>Three Elms Trading Estate Policy W5(2)</p>	<p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p> <p>Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing and schools).</p> <p>Yazor Brook: Need to demonstrate the level of effect on water quality and hydrology of the Yazor Brook.</p>
<p>Upper Lyde Quarry Policy M3(2,a) Policy W6(2)</p>	<p>Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Geodiversity: Need to demonstrate the level of effect on geodiversity and incorporate avoidance, mitigation and monitoring measures as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Green infrastructure and reclamation: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 2 and Hereford Fringe Zone 4. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.</p> <p>Ground water: Glaciofluvial sand and gravel deposits represent a secondary aquifer in hydraulic continuity with watercourses. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs.</p> <p>Housing: Need to demonstrate the level of effect on residential amenity at nearby properties.</p> <p>Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of</p>

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	<p>ancillary infrastructure will not be permitted. A consolidated application should be made, providing the opportunity to review working practices and reclamation across the whole site.</p> <p>River Lugg: Need to demonstrate the level of effect on water quality and hydrology of these watercourses.</p> <p>River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Road network: Highways England identifies the site as located near to the strategic road network. Need to demonstrate the level of effect on the local road network in the vicinity of the site.</p>
<p>Wellington Quarry Policy M3(2,a) Policy W6(2)</p>	<p>Archaeology and geodiversity: Need to demonstrate the potential for archaeological remains or geological features to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere (including Leystone Bridge); and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation.</p> <p>Footpath: Wellington footpaths 23, 23A and 34 cross the site and may require diversion or a non-working buffer such that the amenity value and connectivity of the footpaths are maintained.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 1 and District Enhancement Zone 3. Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.</p> <p>Ground water: Glaciofluvial sand and gravel deposits represent a secondary aquifer in hydraulic continuity with watercourses. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s) particularly Sutton Walls Hillfort, St Mary's Church and the historic core of Marden and other listed buildings.</p>

Site Name and Policy	Key Development Criteria
	<p>Marches Line: A non-working buffer may be required such that railway safety is maintained.</p> <p>Otter: Detail protected species survey required to determine any site-specific mitigation and protection measures.</p> <p>Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will not be permitted. A consolidated application should be made, providing the opportunity to review working practices and reclamation across the whole site.</p> <p>River Lugg and Wellington Brook: Need to demonstrate the level of effect on water quality and hydrology of these watercourses.</p> <p>River Lugg LWS and SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Road network: Highways England identifies this site as located near to the strategic road network. Need to demonstrate the level of effect on the A49 and that vehicles can access and leave the site, to and from the public highway, safely.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (school and housing).</p> <p>Utilities: Utility infrastructure (high pressure gas, water mains and foul sewer) that cross the site may require diversion or a non-working buffer to enable the site to be worked.</p>
<p>Westfields Trading Estate Policy W5(2)</p>	<p>Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.</p> <p>Hereford AQMA: Need to demonstrate the level of effect on air quality, particularly within the Hereford AQMA.</p> <p>Heritage assets: Need to demonstrate <u>that the proposed development will appropriately minimise and mitigate impacts</u> on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.</p> <p>Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.</p>

Site Name and Policy	Key Development Criteria
	<p>Plough Lane LWS, Widemarsh Brook LWS and Yazor Brook LWS: Need to demonstrate the level of effect on the key features of these designations.</p> <p>Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (schools).</p> <p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>Widemarsh Brook and Yazor Brook: Need to demonstrate the level of effect on water quality and hydrology of the Yazor Brook.</p>
<p>Westonhill Wood Delves Policy M5(1,a&b)</p>	<p>Airfield: Need to demonstrate the level of effect on the current and likely future operations of the nearby airfield.</p> <p>Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation.</p> <p>Archaeology and geodiversity: Need to demonstrate the potential for archaeological remains or geological features to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.</p> <p>Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.</p> <p>Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 7. Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.</p> <p>Ground water: Located on secondary aquifer of the Devonian. Need to demonstrate potential risks to the water environment, including abstractions (public and private supply) wells and springs.</p> <p>Housing: Need to demonstrate the level of effect on residential amenity at nearby properties.</p> <p>Heritage assets: Need to demonstrate that the proposed development will appropriately minimise and mitigate impacts on heritage asset(s) and their setting(s).</p> <p>Merbach Hill LWS, Benfield Park LWS and Westonhill Wood LWS: Need to demonstrate the level of effect on the key features of these designations.</p>

Site Name and Policy	Key Development Criteria
	<p>River Wye SAC: An Appropriate Assessment is required to demonstrate no likely significant effect on the SAC. Development will be required to demonstrate at least nutrient neutrality.</p> <p>River Wye SSSI: Need to demonstrate the level of effect on the key features of this designation.</p> <p>Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.</p>

9. Glossary

Term	Description
A	
Aggregates	Sand and gravel, crushed rock and other bulk materials used in the construction industry for purposes such as the making of concrete, mortar, asphalt or for roadstone, drainage or bulk filling.
Agricultural waste	Includes a variety of substances such as pesticides containers, oil and silage wrap, as well as slurry which result from activities including horticulture, fruit growing, dairy farming, livestock breeding, seed growing, grazing and nurseries.
Airfield (aerodrome) safeguarding	Aerodromes need to take measures necessary to ensure safety of aircraft while flying in the vicinity of an aerodrome. Planning applications should meet certain criteria relating to height and location of proposed development to the aerodrome. Any proposed development with bird attractant properties, within 13km of an aerodrome needs to be consulted upon.
Anaerobic digestion	The process by which biodegradable material is broken down in the absence of oxygen in an enclosed vessel, yielding carbon dioxide, methane and solids/liquors, which can be used as fertilizer or compost.
Area of Outstanding Natural Beauty (AONB)	A statutory landscape designation, which recognises that a particular landscape is of national importance. The special qualities of the AONB encompass natural beauty, amenity, heritage and landscape assets. The primary purpose of the designation is to conserve and enhance the natural beauty of the landscape. Parts of the Wye Valley and Malvern Hills AONB lie within Herefordshire.
Appropriate assessment	Process for assessing impacts on National Network Sites, habitats or species. It is a decision making tool.
Aquifers	An aquifer is an underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand, or silt) from which groundwater can be extracted.
B	
Best and most versatile land	Land in grades 1, 2 and 3a of the Agricultural Land Classification.
Biodegradable waste	Includes food waste, garden waste and cardboards, which can decompose without any assistance.
Biodiversity	The variety of plants and animal life on earth, encompassing the diversity of habitats, species and genetic variation. Biodiversity provides our life support system as well as having social and economic value.
Biodiversity Action Plan (BAP)	Local BAP identify national and local targets for species and habitats conservation and actions.
Borrow pit	Site where mineral (often aggregate) is excavated specifically for a construction project nearby.

Building stone	Hard rock types suitable for use directly for construction in the form of walling, roofing, flagstones or for ornamental purposes. In the plan area the principle rock type used as building stone is sandstone.
C	
Circular Economy	An approach to resource management, seeking to keep materials at their highest value for the longest period of time.
Climate change	The term climate change is generally used when referring to changes in our climate, which have been identified since the early parts of the 1900s. The changes that we have seen over recent years, and those which are predicted over the next 80 years, are thought by many to be mainly as a result of human behavior, rather than due to natural changes in the atmosphere.
Coal mining legacy	Disused mines which give rise to land stability issues and other hazards. The Coal Authority map and monitor the mines and highlight public safety hazards and risk associated with them.
Coal mining risk assessment	Needs to be carried out by applicant in Development High Risk Areas and submitted alongside a planning application.
Commercial and industrial waste (C&I waste)	Produced by a range of sectors which can be separated into commercial groups (including Retail & Wholesale, Public Services and other services) and industrial groups (including food, drink & tobacco, chemical/non-metallic minerals, power and utilities, metal manufacturing, machinery and equipment and textiles, wood and paper publishing). Abbreviated to C&I waste.
Composting	Aerobic processing of biologically degradable organic wastes to produce an end product of compost.
Conservation of Habitats and Species Regulations 2017 (as amended).	The abbreviated term used for the Conservation of Habitats and Species Regulations (England and Wales) 2017; as amended by the Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018; and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
Construction, demolition and excavation waste (CD&E waste)	Waste which arises from activities such as construction, refurbishment, demolition or excavation. It includes items such as plasterboard, bricks, soils, minerals, glass, metals and tiles. Abbreviated to CD&E waste.
Conventional hydrocarbons	Oil and gas where the reservoir is in porous rock such as sandstone or limestone and can be extracted using traditional drilling techniques.
Crushed rock	Hard rock (in Herefordshire, limestone) which has been quarried, fragmented and graded for use as aggregate.
D	
Developer contributions	This includes section 106 agreements and the Community Infrastructure Levy (CIL).
E	
Ecosystem services	Can be simply described as the benefits people obtain from ecosystems. These include: provisioning services (food and water); regulating services (flood and disease control); cultural services (such as spiritual and cultural benefits); and supporting services (such as nutrient cycling that maintains conditions for life on Earth).

Energy from waste	The conversion of waste into a useable form of energy, often electricity and/or heat.
Environmental assets	Features in the physical environment that are valued for a variety of cultural and scientific reasons.
Evidence base	The information and data gathered by local authorities to justify the 'soundness' of the policy approach set out in development plan documents, including physical, economic and social aspects of the area.
F	
Floodplain	This is identified as the area of land at risk of flooding, when water flowing into a watercourse channel overtops its banks.
Flood alleviation	Measures put in place to lower or eliminate the risk of flooding in developed areas.
Flood zone	An area identified by the Environment Agency as being at risk of flooding, flood zone 3 having the greatest risk.
G	
Geodiversity	The range of rocks, minerals, fossils, soils and landforms.
Greenfield land	Land that has not been previously developed, often in agricultural use.
Green infrastructure	A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.
Groundwater source protection zones	Protection zones for groundwater supplies such as wells, boreholes and springs including those used for public drinking water supply. Displayed on maps and used to help prevent contamination of the water.
H	
Habitats Regulation Assessment	A Habitats Regulations Assessment is the assessment of the impacts of implementing a plan or policy on a National Network Site . Its purpose is to consider the impacts of a land use plan against conservation objectives of the site and to ascertain whether it would adversely affect the integrity of the site. Where significant negative effects are identified, alternative options should be examined to avoid any potential damaging effects.
Hazardous waste	Waste that may cause particular harm to human health or the environment.
Heritage asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated assets and assets identified by the local planning authority.
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.
I	
Incineration with energy recovery	Burning of waste in an incinerator and using the energy produced as heat or as electrical energy.

Infrastructure	A collective term for services such as roads, electricity, sewerage, water, social services, health facilities and recycling and refuse facilities. For minerals development this also includes the plant necessary to work the mineral before it leaves the site.
Infrastructure delivery plan	This sets out details of the infrastructure required to support development in the future.
L	
Landbank	A landbank is a stock of land with planning permissions for the winning and working of minerals, usually expressed in terms of assumptions about annual production rates.
Landfill site	The place where controlled waste is deposited. References to landfill may also refer to land raising and waste disposal.
Landscape	An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors.
Local Aggregates Assessment (LAA)	An annual assessment, prepared by mineral planning authorities, of aggregate minerals supply requirements in a planning area or areas.
Local Authority Collected Waste (LACW)	Household waste plus other similar waste collected and managed by local authorities. Abbreviated to LACW.
Low level (non-nuclear) radioactive waste (LLR waste)	Waste, not derived from the nuclear industry and having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma activity.
M	
Mechanical biological treatment (MBT)	Involves processing residual waste by a combination of both mechanical and biological treatment methods.
Mechanical recovery facility (MRF)	Actively alters the composition of waste in order to produce an end product that can be utilised.
Mineral safeguarding areas (MSA)	Areas defined by mineral planning authorities to protect potentially economic resources of minerals from other forms of development which may prevent future extraction of the mineral.
Mitigation	Measures taken to reduce adverse impacts; for example, changing the way development is carried out to minimise adverse effects through appropriate methods or timing.
Monitoring	Process where outcomes of policies and proposals are checked on a continuous or periodic basis, in order to assess their effectiveness and impact.
Municipal waste	Comprises mainly household and some other waste for which the waste collection and disposal authorities have responsibility forms an element of LACW, which includes similar C&I waste collected by local authorities.
Municipal Waste Management Strategy	Strategy produced by waste management authorities which outlines targets for dealing with municipal waste within their area.
N	

National Network Site(s)	The group terminology given to SAC, SPA and Ramsar Sites under the Conservation of Habitats and Species Regulations 2017 (as amended).
National Planning Policy Framework	This sets out the Government's planning policies for England and is the framework within which Herefordshire Council has produced the Local Plan – Core Strategy.
Nutrient	The ecology of the River Wye SAC including the River Lugg and its catchment are sensitive to nitrate and phosphate concentration. Nitrate and phosphate are nutrients that promote algal growth, affecting the conservation objectives of the SAC.
Nutrient neutrality	The means of ensuring that development does not add to existing nutrient burdens and provides certainty that the whole of the scheme is deliverable in line with the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended). Advice regarding nutrient neutrality is likely to change throughout the plan period. Up to date guidance available on Herefordshire Council's website should be consulted in understanding the current approach to nutrient neutrality.
O	
Oil and Gas Authority	Oil and gas regulator in the UK.
Open space	All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs), which offer important opportunities for sport and recreation and can act as a visual amenity.
P	
Petroleum Exploration and Development Licence (PEDL)	PEDLs cover the three main stages of petroleum activity which are: exploration; appraisal; and development. The licence provides exclusivity to the holder to undertake seismic investigations, drill wells and develop discoveries. PEDLs are issued by the Oil and Gas Authority, an Executive Agency of the Department for Business, Enterprise, Industry and Skills.
Preferred Area	An area identified as having policy support for development, but where it is not practicable to define a specific development boundary.
R	
Ramsar Site	A site designated for conservation under the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat, also known as the Convention on Wetlands. The Convention is an international treaty for the conservation and sustainable use of wetlands. It is named after the city of Ramsar in Iran, where the Convention was signed in 1971.
Reclamation	Restoring land that was once used for mineral extraction or as a landfill, in order to return it to a condition suitable for some other beneficial use.
Renewable energy	Power derived from a source that is continually replenished, such as wind, wave, solar, hydroelectric and energy from plant material, but not fossil fuels or nuclear energy. The biogenic content of waste is important in terms of considering energy from waste as renewable. Energy from residual waste is therefore a partially renewable energy source, sometimes referred to as a low carbon energy. In a typical household waste bag, somewhere between one half and two thirds will contain biogenic materials.
Residual waste	Waste which cannot be recycled or otherwise dealt with further up the waste hierarchy.

River Wye SAC Nutrient Management Plan	Prepared by Natural England and the Environment Agency the Plan for the River Wye, this will aim to control and reduce phosphates in the SAC to facilitate the delivery of the proposed development.
S	
SAC Special Area of Conservation	A Special Area of Conservation (SAC) is one given greater protection under Conservation of Habitats and Species Regulations 2017 (as amended). They have been designated because of a possible threat to the special habitats or species which they contain and to provide increased protection to a variety of animals, plants and habitats of importance to biodiversity both on a national and international scale.
Safeguarding	Protection of specific resource or site from being adversely impacted by alternative or encroaching development.
Self-sufficiency	The European Community (EC) Framework Directive on Waste and the EC Landfill Directive set out a common framework for action on waste. Waste management should protect human health and the environment by establishing an integrated network of waste facilities. Member States should promote self-sufficiency by dealing with waste as close as possible to its point of origin and promoting waste avoidance by recycling, reclamation and energy recovery.
Source protection zone	Environment Agency defined zones that include boreholes, springs and wells used for public drinking supply and certain commercial uses and so need protection from pollution.
SPA Special Protection Area	A Special Protection Area (SPA) is designated under Conservation of Habitats and Species Regulations 2017 (as amended). Post transition the UK is still required to identify internationally important areas for breeding, over-wintering and migrating birds and designate them as SPA.
Sustainable development	In broad terms, this means development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Sustainable drainage systems (SuDS)	Measures introduced in developments that aim to minimise surface water run-off and the level of waste water generated by the development. These can include use of reed beds to filter water and water storage areas.
U	
Unconventional hydrocarbons	Oil or gas that cannot be extracted using traditional drilling techniques and include underground coal gasification, coal bed methane and shale gas.
W	
Waste hierarchy	A guiding theme for waste policy at all levels. Seeks the sustainable management of waste by giving preference to waste management methods towards the top of the hierarchy (such as prevention, re-use and recycling) over methods lower down the hierarchy (such as recovery and disposal).
Waste management facilities	These include facilities for waste treatment and disposal.
Waste recovery	Processing waste to prevent it going to landfill. Recovery processes include incineration with energy recovery, advanced thermal treatment, anaerobic digestion and composting.
Wastewater	Water that is disposed of at domestic properties or through commercial and industrial activities.

Z	
Zero waste economy	Where material resources are re-used, recycled or recovered wherever possible, and only disposed of as the option of very last resort.