

Central and Eastern Berkshire

Joint Minerals & Waste Plan

Proposed Submission Plan

July 2020



www.rbwm.gov.uk



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About the Proposed Submission Plan

Central and Eastern Berkshire – Joint Minerals & Waste Plan

Local Planning Authorities have a statutory responsibility to prepare and maintain an up-to-date local plan. Bracknell Forest Council, Reading Borough Council, the Royal Borough of Windsor and Maidenhead and Wokingham Borough Council (collectively referred to as the 'Central & Eastern Berkshire Authorities') are working in partnership to produce a Joint Minerals & Waste Plan which will guide minerals and waste decision-making in the Plan area for the period up to 2036.

The Joint Minerals & Waste Plan will build upon the currently adopted minerals and waste plans for the Berkshire area, and improve, update, and strengthen the policies and provide details of strategic sites that are proposed to deliver the vision.

The currently adopted minerals and waste plans for the Berkshire area are the Replacement Minerals Local Plan for Berkshire, adopted in 1995 with subsequently adopted alterations in 1997 and 2001¹ and the Waste Local Plan for Berkshire adopted in 1998². The Minerals Local Plan and Waste Local Plan cover the administrative areas of the Central & Eastern Berkshire Authorities, as well as Slough Borough Council and West Berkshire Council. While these plans covered the period until 2006, the Secretary of State directed that a number of policies in them should be saved indefinitely until replaced by national, regional or local minerals and waste policies. For the Central & Eastern Berkshire Authorities, these saved policies will be replaced by the Joint Minerals & Waste Plan, when it is adopted.

A review of the Replacement Minerals Local Plan for Berkshire and the Waste Local Plan for Berkshire was previously being undertaken on behalf of the six Berkshire Unitary Authorities by the Joint Strategic Planning Unit. During the Examination of the Core Strategy concerns were raised and the Secretary of State subsequently formally requested the withdrawal of the Core Strategy in January 2010.

Following a review of minerals and waste planning, the Central & Eastern Berkshire Authorities decided to progress with a Joint Minerals & Waste Plan. While the Joint Minerals & Waste Plan does not cover Slough Borough Council³ or West Berkshire Council⁴, close coordination of the work between the Berkshire authorities will

¹ Replacement Minerals Local Plan for Berkshire 2001 - <https://www.bracknell-forest.gov.uk/planning-and-building-control/planning/planning-policy/development-plan/minerals-and-waste>

² Waste Local Plan for Berkshire (1998) - <https://www.bracknell-forest.gov.uk/planning-and-building-control/planning/planning-policy/development-plan/minerals-and-waste>

³ Slough Borough Council minerals and waste policy - <http://www.slough.gov.uk/council/strategies-plans-and-policies/minerals-and-waste.aspx>

⁴ Emerging West Berkshire Minerals and Waste Local Plan - <http://info.westberks.gov.uk/index.aspx?articleid=29081>

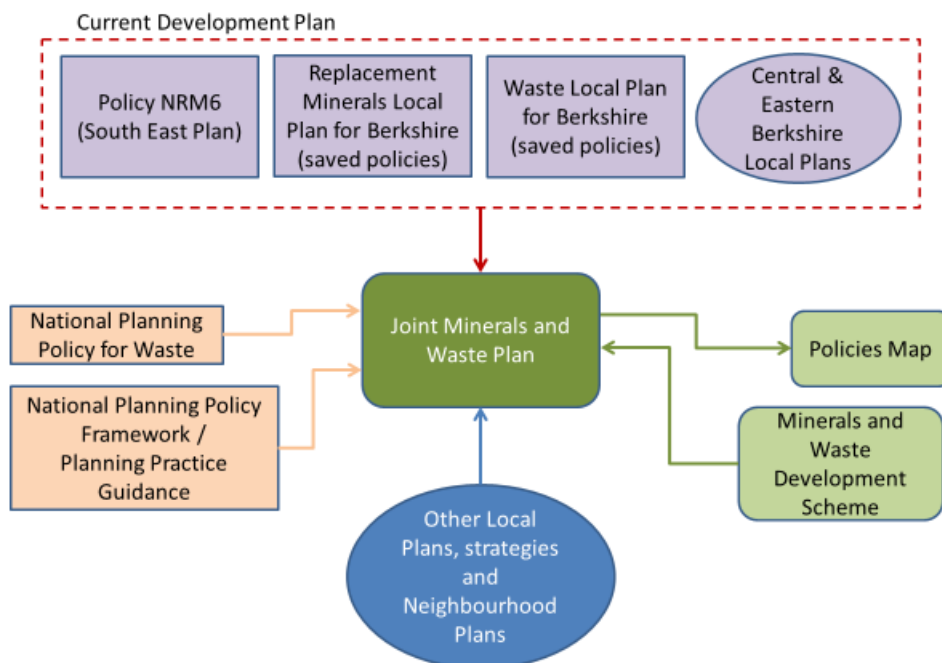
continue in order to plan for minerals and waste strategically and address any cross-border issues that may arise.

Preparing the Plan has involved engagement and collaboration with communities, local organisations, and businesses. Public consultation has been held for each stage of the plan-making process. This Proposed Submission consultation document follows a 'Draft Plan' consultation carried out in the summer / autumn of 2018 and two focused consultations held in 2019 and 2020. The feedback and responses from these consultations have informed the direction of the Proposed Submission Plan and accompanying Policies Map.

The Plan has also been prepared in cooperation with neighbouring authorities and other minerals and waste planning authorities that may be affected by the strategies and policies in the Plan. This has ensured that effective cooperation has been undertaken where there are cross-boundary impacts.

The Central & Eastern Berkshire – Joint Minerals & Waste Plan (JMWP) covers the period to 2036. This aligns the Plan with other Local Plans being developed by the authorities and meets the National Planning Policy Framework requirements (see Figure 1). The JMWP sets out the overarching strategy and planning policies for mineral extraction, importation and recycling, and the waste management of all waste streams that are generated or managed in Central and Eastern Berkshire.

Figure 1: Joint Mineral & Waste Plan related planning documents



The Proposed Submission stage

This stage includes the preparation of the Proposed Submission Plan and outlines the version that is intended to be submitted to the Secretary of State for independent examination. The Proposed Submission Plan identifies and sets out the following subjects for the period up to, and including, the year 2036:

- The long-term Spatial Vision and Strategic Objectives for minerals and waste in Central and Eastern Berkshire;
- The delivery strategy policies for minerals (M) and waste (W) planning that identifies how the objectives will be achieved through development policies in the plan period;
- The Development Management (DM) policies that will be used when the Local Planning Authorities make decisions on planning applications; and
- How each policy will be implemented and monitored by the Central & Eastern Berkshire Authorities to ensure their effectiveness.

The 'Draft Plan' Consultation in Summer 2018 was the initial version which set out the proposed approach. As a result of the responses received and consideration of local circumstances, the draft policies and proposed allocations were reviewed and amended. A summary report of the representations made at the Draft Plan stage is available on the Joint Minerals & Waste Plan consultation website:

www.hants.gov.uk/berksconsult.

Two further Regulation 18 consultations were carried out following the Draft Plan on specific issues. The first was a site-specific consultation in June 2019 on the Bray Quarry Extension site in the Royal Borough of Windsor & Maidenhead which was nominated in response to a further call for sites. In early 2020, a further consultation was carried out which included two nominated sites: one in Wokingham (Land west of Basingstoke Road) and one in the Royal Borough of Windsor and Maidenhead (Area between Horton Brook and Poyle Quarry), an Area of Search approach to sharp sand and gravel provision and Policy DM15 (Past Operator Performance). The summary reports of the representations made to both these consultations are available on the Joint Minerals & Waste Plan consultation website:

www.hants.gov.uk/berksconsult.

Making representations on this Proposed Submission Plan

We would like to hear from you in respect of your views on the 'soundness' (see below) and legal compliance of this Proposed Submission document and its accompanying material (Appendix C lists the accompanying material). Representations made on this Plan must refer to the tests of 'soundness' or they may not be considered by the Secretary of State.

Representations can be made on this Proposed Submission Plan from 3 September 2020 for a period of six weeks until 15 October 2020.

This document, the Sustainability Appraisal (incorporating Strategic Environmental Assessment) (SA/SEA) Environmental Report, Habitats Regulation Appropriate Assessment, Strategic Flood Risk Assessment and other supporting documentation, along with a Representations Form and a survey questionnaire, are all available to view and download from the Joint Minerals & Waste Plan consultation website: www.hants.gov.uk/berksconsult.

Soundness

The National Planning Policy Framework (NPPF) contains a series of tests which local plans are examined against to assess whether the plan has been produced in the right way and provides an effective planning framework for the area it covers. These ‘tests of soundness’ are set out as follows in the NPPF⁵:

- a) Positively prepared – providing a strategy which, as a minimum, seeks to meet the area’s objectively assessed needs; and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where it is practical to do so and is consistent with achieving sustainable development;
- b) Justified – an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence;
- c) Effective – deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground; and
- d) Consistent with national policy – enabling the delivery of sustainable development in accordance with the policies in this Framework.

The Plan will be examined against these tests of soundness (and legal compliance) and stakeholders are now asked to comment on whether the plan meets the tests or needs to be changed in some way to meet them.

The stages to come

Representations made on this Proposed Submission Plan, SA/SEA report and other relevant documentation will be compiled and submitted to the Secretary of State for independent examination.

⁵ National Planning Policy Framework (Para. 35) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

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1. Introduction

Status of the Plan

- 1.1 The Central and Eastern Berkshire - Joint Minerals & Waste Plan (JMWP) forms the land use planning strategy for minerals and waste development within the administrative area covered by the Central & Eastern Berkshire Authorities which are:
 - Bracknell Forest Council;
 - Reading Borough Council;
 - The Royal Borough of Windsor and Maidenhead; and
 - Wokingham Borough Council.
- 1.2 Together with the individually adopted Local Plans for each Authority and any other adopted or made Plans, the JMWP will form the development plan for the area. The Plan guides the level of minerals and waste development needed within Central and Eastern Berkshire and identifies where development should go. Proposals for minerals and waste developments will be considered against the policies contained in the Plan. The determination of non-minerals and waste applications by those Authorities (in terms of other matters such as housing) will also need to take the JMWP into consideration.
- 1.3 The detailed timescale for preparation of the Plan is set out in the Local Development Scheme (which is the formal programme for the plan preparation process) for each of the Authorities⁶. The JMWP is a Local Plan, supported by other development documents, such as the Statement of Community Involvement, for each Authority. The policies in this Plan will replace all previous Minerals and Waste Plan policies. The Plan period for the JMWP is up to 31 December 2036.
- 1.4 The Plan is being prepared in accordance with national legislation. It has also been prepared to be in general conformity with the National Planning Policy Framework (NPPF), National Planning Policy for Waste (NPPW) and the Waste Management Plan for England.

⁶ Bracknell Forest LDS - <http://democratic.bracknell-forest.gov.uk/documents/s130421/Revised%20Local%20Development%20Scheme%202019-2022%20Appendix%20A%2021012019%20Environment%20Portfolio%20Review%20Group.pdf>

Reading LDS - http://www.reading.gov.uk/media/1053/Local-Development-Scheme/pdf/Local_Development_Scheme_November_2016.pdf

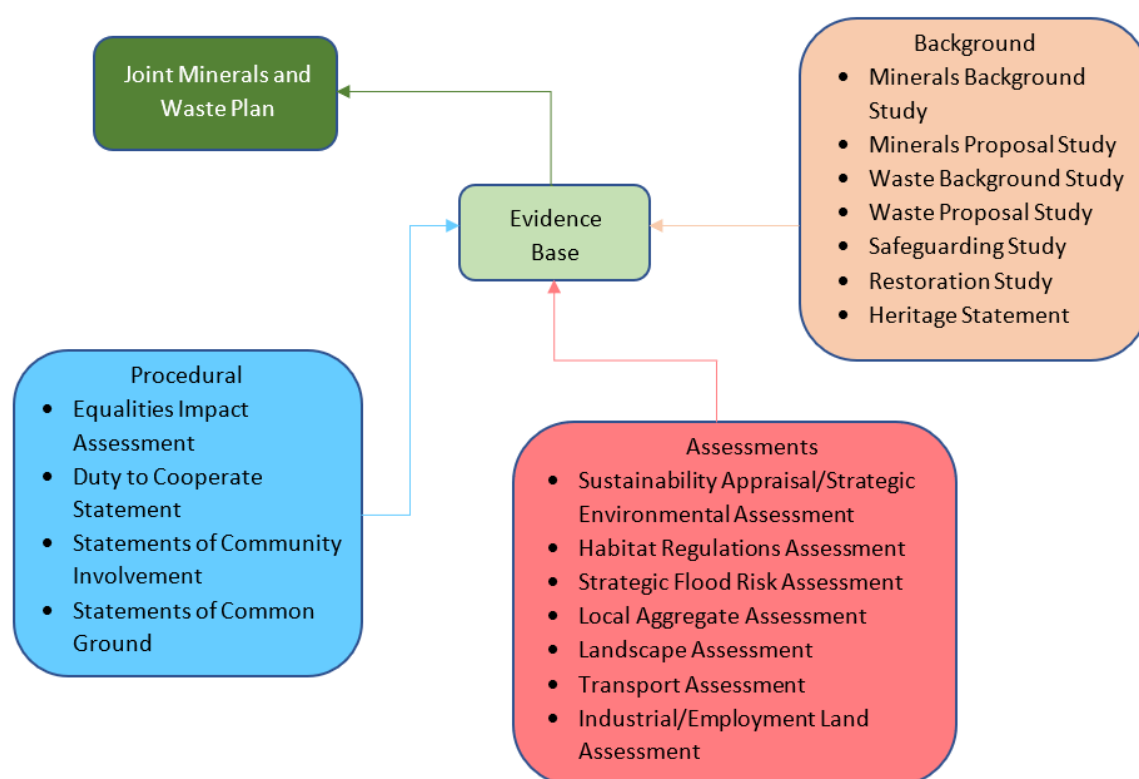
Windsor & Maidenhead LDS -

https://www3.rbwm.gov.uk/info/201025/emerging_plans_and_policies/1346/local_development_scheme

Wokingham LDS - <https://www.wokingham.gov.uk/planning-policy/planning-policy-information/local-plan-update/>

- 1.5 The JMWP only applies to the administrative area of the four unitary councils of Bracknell Forest, Reading, Windsor and Maidenhead, and Wokingham. The West Berkshire and Slough unitary authorities are preparing their own Local Plans.
- 1.6 Annual monitoring will review the effectiveness of the adopted Plan and its policies. Monitoring issues, indicators and triggers accompany each of the policies in this Proposed Submission Plan.
- 1.7 The preparation of the Plan provides the opportunity to develop a new spatial strategy for minerals and waste planning in Central and Eastern Berkshire. At the same time, it allows for changes and adjustments to be made in the planning approach in order to reflect new legislation and other developments since adoption of its predecessors.
- 1.8 The evidence base for the Plan (see Figure 2) includes the Minerals Background Study and the Waste Background Study which set out the requirements for mineral supply and waste management provision, presented in this Plan (see Appendix C).

Figure 2: Joint Minerals & Waste Plan Evidence Base



Links with Legislation, Other Policies and Strategies

National Planning Policy

- 1.9 The Joint Minerals & Waste Plan will need to accord with current planning policy and guidance on minerals and waste. The National Planning Policy Framework (NPPF) was published in 2012 with the accompanying National Planning Practice Guidance⁷ launched in 2014 as a live document, updated as necessary by the Government. The NPPF was subsequently revised in 2018 and 2019⁸. The Waste Management Plan for England⁹ was published in December 2013, followed by the National Planning Policy for Waste¹⁰ which was published in October 2014. The 25 Year Environment Plan¹¹ was published in 2018 and sets out Government action to help the natural world regain and retain good health. A Resources and Waste Strategy for England was also published in December 2018¹². The Strategy seeks to preserve material resources by minimising waste, promoting resource efficiency, and encouraging a move towards a circular economy.
- 1.10 A 'Duty to Cooperate'¹³ was introduced by the Localism Act and Regulations in 2011 to encourage local planning authorities to address issues which have impacts beyond their administrative boundaries. The approach being taken by the Central & Eastern Berkshire Authorities recognises that minerals and waste issues require a strategic cross-boundary approach. Beyond this, it is necessary to demonstrate on-going, constructive, and active engagement with other neighbouring councils and certain organisations that are concerned with sustainable development. Where necessary, Statements of Common Ground and position statements have been prepared to outline the relationship with relevant bodies in terms of minerals and waste movements.
- 1.11 To demonstrate how this duty has been addressed, a Duty to Cooperate Statement¹⁴ accompanies this consultation document. The Statement shows

⁷ Planning Practice Guidance - <http://planningguidance.communities.gov.uk/>

⁸ National Planning policy Framework - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

⁹ Waste Management Plan for England - <https://www.gov.uk/government/publications/waste-management-plan-for-england>

¹⁰ National Planning Policy for Waste - <https://www.gov.uk/government/publications/national-planning-policy-for-waste>

¹¹ The 25 Year Environment Plan, 2018 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

¹² Our Waste, our Resources: A Strategy for England - <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

¹³ Localism Act 2011 - <http://www.legislation.gov.uk/ukpga/2011/20/section/110/enacted>

¹⁴ Duty to Cooperate Statement (July 2020) – www.hants.gov.uk/berksconsult

who the authorities have cooperated with, the matters discussed, and when and where meetings have taken place to discuss sustainable development and strategic policies to achieve this.

Regional Planning Policy

1.12 The South East Plan was partially revoked on 25 March 2013. Policy NRM6, which deals with the Thames Basin Heaths Special Protection Area, remains in place as a saved policy¹⁵ and is relevant to the Plan area.

Local Plans

1.13 Each of the Central & Eastern Berkshire Authorities will continue to prepare its own Local Plan, which will focus on the areas of planning that are not related to minerals and waste. They include the following:

- Bracknell Forest Local Plan¹⁶;
- New Local Plan for Reading¹⁷;
- Borough Local Plan for Windsor and Maidenhead¹⁸; and the
- Local Plan Update for Wokingham¹⁹.

Strategies

1.14 A Statement of Community Involvement (SCI) sets out the approach for involving the community in the preparation, alteration and continuing review of all development plan documents, and in publicising and dealing with planning applications. Each of the Central & Eastern Berkshire Authorities has adopted its own Statement of Community Involvement²⁰. They are as follows:

- Bracknell Forest SCI (adopted 2014)²¹;
- Reading SCI (adopted 2014)²²;

¹⁵ Natural Resource Management (NRM6) - <http://www.bracknell-forest.gov.uk/south-east-plan-policy-nrm6.pdf>

¹⁶ Comprehensive Local Plan for Bracknell - <http://www.bracknell-forest.gov.uk/comprehensivelocalplan>

¹⁷ New Local Plan for Reading - <http://www.reading.gov.uk/newlocalplan>

¹⁸ Borough Local Plan for Windsor and Maidenhead - https://www3.rbwm.gov.uk/info/201026/borough_local_plan/1351/submission/1

¹⁹ Local Plan Update for Wokingham - <http://www.wokingham.gov.uk/planning-policy/planning-policy-information/local-plan-update/>

²⁰ Please note that temporary updates are being undertaken by the Berkshire Authorities in response to the 2020 Cov-19 national emergency.

²¹ Bracknell Forest Council. Statement of Community Involvement 2014 - <https://www.bracknell-forest.gov.uk/sites/default/files/documents/statement-of-community-involvement-2014.pdf>

²² Reading Borough Council. Statement of Community Involvement 2014 - <http://www.reading.gov.uk/media/1051/Statement-of-Community-Involvement-Adopted-March-2014/pdf/Statement-Of-Community-Involvement-Mar14.pdf>

- Windsor and Maidenhead SCI (adopted 2016)²³; and
- Wokingham SCI (adopted 2019)²⁴.

1.15 A Climate Change Action Plan sets out the strategy and policies for a Council's response to climate change. Three of the Central & Eastern Berkshire Authorities have adopted or approved their own Climate Change Action Plans. They are as follows:

- Bracknell Forest Council (adopted 2013, updated 2016)²⁵;
- Reading Climate Change Strategy 2013-2020 (Second strategy adopted 2014)²⁶ (production of the third commenced in 2019);
- Wokingham (high-level) Action Plan (2020)²⁷.

1.16 Central and Eastern Berkshire is located within the Thames Valley Berkshire Local Enterprise Partnership (LEP) area. The Thames Valley Berkshire LEP has produced a Strategic Economic Plan²⁸ which outlines the proposed strategic plan for implementing national economic growth and needs to be taken into consideration.

1.17 Figure 3 shows how waste is considered in the plans and strategies which cover the Plan area. While all three types of plan contribute to sustainable waste management, the Waste Strategy considers municipal collection and waste disposal, the Local Plan looks at the uses for employment land (including waste minimisation and reuse) and the JMWP looks at land use for waste management purposes (recycling, recovery and disposal).

²³ Royal Borough of Windsor and Maidenhead. Statement of Community Involvement 2016 -

https://www3.rbwm.gov.uk/info/200209/planning_policy/460/statement_of_community_involvement/1

²⁴ Wokingham Borough Council. Statement of Community Involvement 2019 -

<http://www.wokingham.gov.uk/planning-policy/planning-policy-information/planning-policy-consultations/>

²⁵ Bracknell Forest Council Climate Change Action Plan 2016 - [https://www.bracknell-](https://www.bracknell-forest.gov.uk/sites/default/files/documents/climate-change-action-plan.pdf)

[forest.gov.uk/sites/default/files/documents/climate-change-action-plan.pdf](https://www.bracknell-forest.gov.uk/sites/default/files/documents/climate-change-action-plan.pdf)

²⁶ Reading Climate Change Strategy 2013-2020 (Second strategy adopted 2014) -

<https://www.reading.gov.uk/media/1232/Climate-Change-Strategy/pdf/Climate-Change-Strategy.pdf>

²⁷ Wokingham Climate Emergency - [https://www.wokingham.gov.uk/council-and-meetings/open-](https://www.wokingham.gov.uk/council-and-meetings/open-data/climate-emergency/)

[data/climate-emergency/](https://www.wokingham.gov.uk/council-and-meetings/open-data/climate-emergency/)

²⁸ Strategic Economic Plan -

<http://thamesvalleyberkshire.co.uk/Portals/0/FileStore/StrategicEconomicPlan/TVB%20SEP%20-%20Strategy.pdf>

Figure 3 - Relationship between the different plans



Assessment of the Local Plan

1.18 In line with European Directives, this Plan has been subject to the following statutory assessments throughout its preparation:

- Strategic Environmental Assessment (incorporated into the Sustainability Appraisal); and
- Habitats Regulation Assessment.

1.19 In compliance with National policy, this Plan is also subject to Strategic Flood Risk Assessment.

Local Plan Monitoring & Review

1.20 The NPPF²⁹ requires that Local Plans are reviewed at least every five years from the year of adoption in order to take into account changing circumstances to the local area and national policy. The review should decide whether the policies need updating and if not, the reasons for this decision must be published.

²⁹ National Planning Policy Framework (Para. 33) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

- 1.21 Each of the policies contained within the Plan have associated monitoring indicators to measure their effectiveness, and thresholds for when a policy should be reviewed. These thresholds may relate to a breach over a 5-year period or less. The monitoring information will be collated and reported annually. In addition to monitoring how each of the policies is performing, it will also be necessary to consider the inter-relation of the policies to order to measure the effectiveness of the policies to mitigate and adapt to the effects of climate change.

2. Background and Context

The Central and Eastern Berkshire Context

- 2.1 The Central & Eastern Berkshire Authorities have a combined population of around 600,000, split relatively evenly between the four authorities. Spatially the degree of urbanisation increases from west to east, with the main centres of population and commercial activity located around the centres of Reading, Bracknell and Maidenhead.
- 2.2 With regards to individual authorities, Reading has a significantly greater population density than the other areas at around 4,000 people per square kilometre. The population pyramid for each of the authorities' mirrors that of the UK as a whole, with the most significant difference in Reading where the increase in the 20 years bracket reflects the prominence of educational facilities, specifically Reading University and the retention of young professionals within the borough.
- 2.3 Superimposed on this dense pattern of land use is the significant area of London's Metropolitan Green Belt which covers areas of the Bracknell Forest, Wokingham and Windsor and Maidenhead Council areas. Within this area of Green Belt, new development is tightly controlled in order to prevent the outward sprawl of London.
- 2.4 The Green Belt designation imposes significant constraints in the eastern part of the Plan area, where there is the highest demand for waste management facilities to deal with waste arisings from the main centres of population and economic activity.

The role of minerals in supporting economic growth

- 2.5 Minerals are an important element both in the national economy and that of the Plan area. Their exploitation can make a significant contribution to economic prosperity and quality of life. The maintenance of a buoyant economy, the improvement and development of infrastructure and maintenance of the building stock all require an adequate supply of construction minerals known as aggregates.
- 2.6 Minerals development is a key part of the wider economy. The location and type of minerals development can lead to local economic benefits, through the supply of a local resource to development projects and the provision of local employment.
- 2.7 Mineral production is influenced by economic factors, in terms of operators wishing to extract based upon the market demand for these mineral resources.

The demand for mineral resources will be determined by the action of the market and macro-economic forces that are beyond the remit of the minerals planning authority to influence.

- 2.8 The performance of the economy is constantly changing, and the activities of the minerals industry could give rise to temporary and reversible effects (in that shortages of local supply could have implications for the timing and cost of physical development but would be unlikely to prevent it from going ahead altogether).
- 2.9 The aggregates industry is important to the Plan area's economy because of its role alongside the construction sector in enabling the physical development including major infrastructure projects that are vital for economic growth and development. Central and Eastern Berkshire as well as surrounding areas are subject to major growth pressures which will need to be supported by the aggregates industry, but this will also need to be balanced with protecting the quality of the local environment and communities.

The importance of planning for aggregates

- 2.10 The mineral of more than local significance in Central and Eastern Berkshire is gravel and sharp sand. National Planning Practice Guidance³⁰ outlines how aggregate supply should be managed nationally through the Managed Aggregate Supply System (MASS) which seeks to ensure a steady and adequate supply of aggregate whilst taking into account the geographical imbalances in terms of both need and the geological occurrence of appropriate resources. MASS requires mineral planning authorities to make an appropriate contribution nationally as well as locally whilst controlling environmental damage to an acceptable level.
- 2.11 Owing to the obligations under the NPPF and more specifically MASS, there is a requirement for the Central & Eastern Berkshire Authorities to enable provision of this mineral as best they can.

The importance of planning for Waste

- 2.12 If left unmanaged waste can have a number of environmental, amenity and health impacts that are undesirable. Waste is comprised of considerable resources, which will have been used when producing the original object. With appropriate technologies, many of these resources can be retrieved and used again, thereby reducing the need for raw materials. As such, an array of

³⁰ Planning Practice Guidance (Paragraph: 060 Reference ID: 27-060-20140306) - <https://www.gov.uk/guidance/minerals>

legislation exists to control how waste is managed and national policy seeks to improve the sustainability of waste management.

- 2.13 There are a variety of waste management facilities and technologies. Each has different locational requirements and range of potential impacts. The planning regime can help to identify suitable sites for waste management but also manage these impacts. Therefore, the Joint Minerals & Waste Plan should not only determine the amount and type of waste management facilities whilst driving waste up the 'waste hierarchy', but also enable waste development in appropriate locations.

3. Spatial Vision for Minerals and Waste

- 3.1 The Joint Minerals & Waste Plan will cover the period up to 2036 to align with Local Plans the Central & Eastern Berkshire Authorities are producing.
- 3.2 The Vision, Strategic Plan Objectives and Spatial Strategy principles have been prepared to be consistent with National Policy principles and fit with the other Local Plans within Central and Eastern Berkshire.

Vision

- 3.3 The Vision shapes the overall direction of the Central and Eastern Berkshire - Joint Minerals & Waste Plan. The area covered by the Plan will continue to experience significant growth in the period up to 2036. The Vision must, therefore, recognise the balance to be struck between making provision for minerals and waste developments to meet future requirements and ensuring that such developments seek social, environmental and economic gains.
- 3.4 The focus of the Vision is on ensuring a sufficient supply of minerals based on the principles of sustainable development. The Joint Minerals & Waste Plan will strive to ensure that minerals are available at the right time and in the right locations to support levels of growth in terms of new housing, commercial, industrial development and essential infrastructure; and that waste is managed near to where it is produced and in accordance with the waste hierarchy. The Joint Minerals & Waste Plan will seek to provide for future minerals and waste needs; conserve local resources; maximise the treatment of waste as a potential resource; provide local jobs; and protect and improve the environment. The Plan recognises the urgency required to tackle climate change and will proportionately contribute to the climate change response.
- 3.5 The following is the Vision for the Joint Minerals & Waste Plan:

Vision for Central & Eastern Berkshire

In recognition of the importance of the area as a source of minerals, the Central & Eastern Berkshire Authorities will aim to ensure the maintenance of a steady and adequate supply of minerals, whilst maximising the contribution that minerals development can bring to local communities, the economy and the natural and historic environment.

Waste will be managed in a sustainable way, in accordance with the waste hierarchy. The Authorities will work in collaboration with others to ensure the best environmental solutions to waste management are delivered.

The Plan will also ensure that the full extent of social, economic and environmental benefits of minerals and waste development are captured, contributing to Central and Eastern Berkshire's economic activity and enhancing the quality of life and living standards within the area. These benefits will be achieved, whilst minimising impacts on the natural and historic environment and positively contributing to climate change adaptation and mitigation.

Strategic Plan Objectives

3.6 The purpose of the strategic objectives are to assist in the delivery of the Spatial Vision and provides the context and overall direction of the Plan. The Strategic Plan Objectives are to:

- 1) Strike a balance between the demand for mineral resources, waste treatment and disposal facilities and the need to protect the quality of life for communities, the economy and the improving and enhancing the quality and diversity of environmental assets, by protecting the natural and historic environment and local communities from negative impacts;
- 2) Protect community health, safety and amenity in particular by managing traffic impacts, minimising the risk from flooding and reduction in water quality, ensuring sustainable, high quality and sensitive design and layout, sustainable construction methods, good working practices and imposing adequate separation of minerals and waste development from residents by providing appropriate screening and/or landscaping and other environmental protection measures;
- 3) Ensure minerals and waste development makes a positive contribution to the local and wider environment, and biodiversity, through the protection and creation of high quality, resilient habitats and ecological networks and landscapes that provide opportunities for enhanced biodiversity and geodiversity and contribute to the high quality of life for present and future generations;
- 4) Help mitigate the causes of, and adapt to, climate change by; positive design of development; developing appropriate restoration of mineral workings; prioritising movement of waste up the waste hierarchy; reducing the reliance on landfill; maximising opportunities for the re-use and recycling of waste; and facilitating new technologies to maximise the renewable energy potential of waste as a resource;

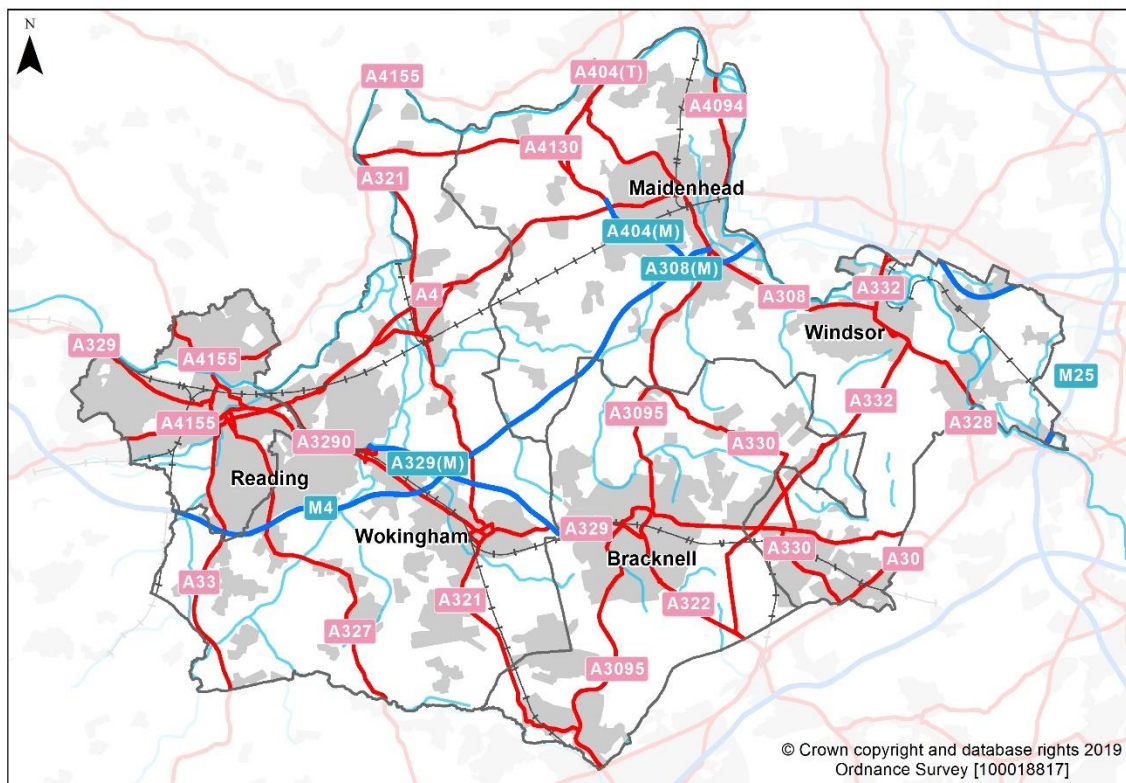
- 5) Encourage engagement between developers, site operators and communities so there is an understanding of respective needs.
- 6) Ensure the restoration of mineral sites is suitably addressed at the beginning of the proposal to enable progressive restoration in order to maximise environmental gains and benefits to the quality of life of local communities through appropriate after uses that reflect local circumstance and landscape linkages;
- 7) Support continued economic growth in Central and Eastern Berkshire, as well as neighbouring economies by helping to deliver a steady and adequate supply of environmentally acceptable primary minerals and mineral-related products to enable new development and key infrastructure projects locally through safeguarding mineral resources and allocating key sites;
- 8) Protect key mineral resources from the unnecessary sterilisation by other forms of development, and safeguarding existing minerals and waste infrastructure, to ensure a steady and adequate supply of minerals and provision of waste management facilities in the future;
- 9) Safeguard facilities for the movement of minerals and waste by rail and encouraging the use of other non-road modes where these are available and more sustainable;
- 10) Ensure sufficient primary aggregate is supplied to the construction industry from appropriately located and environmentally acceptable sources achieving a net reduction in 'mineral miles'.
- 11) Enable the production and encourage use of good quality secondary and recycled aggregates, having regard to the principles of sustainable development;
- 12) Drive waste treatment higher up the waste hierarchy and specifically to increase the re-use, recycling and recovery of materials, whilst minimising the quantities of residual waste requiring final disposal;
- 13) Encourage a zero waste economy whereby landfill is virtually eliminated (excluding inert materials) by providing for increased recycling and waste recovery facilities including energy recovery; and
- 14) Achieve a net reduction in 'waste miles' by delivering adequate capacity for managing waste as near as possible to where it is produced.

Spatial Strategy

- 3.7 The Central & Eastern Berkshire Authorities have, and will continue to, work collaboratively with other bodies and partners³¹. This will ensure that strategic priorities across local boundaries are, and will continue to be, properly coordinated and clearly reflected in this Plan, any subsequent review of this Plan, and other individual Local Plans.
- 3.8 The spatial context in which this Plan is set is outlined in the Key Diagram (see Section 4). This includes the existing minerals and waste sites that are already contributing to mineral supply and waste management within the Plan area. The existing movements of minerals and waste (both imports and exports) are shown which highlights the strategic nature of these requirements. In addition, an Area of Search is outlined which demonstrates the potential locations for future sand and gravel proposals.
- 3.9 The Vision, Objectives and Spatial Strategy are delivered by the policies in this Plan. As the Plan is a joint plan between four different authorities, and the policies make provision for minerals, waste, conservation, and climate change mitigation and adaptation, all the policies are considered strategic.
- 3.10 Central and Eastern Berkshire is characterised by both its urban and rural nature, with the key towns of Reading, Wokingham, Bracknell, Windsor and Maidenhead, alongside large areas of countryside with smaller settlements and villages. It is also crisscrossed by significant transport corridor routes in the form of the M4, A33, A404, A329(M), A322 and the Great Western Mainline rail route from Bristol Temple Meads to London Paddington, the Windsor Lines and the Waterloo-Reading line (see Figure 4). The Plan area is also characterised by its extensive network of water courses including rivers which are used by leisure users but could provide opportunities for more sustainable transportation of materials.

³¹ Duty to Cooperate Statement (July 2020) – www.hants.gov.uk/berksconsult

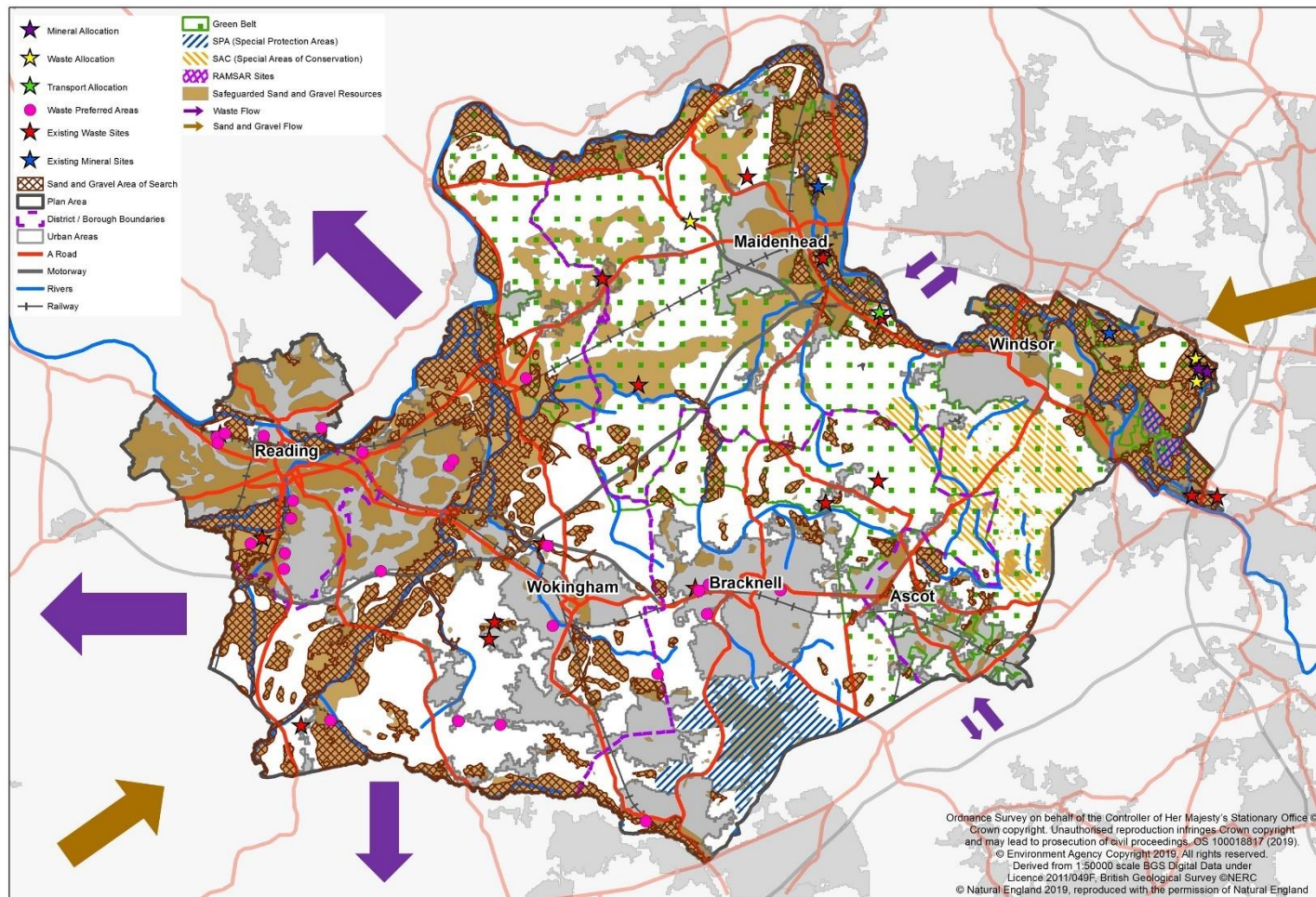
Figure 2: Strategic Transport Routes in Central and Eastern Berkshire



- 3.11 This transport network forms a vital building block in the area's buoyant economy; that unites local authority areas and will be a key element of the strategic spatial approach.
- 3.12 Central and Eastern Berkshire is located at the heart of the economic powerhouse of the United Kingdom. It is within the Thames Valley Berkshire Local Enterprise Partnership (LEP), prominent within the South East and is adjacent to London. As a result, and in line with the Thames Valley LEP Strategic Economic Plan, the wider Thames Valley will be subject to major growth pressures on a local and national level throughout the Plan period. Future growth requirements will play a key role in forming the spatial strategy for Central and Eastern Berkshire, as well as the wider Thames Valley region.
- 3.13 The area's importance is highlighted by its relatively close proximity to several major infrastructure projects including the M4 Junctions 3 to 12 Smart Motorway and Southampton to London Pipeline Nationally Significant Infrastructure Projects; the High Speed 2 rail link from London to the North; the proposed Heathrow airport expansion and Crossrail. These projects significantly increase the regional and national demand for construction aggregates, as well as for construction waste treatment and recycling.

- 3.14 The unitary authorities of Bracknell Forest, Windsor and Maidenhead, and Wokingham are also characterised by a considerable area of Green Belt, which covers large areas of these authorities outside of the existing built up area. The Plan area also benefits from a rich natural and historic environment with prominent features such as Windsor Castle and Great Park.
- 3.15 In addition, a steady, adequate supply of aggregate will be required to support the drive for increased housebuilding in the area as well as supporting infrastructure such as roads, schools, and commercial premises. These future projects will also impact future waste management requirements through increased numbers of households and businesses as well as the associated production of construction wastes.
- 3.16 The Spatial Strategy, in delivering the Vision and Objectives of the Plan, is based on a number of principles. These principles form the basis of sustainable development, and the delivery aspect of the Plan, such as site allocations, must adhere to these principles:
- i. Respond to the needs of communities and the economy by taking decisions that account for future generations, whilst enhancing the quality of life, health and wellbeing and living conditions of today's residents;
 - ii. Promote the sustainable management of mineral resources;
 - iii. Ensure the efficient use of materials and promote the sustainable use and disposal of resources, particularly recycled and secondary aggregates, while mitigating and adapting to climate change;
 - iv. Protect the environment and the character of localities by maintaining/improving the natural and historic environment of the area, mitigating the effect of new development on the environment;
 - v. Maintain the distinct and separate identity of the area's settlements;
 - vi. Maintain and enhance supporting infrastructure, including roads and railways;
 - vii. Deliver minerals and waste infrastructure in locations that are appropriate and meet the needs of the community;
 - viii. Limit minerals and waste development in those areas at most risk of flooding and pollution, making the development safe through mitigation without increasing flood risk elsewhere if necessary;
 - ix. Protect important areas for biodiversity, landscape and heritage from unacceptable forms of development;
 - x. Ensure development is of high-quality design which is in keeping with the area; and
 - xi. Take account of the public's views following consultation and engagement in the context of national planning policies.

4. Key Diagram



5. Development Management Policies

- 5.1 The following Development Management (DM) policies address a range of subjects relevant to minerals and waste developments in Central and Eastern Berkshire. Together with the minerals (M) and waste (W) policies, they form a robust framework for the determination of minerals and waste applications. These policies should also be considered in the context of the wider Development Plan³² where the proposal is situated. All policies include an explanation of the existing situation, supporting text regarding the policy and details on how the policy would be implemented and monitored.
- 5.2 It is important that all minerals and waste developments are designed to minimise the impact upon the environment and local communities within Central and Eastern Berkshire.

³² The Development Plan includes the Local Plan for the relevant area.

Sustainable Development

- 5.3 The National Planning Policy Framework (NPPF) requires local plans to support the presumption in favour of sustainable development. Accordingly, any development that conforms to the policies in this Plan is deemed sustainable and should be progressed without delay by the relevant planning authority.

Policy DM1

Sustainable Development

1. The Central & Eastern Berkshire Authorities will take a positive approach to minerals and waste development that reflects the presumption in favour of sustainable development contained within the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance. The authorities will seek to work proactively with applicants to find solutions to secure development that improves the economic, social and environmental conditions of the Plan area.
2. The policies in this Plan are to be regarded as a whole and proposals will be expected to conform to all relevant policies in the Plan.
3. Minerals and waste development that conforms with all the relevant policies in this Plan will be approved, unless material considerations indicate otherwise.

Implementation

- 5.4 Development management will be the main, but not the only, means by which the Plan will deliver sustainable minerals and waste development in Central and Eastern Berkshire. The Plan is largely delivered through the determination of minerals and waste planning applications and through the implementation of policies in this Plan. The approach will be focused on problem solving and seeking quality outcomes. Accordingly, when dealing with applications, the relevant planning authority will:
- Make timely decisions within the required timeframes;
 - Promote pre-application discussions between minerals and waste developers, the determining authority, statutory consultees and other consultees, as appropriate;
 - Ensure appropriate and proportionate information is submitted;
 - Request that statutory consultees provide timely advice;
 - Give due weight to this Plan in the context of the overall Development Plan when making decisions on minerals and waste development;
 - Impose appropriate controls on development through conditions;

- Monitor all minerals and waste development proportionate to its potential risk and take appropriate compliance measures, including enforcement action when unauthorised development takes place; and,
- Encourage community engagement on minerals and waste development proposals, as appropriate, to ensure the community can examine development proposals and engage with interested parties. Community engagement is relevant to minerals and waste development at all stages of the planning process, including pre-application and post submission, as well as during development monitoring.

- 5.5 Minerals and waste developments are often able to provide economic and social improvements by contributing to the economy and providing job opportunities, but the specific contribution of each proposal will need to be assessed. Environmental improvements will be assessed by considering whether the development provides environmental net gain. It will be expected that minerals and waste developments provide environmental net gain, taking account of the mitigation hierarchy. The NPPF removes the presumption in favour of sustainable development where a plan or project is likely to have a significant effect on a European protected site or Ramsar site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the site.
- 5.6 In making any planning decision the relevant authority will have to make a judgement as to the weight they give to the various elements of the Development Plan including the Joint Minerals and Waste Plan as well as other material considerations and conclude whether on the balance of evidence a development is sustainable and if it should be granted planning permission. This is particularly the case where a proposal does not conform with one or more policies in the Plan and there will need to justify doing so.
- 5.7 The effectiveness of the Joint Minerals & Waste Plan will be monitored against the relevant indicators and reported annually. The Plan will be reviewed within five years of adoption to determine whether an update of the Plan will be required.

Monitoring

5.8 Monitoring Indicators

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Planning performance	60% of planning applications decided within 13 weeks (excluding those subject to an Environmental Impact Assessment (EIA) or a Planning Performance Agreement or other agreed extension of time).	Percentage of applications < 60%. Breach over 3 successive years.
Plan conformity	Permissions not in accordance with the Plan.	Number of permissions not in accordance with the Plan > 0

Climate Change – Mitigation and Adaptation

- 5.9 The urgency required to tackle climate change has been recognised by the Central & Eastern Berkshire Authorities through their declaration of a climate emergency³³ and/or the preparation of challenging Action Plans to reduce carbon emissions³⁴.
- 5.10 It is a national planning objective that planning plays a key role in helping to shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and improving resilience; encouraging the reuse of existing resources, including the conversion of existing buildings; and supporting the delivery of renewable and low carbon energy and associated infrastructure³⁵.
- 5.11 National planning policy also states that 'local planning authorities should adopt proactive strategies to mitigate and adapt to climate change'³⁶. This should include taking account of the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes as well as the risk of overheating from rising temperatures³⁷.

Policy DM2

Climate Change – Mitigation and Adaptation

1. Minerals and waste development will be supported that:
 - a. contributes towards mitigating the causes of climate change by:
 - i. Being located and designed to encourage the sustainable use of resources; and
 - ii. Helping to reduce greenhouse gas emissions; and/or
 - iii. Facilitating low carbon technologies; and
 - b. reduces vulnerability and provides resilience to the impacts of climate change through location and design and the incorporation of adaptation measures.
2. Minerals and waste development proposals will be supported by a Climate Change Assessment which demonstrates how these opportunities have been considered, and where possible, incorporated.

³³ Declarations of Climate Change Emergencies: Reading BC – 26 Feb 2019, RBWM – 26 June 2019 and Wokingham BC – 18 July 2019.

³⁴ Bracknell Forest commitment to update Climate Change Action Plan – 17 July 2019

³⁵ National Planning Policy Framework (Para. 148):

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

³⁶ National Planning Policy Framework (Para. 149)

³⁷ National Planning Policy Framework (Para. 149)

Implementation

5.10 Minerals and waste development can provide opportunities to mitigate and adapt to the effects of climate change, including:

- Reduction in greenhouse gas emissions through diverting biodegradable waste from landfill;
- Generation of renewable energy from energy recovery facilities;
- More sustainable use of resources through the use of recycled and secondary aggregates in construction;
- Appropriate restoration of quarries and landfill sites;
- Supplying aggregates for use in flood defences;
- opportunities for increasing floodplain storage when sites are restored; and,
- The location of development adjacent to local markets which may provide opportunities to reduce emissions from or created by transport.

5.11 In this instance resilience means capacity for the environment to respond to such changes by resisting damage caused by climate change and, where damage does occur, recovering quickly. This can be achieved by maintaining a robust and varied network of natural environments which will allow natural processes to change and adapt.

5.12 The Climate Change Assessment should include how the development proposal encourages the wider sustainable use of resources and how the development itself makes efficient use of resources (e.g. through sustainable construction techniques, the use of renewable energy and design that minimises resource and energy use).

5.13 The Climate Change Assessment must also outline:

- the current carbon baseline at the site;
- the method for measuring carbon emissions associated with the development for the total life of the proposal (including restoration); and
- a commitment to supply the data to the relevant Authority for reporting in the Authority Monitoring Report.

5.14 The following policies support the mitigation and adaptation of Climate Change and will need to be taken into account as part of the Climate Change Assessment:

- Policy DM8: Restoration of Minerals and Waste Developments;
- Policy DM9: Protecting Public Health, Safety and Amenity;
- Policy DM10: Flood Risk;
- Policy DM11: Sustainable Transport Movements; and

- Policy DM12: High Quality Design of Minerals and Waste Development.

Monitoring

5.15 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Climate change.	<p>Planning permissions granted which do not:</p> <ul style="list-style-type: none"> • divert waste from landfill; • generate renewable energy; or • use recycled or secondary aggregate; or • provide resilient restoration schemes; or • provide for flood defence or water storage; or • include measures to support and promote sustainable transport. <p>Carbon emission monitoring data for minerals and waste development.</p>	<p>Number of permissions > 0</p> <p>A total increase in carbon emissions from baseline levels reported from minerals and waste developments, subject to monitoring requirements, over 5-year period.</p>

5.16 The Plan seeks to reduce emissions as required by the Climate Change Act 2008, but it is not possible to monitor the effectiveness of this on existing minerals and waste operations until baseline and monitoring data is available.

Protection of Habitats and Species

- 5.17 Central and Eastern Berkshire supports a wide range of landscapes and habitats that play an important role in supporting a variety of flora and fauna, including internationally and nationally important wildlife areas, and rare and declining species. These habitats and their associated species form a vital component of the area's natural capital from which communities derive significant benefit.
- 5.18 The Central & Eastern Berkshire Authorities will provide net gain for biodiversity as a result of development and will give regard to the implications of climate change to ensure that habitats are sufficiently protected and enhanced to support resilience to such changes, such as the creation of coherent ecological networks. Net gain will be measured using appropriate metrics such as Defra's proposed biodiversity metric³⁸.
- 5.19 National planning policy protects biodiversity overall, as well as important habitats and species, requiring local authorities to 'distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value' and 'take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries'³⁹.
- 5.20 The Environment Act⁴⁰ requires that development achieves at least a 10% net gain in value for biodiversity and that developers must submit a 'biodiversity gain plan' with a planning application. Furthermore, the Act requires that Local Nature Recovery Strategies (LNRS) to be prepared by locally appointed 'responsible authorities'⁴¹ to guide delivery of biodiversity net gain and other nature recovery measures by helping developers and planning authorities avoid the most valuable existing habitat and focus habitat creation or improvement where it will achieve the greatest benefit.
- 5.21 Bracknell Forest and Windsor & Maidenhead both have sites of international importance including Thames Basin Heaths Special Protection Area (SPA), Chiltern Beechwoods Special Area of Conservation (SAC), South West London Waterbodies SPA and Ramsar as well as the Windsor Forest and Great Park SAC which crosses both authorities. Further internationally important sites are within 10km of the plan boundaries.

³⁸ Net Gain consultation proposals (Defra, December 2018) - https://consult.defra.gov.uk/land-use/net-gain/supporting_documents/netgainconsultationdocument.pdf

³⁹ National Planning Policy Framework 2019 (Para. 171)

⁴⁰ Environment Bill currently going through Parliament

⁴¹ LNRS area boundaries and 'responsible authorities' are yet to be determined by the Secretary of State

5.22 There are a number of nationally important Sites of Special Scientific Interest (SSSI) across the Plan area and all European Protected sites are also designated SSSI. Locally important sites, such as Local Wildlife Sites, are also designated in recognition of their significance at the local level but do not normally carry the same level of protection as internationally or nationally designated sites.

5.23 Central and Eastern Berkshire's network of green infrastructure includes an important and extensive network of wildlife rich water courses, including rivers and streams and their corridors ('blue infrastructure'). This component of the area's natural capital provides important linear features and ecological linkages that support the migration of important species.

Policy DM3

Protection of Habitats and Species

1. Minerals and waste development that will contribute to the conservation, restoration and enhancement of biodiversity through the securing of at least 10% measurable net gain in biodiversity value will be permitted.
2. Development that is likely to result in a significant effect, either alone or in combination, on internationally designated sites including Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations.
3. The following sites, habitats and species will be protected and enhanced in accordance with the level of their relative importance:
 - a) Nationally designated sites including Sites of Special Scientific Interest and National Nature Reserves, and nationally protected species;
 - b) Irreplaceable habitats (such as ancient woodland and ancient or veteran trees).
 - c) Locally designated sites including Local Wildlife Sites, and Local Nature Reserves;
 - d) Habitats and species of principal importance;
 - e) Priority habitats and species listed in the national and local Biodiversity Action Plans;
 - f) Trees, woodlands, and hedgerows; and
 - g) Features of the landscape that function as 'stepping stones' or form part of a wider network of features by virtue of a coherent ecological structure or function, or importance in the migration, dispersal and genetic exchange of wild species.
4. Development likely to result in the loss, harm or deterioration of the above sites, habitats and species will only be permitted where it can be demonstrated:
 - a. For Sites of Special Scientific Interest that the benefits of the development clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of such sites;
 - b. For irreplaceable habitats that there are wholly exceptional reasons for the development and a suitable compensation strategy exists;
 - c. For those listed in c – g of paragraph 3, in proportion to their relative importance (alone or as part of a wider network), where loss, harm or deterioration to biodiversity cannot be avoided through locating on an alternative site with less harmful impacts, adequate mitigation, or, as a last resort, compensation is provided.

Implementation

- 5.21 Internationally protected sites will be given the statutory protection set out in the Conservation of Habitats and Species Regulations 2017, and development that is likely to result in a significant effect, either alone or in combination, will need to satisfy the requirements of the Regulations through project level assessments; proposals likely to result in adverse effects, after avoidance and mitigation measures have been accounted for, will not be permitted.
- 5.22 Development which is likely to have an adverse impact upon European Protected Species can only be permitted where it is judged to have no satisfactory alternative, there are strong overriding reasons of public interest, and that the conservation status of species can be maintained.
- 5.23 With regards to internationally and nationally designated sites, the Central & Eastern Berkshire Authorities have a duty to take reasonable steps to further the conservation and enhancement of the features for which sites are designated. The presence of such a site within proximity to a minerals or waste proposal may constrain the type and scale of development where the designated features of interest may be impacted.
- 5.24 National planning policy is clear that development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed “clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest”⁴².
- 5.25 Similarly, national planning policy requires that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) be refused, unless there are “wholly exceptional reasons”⁴³ and a suitable compensation strategy exists”⁴⁴.
- 5.26 Central and Eastern Berkshire also contains other important sites, habitats and species which are also critical in maintaining a high level of biodiversity. These sites, habitats and species form networks that support a robust and healthy natural environment that is resilient to change. The Central & Eastern Berkshire

⁴² National Planning Policy Framework (NPPF) 2019 (Para 175(b)).

⁴³ For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.

⁴⁴ National Planning Policy Framework (NPPF) 2019 (Para 175(c))

Authorities will encourage positive management of such habitats and the species they support, particularly where development proposals would extend or create links between existing habitats, create or restore priority habitats and support Biodiversity Action Plan or Biodiversity Opportunity Area targets.

- 5.27 Features of the landscape that function as ‘stepping stones’ (such as ponds, small woods and meadows) and features that by virtue of their linear and continuous structure (such as rivers and their corridors, vegetated field boundaries and other green infrastructure linkages) are essential for the migration, dispersal and genetic exchange of wild species. The ecological importance of such features should be identified at the preliminary ecological assessment stage for minerals and waste development and such features protected and enhanced.
- 5.28 Rivers and their corridors are important environmental assets, particularly for the conservation and enhancement of biodiversity and for the promotion of strong and resilient ecosystems. These assets require protection and enhancement. As such, minerals and waste development close to waterbodies must maintain and, where feasible, enhance their ecological status.
- 5.29 In a small number of instances, minerals and waste development may result in significant impacts on habitats and species which cannot be avoided or adequately mitigated. In these instances, the provision of new compensatory habitat areas will be required to ensure that there is overall biodiversity net gain. If significant harm cannot be avoided, mitigated, or adequately compensated for, planning permission may be refused if the need for the development does not clearly outweigh the biodiversity interests at the site.
- 5.30 In the case of a demonstrable overriding need for the development, any impacts must be mitigated or compensated for in order to provide a net gain or improvement in condition. Such measures should be located either within or close to the proposed development.
- 5.31 As the proposed net gain biodiversity metric is developed, the Central & Eastern Berkshire Authorities will take a consistent approach to its application in ensuring biodiversity net gain through minerals and waste development and in monitoring the performance of this policy.

Monitoring

5.32 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Impact on habitat and species.	Planning permissions granted which impact on European designations or Sites of Special Scientific Interest (SSSIs) against Natural England advice.	Number of planning permissions granted which impact on European designations or Sites of Special Scientific Interest (SSSIs) against Natural England advice > 0
	Condition and/or changes in biodiversity of SSSIs and Local Wildlife Sites (LWSs) within 5km of operational minerals and waste sites.	Decline in condition of SSSI or LWS over 5-year period.
	Planning permissions granted for which a measurable net biodiversity gain is not agreed.	The number of planning permissions granted for which a measurable net biodiversity gain is not agreed > 0.

Protection of Designated Landscape

- 5.33 Central and Eastern Berkshire contains a diverse range of landscapes. National planning policy requires that ‘great weight is given to conserving landscape and scenic beauty in National Parks and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues’⁴⁵.
- 5.34 Although Central and Eastern Berkshire does not include any landscape designations, the North Wessex Downs Area of Outstanding Natural Beauty (AONB) and Chilterns AONB border the northern limit of the administrative area. These designations, including their setting, need to be fully taken into account when considering minerals and waste developments.
- 5.35 Although it does not have a defined geographical boundary, the setting of an AONB is the area within which development and land management proposals, by virtue of their nature, size, scale, siting, materials or design could be considered to have an impact, either positive or negative, on the natural beauty of the AONB.

Policy DM4

Protection of Designated Landscape

1. Development which affects the setting of an Area of Outstanding Natural Beauty (AONB) will be accompanied by a Landscape and Visual Impact Assessment that demonstrates that there is no detrimental impact on the natural beauty of the North Wessex Downs or Chilterns AONBs in terms of scale, design, layout or location, that cannot be effectively mitigated.

Implementation

- 5.36 Minerals can only be worked where they are found. Minerals development in areas of landscape importance and sensitivity should be rigorously examined and should only take place when there are exceptional reasons and the need for the development outweighs any negative impact. Proposals should be assessed against the criteria for ‘valued landscapes’ as set out in relevant guidance⁴⁶.
- 5.37 Minerals and waste developments are considered to be development that, by reason of its scale, character or nature, has the potential to have a significant adverse impact on the natural beauty, distinctive character, and remote and

⁴⁵ National Planning Policy Framework (Para. 172) - <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁴⁶ Guidance for Landscape and Visual Impact Assessment (3rd Edition) (Para. 5.29, Box 5.1).

tranquil nature of the AONBs and local landscapes. The potential for significant impacts on the AONBs will be dependent on the individual characteristics of each case.

- 5.38 Although the North Wessex Downs and Chilterns AONBs border Central and Eastern Berkshire, minerals and waste development within the setting of these protected landscapes could have indirect impacts within the AONBs, by for example impacting on tranquillity from increased lorry movements.

Monitoring

5.39 Monitoring Indicators:

Monitoring Issues	Monitoring Indicator	(Threshold) for Policy Review
Impact on the setting of AONBs.	Planning permissions granted in the setting of an AONB against Natural England advice.	Number of planning permissions granted in the setting of an AONB against Natural England advice > 0

Protection of the Countryside

- 5.40 Landscapes outside designated areas and sites are highly valued and it is important to respect their special qualities. Minerals and waste developments, even though they may be temporary, can have a negative landscape and visual impact on residents, visitors, users of publicly accessible land, rights of way and roads.
- 5.41 In general, most mineral developments are tied to countryside locations as this is where the most unsterilized viable mineral deposits are available. Other activities essential for supplying minerals are therefore often located in the countryside including mineral processing or aggregate recycling.
- 5.42 Some waste uses, such as large-scale facilities requiring an open site are difficult to accommodate in urban areas. Waste uses not requiring a more isolated location and minerals developments that are not specifically linked to the natural occurrence of a mineral, should be located in urban areas. However, this is not always feasible on amenity grounds.
- 5.43 Appropriately managed minerals and waste development is important to support employment and provision of services in rural areas.

Policy DM5

Protection of the Countryside

1. Minerals and waste development in the open countryside will only be permitted where:
 - a. It is a time-limited mineral extraction or related development; or
 - b. The development provides a suitable reuse of previously developed land; or
 - c. The development is within redundant farm or forestry buildings and their curtilages or hard standings.
2. Where appropriate and applicable, development in the countryside will be expected to meet the highest standards of design, operation and restoration including being subject to a requirement that it is restored in the event it is no longer required for minerals and waste use. In particular, the network of statutory and permissive countryside access routes should be protected, and where possible, enhanced.

Implementation

- 5.44 The 'countryside' (not covered by other designations such as Green Belt) within the Plan area is defined by the settlement boundaries and development limits as set out in the Central & Eastern Berkshire Authorities' Local Plans.
- 5.45 Where minerals or waste developments are located close to or would directly impact a statutory public right of way footpath network, measures should be put in place to protect or divert the route (for a temporary or permanent period, as appropriate). This includes adopted public footpaths, bridleways and cycle routes. Minerals and waste development may also provide benefits for rural communities such as opportunities for enhanced public access and recreation, especially as part of the restoration of minerals or waste developments.
- 5.46 Where they are located close to, or would directly impact on a permissive footpath, the use of this route for public access would be considered as part of any planning application. Permissive footpaths do not carry the same weight as adopted public rights of way.
- 5.47 Minerals and waste proposals proposed in the countryside that cannot be accommodated by Policy DM5 would be considered as a departure from the Plan. Exceptional developments will need to demonstrate how impacts on the countryside will be minimised and the level of net environmental gain provided.
- 5.48 High quality design is outlined in Policy DM12 and the requirements for restoration are provided in DM8.

Monitoring

- 5.49 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Impact on the countryside	Planning permissions granted in the countryside contrary to policy.	Number of planning permissions granted in the countryside contrary to policy > 0.

Green Belt

- 5.50 The eastern part of the Plan area is situated within the Metropolitan Green Belt around London (see Key Diagram). The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence⁴⁷.
- 5.51 Proposals for minerals and waste development within the Green Belt will be considered in light of their potential impacts and the National Planning Policy Framework.
- 5.52 There is a presumption against inappropriate development within the Green Belt. Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances⁴⁸.

Policy DM6 Green Belt

1. Proposals for minerals and waste development within the Metropolitan Green Belt will be carefully assessed for their effect on the objectives and purposes for which the designation has been made. High priority will be given to preservation of the openness of the Green Belt.
2. Where the proposals do not conflict with the preservation of the openness of the Green Belt, waste management facilities, including aggregate recycling facilities will be permitted where it can be demonstrated:
 - that the site is the most suitable location in relation to arisings and recycle markets;
 - there are no appropriate sites outside the Green Belt that could fulfil the same role; and
 - that suitable mitigation is provided to ensure the development would not cause harm to the objectives and purposes of the Green Belt.

Implementation

- 5.53 When considering any planning application, the planning authority will ensure that substantial weight is given to protection of the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by

⁴⁷ National Planning Policy Framework (Para. 133) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁴⁸ National Planning Policy Framework (Para. 143)

reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

- 5.54 When considering waste management proposals, the following factors may combine to produce very special circumstances, allowing development within the Green Belt: a lack of suitable alternative sites within the Plan area outside the Green Belt; the need to locate facilities close to sources of waste to serve a local catchment; and the wider social and environmental benefits associated with sustainable waste management.
- 5.55 National planning policy⁴⁹ states that minerals extraction, engineering operations and the re-use of buildings provided that the buildings are of permanent and substantial construction are not inappropriate development in the Green Belt provided that they preserve the openness of the Green Belt and proposals do not conflict with the purpose of including land in the Green Belt.
- 5.56 A processing plant, although commonly associated with mineral extraction, is unlikely to preserve openness, owing to its size, height and industrial appearance and would therefore be inappropriate development.
- 5.57 Elements of many renewable energy projects will also comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources. Sequential testing to show that other suitable sites are not available will also be required.
- 5.58 The Central & Eastern Berkshire Authorities will plan positively to enhance the beneficial use of the Green Belt, by retaining and enhancing landscapes, visual amenity and biodiversity, by improving damaged and derelict land, and seeking opportunities to increase access or provide for outdoor sport and recreation.
- 5.59 The disposal of inert waste can play a part in the restoration of mineral workings and may therefore be acceptable in the Green Belt as in other areas, and subject to policies to encourage the recycling of materials as part of a sustainability strategy. Site restoration may also provide opportunities to enhance beneficial use of the Green Belt. The development of permanent waste management facilities will be judged on the locational needs of the development and the impact on the area, landscape, biodiversity and other issues. This, together with the wider environmental and economic benefits of

⁴⁹ National Planning Policy Framework (Para. 146) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

sustainable waste management are material considerations that should be given significant weight in determining whether proposals for waste management facilities on Green Belt land should be given planning permission.

Monitoring

5.60 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Impact on the Green Belt.	Planning permissions granted in the Green Belt without Very Special Circumstances.	Number of planning permissions granted in the Green Belt without Very Special Circumstances > 0

Conserving the Historic Environment

- 5.61 Minerals and waste development can play a positive role in protecting heritage assets and their settings, but it is also recognised that many developments can have an adverse impact, whether damaging or in the case of extraction on archaeology, more fully destructive. Where the public benefits of development outweigh the significance of the heritage assets archaeological recording can mitigate the effect by making the results of archaeological excavation and study available, through the Historic Environmental Record and other public arenas, where appropriate, as a public good.
- 5.62 The historic environment covers 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 as well as landscaped and planted or managed flora.
- 5.63 National planning policy identifies the conservation of such heritage assets as one of the core land-use planning principles that underpin both plan-making and decision-taking; it states that heritage assets should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life by today's and future generations⁵⁰.

⁵⁰ National Planning Policy Framework (Para. 184) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Policy DM7

Conserving the Historic Environment

1. Proposals for minerals and waste developments will be required to protect, conserve and where possible enhance the historic environment, and the character, setting and special interest of heritage assets, whether designated or undesignated.
2. Harm will only be allowed where the public benefit of development clearly and convincingly outweighs the significance of the heritage assets, and where the development cannot be delivered in a way that does not cause harm.
3. Any planning application should be supported by an assessment of the significance of heritage assets, both present and predicted, and the impact of development on them. Where appropriate, this should be informed by the results of technical studies and field evaluation to establish the potential for archaeological remains within the overburden and the mineral body itself.
4. When the public benefits of development outweigh the significance of the heritage assets and harm to or loss to heritage assets would unavoidably occur mitigation of that harm, including archaeological work ahead or during development should be secured (including depositing the results in a public archive).

Implementation

- 5.64 Any decision on planning applications for minerals and waste development should be informed by an assessment, proportionate to the circumstances, of the significance of heritage assets and the historic environment and the potential effects of the proposed development upon heritage significance, which will be submitted with the planning application. This will include, where necessary, technical studies (such as desk-based assessment, Palaeolithic assessment, geoarchaeological deposit models, condition assessments and water environment studies), and field surveys (such as boreholes, test pits and geophysics) intended to establish archaeological potential within both the mineral body and the overburden.
- 5.65 Where there is the potential for as yet unrecorded archaeological remains of such significance as to represent a constraint to development, the submission of pre-determination archaeological evaluation, may be required.

- 5.66 Heritage assets or the potential for previously unidentified archaeological deposits and features may be identified in proposed minerals and waste sites. Therefore, further archaeological investigations or other mitigation, may be required prior to or during development and secured by planning permission or via condition.
- 5.67 Mitigation measures should include archaeological recording during and prior to development, and changes to the development to ensure the preservation, provision within post extraction restoration, screening, and protection of retained heritage assets.
- 5.68 The suitability of all proposals will be assessed, having particular regard to proposed conservation and mitigation measures, and the potential benefits of mineral development on archaeology. This may include enhancing the historic assets or their setting, and the management of the site.
- 5.69 Heritage assets of the highest significance, such as a site of national importance should be preserved as part of the development. Additional site investigations or evaluation may be required prior to the determination of an application and may justify amendments to a permitted scheme during the application process.

Monitoring

5.70 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Impact on Historic Environment	Planning permissions contrary to Historic England advice.	Number of planning permissions contrary to Historic England advice > 0
	Planning permissions granted against Conservation/Heritage Officer advice.	Number of planning permissions granted against Conservation/Heritage Officer advice > 0

Restoration of Minerals and Waste Developments

- 5.71 Effective restoration and long-term aftercare of minerals and waste development is integral to all mineral extraction and landfill development in Central and Eastern Berkshire. Extracting minerals and landfilling are long-term land uses, but they are only temporary developments. It is critical that restoration and aftercare of the site is carefully planned and maintained to ensure that local communities and the environment receive maximum benefit after the development has been completed.
- 5.72 Once mineral extraction and landfilling has been completed, a site may be returned to the former land use or to a number of different 'after-uses'. The restoration of minerals and waste sites will usually involve the removal of buildings, plant and equipment used for winning or processing the materials and may also include the decontamination of land prior to restoration, depending on the type of development.
- 5.73 The nature of restoration activity depends on the choice of after-use, which is influenced by a variety of factors including:
- the aspirations of the landowner(s) and the local community;
 - the present characteristics of the site and its environs;
 - area strategies (such as biodiversity priorities, green and blue infrastructure strategies, river basin management plans and any landscape planning guidance);
 - the nature, scale and duration of the proposed development; and
 - the availability and quality of soil resources.
- 5.74 Restoration, aftercare and after-use will usually seek to assure that the land is restored to a level of quality at least equivalent to that which it was prior to development commencing. Restoration schemes should provide for:
- Net environmental gain through the enhancement of the quality and character of the landscape, local environment or the setting of historic assets to the benefit of the local or wider community; and
 - Measures to achieve biodiversity net gain in line with national planning policy, whatever the proposed after-use of the site.

Policy DM8

Restoration of Minerals and Waste Developments

1. Planning permission for minerals extraction and temporary waste management development will be granted only where satisfactory provision has been made for high standards of restoration and aftercare such that the intended after-use of the site is achieved in a timely manner, including where necessary for its long-term management.
2. The restoration of minerals and waste developments should reinforce or enhance the quality and character of the local area and should contribute to the delivery of local objectives for biodiversity, landscape character, historic environment or community use where these are consistent with the Development Plan and national policies and guidance.
3. The restoration of mineral extraction and landfill sites should be phased throughout the life of the development.

Implementation

5.75 The Central & Eastern Berkshire Authorities will continue to ensure that all mineral extraction, and landfill sites are restored to high quality beneficial after-uses which are in keeping with the local area's biodiversity, landscape and community use. This includes the provision of biodiversity net gain as set out in Policy DM3: Protection of Habitats and Species.

5.76 Consideration needs to be given to the following factors:

- Type, quality and value of the land prior to extraction (for example, agricultural land);
- Presence of important habitats and species prior to development on site and in the local environment;
- Local ecological networks including green/blue corridors;
- Existing hydrological regime;
- Underlying geology;
- Local topography and landscape character/setting;
- Presence of important archaeological features and historic context;
- Proximity of urban areas and aerodromes;
- Compatibility with surrounding land uses;
- Availability of fill material;
- Planning policy framework and guidance;
- Landowner / site operator aspirations;
- Views of local community and other stakeholders;

- Transport issues;
- Public safety;
- Long-term management considerations; and
- Financial considerations.

5.77 Consideration must be given to the material used in restoration schemes and where appropriate, ensure that there is no impact on controlled waters.

5.78 For the initial years following restoration (usually a 5-year period but this may be extended⁵¹) site aftercare measures are required to ensure that the reinstatement of soils and the planting or seeding carried out to meet restoration requirements are managed so that a site is returned to its intended after-use in a timely manner.

5.79 These measures involve improving the structure, stability and nutrient value of soils, ensuring adequate drainage is available and securing the establishment and management of the grass sward, crop or planting areas, together with any other maintenance as may be required. The aftercare scheme normally requires two levels of details to be provided, these are:

- The outline strategy for the whole of the aftercare period;
- A detailed strategy for the forthcoming year.

5.81 Where after-use of a site includes the provision of built infrastructure, such as residential development, post-extraction changes in ground level may provide urban design opportunities for sub-surface development such as underground car parking, subject to geological and hydrological considerations. Such opportunities may provide greater space for green infrastructure improvements and improve the viability of proposed built development.

5.82 Restoration and aftercare plans should take into consideration community needs and aspirations. Local interest groups such as Catchment Partnerships and community representatives should be consulted, and their viewpoints incorporated into the proposals wherever possible and appropriate. Developers should work with the Colne Valley Regional Park and relevant Local Authorities to secure an enhanced bridleway/footpath network in line with the Joint Connectivity Statement⁵². Regard should also be given to the green infrastructure policies and strategies of relevant local planning authorities and

⁵¹ For example, this may occur when restoration is to a particular nature conservation afteruse.

⁵² Joint Connectivity Statement between the Colne Valley Regional Park, Slough Borough Council, RBWM and the Buckinghamshire authorities.

the Colne Valley Regional Park⁵³. Restoration and aftercare plans for mineral development need to be reviewed and updated periodically, in accordance with legislation.

5.83 A Restoration Study⁵⁴, which accompanies this Plan, provides greater detail and guidance on after-use, aftercare and restoration. The study and any subsequent restoration strategies or guidance adopted by the authorities should be read in conjunction with this policy and referenced, where appropriate.

Monitoring

5.84 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Appropriate and timely restoration.	Permissions granted without restoration and aftercare conditions, where restoration and aftercare are required.	Number of permissions granted without restoration and aftercare conditions, where restoration and aftercare are required > 0
	Permissions granted without an agreed restoration plan, where site restoration is required.	Number of permissions granted without an agreed restoration plan, where restoration is required > 0
	Completion of restoration schemes within agreed timescales (not subject to approved extensions of time).	Number of uncompleted restoration schemes within agreed timescales (not subject to approved extensions of time) > 0.

⁵³ Colne and Crane Valleys Green Infrastructure Strategy (September 2019) - <https://www.colnevalleypark.org.uk/project/green-infrastructure-strategy-colne-and-crane-valleys/>

⁵⁴ Restoration Study (July 2020) – www.hants.gov.uk/berksconsult

Protecting Health, Safety and Amenity

- 5.85 Minerals and waste development can have impacts on the environment and local communities. The use of machinery and lighting can result in noise, light and air pollution which can impact on air quality and tranquillity. These impacts can also affect the amenity and health of nearby communities and businesses and other land uses such as sport, recreation or tourism.
- 5.86 It is important that the minerals and waste industry in Central and Eastern Berkshire does not adversely impact upon the health and amenity of the surrounding environment and communities, and appropriate suitable mitigation measures are used to reduce the risk of unacceptable adverse impacts to health such as pollution and the attraction of vermin.

Policy DM9

Protecting Health, Safety and Amenity

1. Planning permission will be granted for minerals and waste development only where it can be demonstrated that it will not generate unacceptable adverse impacts on the health, safety and amenity of local communities and the environment.
2. Minerals and waste development should not:
 - a. Release emissions to the atmosphere, land or water (above appropriate standards);
 - b. Have an unacceptable impact on human health;
 - c. Cause unacceptable noise, dust, lighting, vibration or odour;
 - d. Have an unacceptable visual impact;
 - e. Potentially endanger aircraft from bird strike and structures;
 - f. Cause an unacceptable impact on public safety safeguarding zones;
 - g. Cause an unacceptable impact on public strategic infrastructure;
 - h. Cause an unacceptable cumulative impact arising from the interactions between minerals and waste developments, and between mineral, waste and other forms of development.
 - i. Cause an unacceptable impact through:
 - i. Tip and quarry slope stability; or
 - ii. Differential settlement of quarry backfill and landfill; or
 - iii. Subsidence and migration of contaminants.
3. Where it is considered that there will be adverse impacts, applicants will be expected to undertake mitigation to ensure an acceptable degree of potential impact.

Implementation

- 5.87 Many of the criteria outlined in Policy DM9 will be fulfilled by minerals and waste operators adopting appropriate management systems such as International Standards Organisation controls and other operational controls.
- 5.88 The screening of sites and delivery of mitigation measures are often required to ensure the potential impact of minerals and waste developments on the habitats, landscape, townscape and local communities is kept to acceptable levels. It is recommended practice for operational mineral extraction and inert waste recycling sites to have a minimum buffer zone of 100 metres, where appropriate, from the nearest sensitive human receptors, such as homes and schools, though this distance will be reviewed on a case-by-case basis.
- 5.89 Developments handling bio-wastes, such as landfill and composting sites may need a buffer zone of up to 250 metres from sensitive human receptors unless there are exceptional circumstances such as mitigation measures which can reduce the size of the buffer.
- 5.90 Minerals and waste development and associated traffic movements can give rise to air pollutants that adversely impact human health and sensitive environmental receptors. This can include sulphur oxides (SO_x), nitrogen oxides (NO_x) and carbon particulates (e.g. PM₁₀). HGV traffic can extend these air quality impacts significantly beyond development sites and into adjacent local authority areas. Local authorities review and assess air quality on a regular basis⁵⁵, against a set of Air Quality Objectives (AQOs)⁵⁶. Local authorities are required to declare as Air Quality Management Areas (AQMAs)⁵⁷ where AQOs are exceeded. Central and Eastern Berkshire and adjacent authorities have AQMAs delineated for parts of their areas for which Air Quality Action Plans (AQAP) have been prepared. AQAPs are often integrated with Local Transport Plans (LTP). AQMAs will need to be considered when making any decisions on routing.
- 5.91 Minerals and waste development can affect a community's access to public rights of way, open spaces or outdoor recreation uses whilst the development is in progress. Development could also affect routes favoured by cyclists, equestrians and walkers near minerals and waste sites. It is standard practice for such routes to be diverted if they are impacted by a development. In such

⁵⁵ The Environment Act 1995 requires local authorities to review and assess air quality on a regular basis, against a set of Air Quality Objectives (AQOs).

⁵⁶ Set out in the Air Quality Standards Regulations 2010 -

<http://www.legislation.gov.uk/ukxi/2010/1001/contents/made>

⁵⁷ Air Quality Management Areas - <https://uk-air.defra.gov.uk/aqma/>

instances, it is expected that rights of way will be replaced, diverted or equivalent routes be provided. Minerals and waste development should not negatively affect these features to an unacceptable degree.

5.92 Planning permission will be granted for minerals and waste developments where the cumulative impact would not result in significant adverse impacts on the environment of an area or on the amenity of a local community. Cumulative impacts should be considered, either in relation to the collective effect of different impacts of an individual proposal, or in relation to the effects of a number of developments occurring either concurrently or successively.

5.93 The potential cumulative impacts of minerals and waste development and the way they relate to existing developments must be addressed to an acceptable standard. Where unacceptable impacts are identified, which cannot be addressed through appropriate mitigation measures, planning permission will be refused. Where policy refers to a judgement on 'acceptability', this is defined as being judged acceptable by the relevant authority.

5.94 It is expected, where relevant, that other regulatory bodies or functions (such as the Environment Agency, Health and Safety Executive or Environmental Health) will ensure that the impacts within their remit will be satisfactorily addressed.

Monitoring

5.95 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Impact on local communities.	Planning permissions granted against Environment Agency advice.	Number of planning permissions granted against Environment Agency advice > 0
	Planning permissions granted against Environmental Health Officer advice.	Number of planning permissions granted against Environmental Health Officer advice > 0

Flood Risk

- 5.96 Minerals and waste development can have significant impacts on flooding. National planning policy on flooding aims to ‘steer inappropriate new development to areas with the lowest probability of flooding’⁵⁸. This approach is based on the indicative Flood Maps prepared by the Environment Agency (EA).
- 5.97 A Strategic Flood Risk Assessment (SFRA) has been prepared to support this Plan⁵⁹. The assessment looks at the potential flood-risk associated with the minerals and waste site allocations included in the Plan. The assessment considers flooding from rivers, rainfall, groundwater and sewers.

Policy DM10 Flood Risk

1. Minerals and waste development in areas at risk of flooding should:
 - a. Apply the sequential test, exception test, where required, and sequential approach within the development site directing the most vulnerable development to the areas at lowest risk from flooding;
 - b. Not result in an increased flood risk elsewhere and, where possible, reduce flood risk overall;
 - c. Ensure development is safe from flooding for its lifetime including an assessment of climate change impacts;
 - d. Incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site;
 - e. Include site drainage systems designed to take account of events which exceed the normal design standard;
 - f. Not increase net surface water run-off; and
 - g. If appropriate, incorporate Sustainable Drainage Systems to manage surface water drainage, with whole-life management and maintenance arrangements.

Implementation

- 5.98 Mineral deposits have to be worked where they are found, and these are often located in flood risk areas. Sand and gravel extraction and processing can take place in flood risk areas, provided any potential impact on the site and surrounding area is adequately managed so that the risk of flooding does not

⁵⁸ National Planning Policy Framework (Para 158) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁵⁹ Strategic Flood Risk Assessment (July 2020) – www.hants.gov.uk/berksconsult

increase either within the site or downstream. Applications for minerals and waste proposals within Source Protection Zones should be accompanied by a Hydrogeological Risk Assessment.

- 5.99 Mineral extraction may provide opportunities for flood water to be alleviated, by providing water storage when the area is restored⁶⁰.
- 5.100 Existing waste developments have the potential to pollute water resources if they are at risk from flooding. Landfill and hazardous waste facilities will not be permitted in Flood Risk Zones 3a and 3b. Historic landfills in areas of flood risk may need to be protected by flood defences.
- 5.101 Proposals in identified areas of flood risk will need to demonstrate that the development of the site will be safe and not result in increased flood risk. Such developments will require the Sequential Test and, where appropriate the Exception Test, to be carried out together with site specific Flood Risk Assessments. Where a flood risk is identified, development should only occur where the Exceptions Test in national guidance has been met. A development without a Flood Risk Assessment (FRA), where one is required, will not be supported.
- 5.102 Development of 1 hectare or greater in Flood Zone 1, or all proposals in Flood Zones 2 and 3, require a FRA. The FRA and the advice of the Environment Agency will be taken into account in any decision.

Monitoring

5.103 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Impact on flood risk.	Planning permissions granted against Environment Agency advice.	Number of planning permissions granted against Environment Agency advice > 0
	Planning permissions granted against Lead Local Flood Authority advice.	Number of planning permissions granted against Lead Local Flood Authority advice > 0

⁶⁰ Restoration Study (July 2020) – www.hants.gov.uk/berksconsult

Water Resources

- 5.104 Central and Eastern Berkshire is heavily influenced by its water sources and there are many streams, rivers, lakes and reservoirs though out the Plan area.
- 5.105 Many of the area's rivers are associated with extensive reaches of gravel and sand bed material associated with a dynamic, meandering or divided channel and active erosion and sediment deposition features.
- 5.106 To ensure compliance with the Water Framework Directive, minerals and waste development must not cause any adverse impact on local water bodies.

Policy DM11

Water Resources

1. Planning permission will be granted for minerals and waste development where proposals do not:
 - a. Result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including river, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and
 - b. cause unacceptable risk to the quantity of water resources; and
 - c. cause changes to groundwater and surface water levels which would result in unacceptable impacts on:
 - i. adjoining land;
 - ii. potential groundwater resources; and
 - iii. the potential yield of groundwater resources, river flows or natural habitats.
2. Where proposals are in a groundwater source protection zone, a Hydrological Risk Assessment must be provided. If the Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation.

Implementation

- 5.107 The Water Framework Directive (2000/60/EC) (WFD) provides the framework for ensuring surface and ground water is protected and to achieve good qualitative and quantitative status for all water bodies. Minerals development can have significant impacts on not only flooding and water quality but also water quantity. To ensure compliance with the WFD, development must not cause any unacceptable impact on water resources.
- 5.108 Planning applications should be supported by a Hydrological Risk Assessment which evaluates the impact on surface and groundwater from the proposed

operations. A management scheme will need to be agreed for the construction, operation and restoration phases of development.

- 5.109 Proposals for mineral development must take into account the need to protect water resources. In assessing proposals, the Authorities will consider the risk of flooding (DM 10) and, where relevant, surface water and groundwater issues. All development must consider the need to protect the flow and quality of surface and groundwater resources. Development will only be permitted if they are unlikely to have an unacceptable impact on water resources. Dewatering may require prior approval through the issuing of an Environment Agency abstraction licence.
- 5.110 An undeveloped 16 metre buffer zone (Thames Region Land Drainage Byelaws, as amended) is required on both sides of a main river⁶¹ to help promote strong and resilient ecosystems, green and blue infrastructure links, water quality standards and human health and wellbeing (pleasant amenity space).
- 5.111 Planning applications should be supported by a risk assessment which evaluates the impact to surface and groundwater from the proposed operations; and include a comprehensive management scheme that will be agreed for the construction, operation and restoration of the proposals.
- 5.112 All minerals and waste proposals must include measures to ensure the achievement of both no deterioration and improved ecological status of all waterbodies within the site and/or hydrologically connected to the site. Where relevant a Hydrogeological Risk Assessment will be required to demonstrate the effects of the proposed development on the groundwater environment and how these may be mitigated to an acceptable level. Such assessments should include a consideration of impacts on near-by abstraction licences; risk to the principal aquifer; cumulative impacts of the neighbouring quarry sites; groundwater quality in relation to impacts on neighbouring potable abstractions and adjacent waste sites; and monitoring.

⁶¹ Main rivers are typically larger streams and rivers, but some are smaller watercourses of local significance. Main Rivers are nationally managed by the Environment Agency and can be identified using this map - <https://www.arcgis.com/apps/webappviewer/index.html?id=17cd53dfc524433980cc333726a56386>

Monitoring

5.113 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Impact on water resources	Planning permissions granted against Environment Agency advice.	Number of planning permissions granted against Environment Agency advice > 0
	Planning permissions granted against Environment Health Officer advice.	Number of planning permissions granted against Environment Health Officer advice > 0

Sustainable Transport Movements

- 5.114 The sustainable supply of minerals and management of waste resources is dependent on well-maintained transport infrastructure.
- 5.115 One of the roles of this Plan is to encourage the use of sustainable transportation methods including rail, water, and conveyors to reduce movements by road. However, as limited opportunities are available within the Plan area to increase the use of sustainable transportation methods, it is acknowledged that most minerals and waste movements will continue to be made by road.
- 5.116 The impact of transporting minerals and waste materials by road can, if not controlled, be significant for sensitive environments and on communities both inside and outside of Central and Eastern Berkshire. A key priority of this Plan is minimising and managing the impact of traffic, as traffic can give rise to noise, dust, vibration, congestion and a reduction in air quality through emissions such as carbon dioxide (CO₂), nitrogen dioxide (NO₂) and particulates.
- 5.117 National planning policy supports developments where sustainable transport opportunities have been utilised, safe and suitable access can be achieved, and any significant impacts from the development on the transport network in terms of capacity, congestion and highway safety can be mitigated in an acceptable, and cost effective way⁶².

⁶² National Planning Policy Framework (Para. 108) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Policy DM12

Sustainable Transport Movements

1. Minerals and waste development will be permitted where good connectivity for the movement of minerals and waste can be demonstrated.
2. A Transport Assessment or Statement will be required (as appropriate) to consider:
 - the acceptability of routeing to the site and the impact(s) on the surrounding road network in relation to capacity and demand, with consideration of committed developments and cumulative impact
 - road safety
 - sustainable accessibility
 - appropriate hours of working
 - mitigation as appropriate.
3. Applications are expected to be accompanied by an Environmental Statement which would include details of the site's impact on noise, air quality, and severance.
4. The Assessment or Statement is required to explore how the movement of minerals and/or waste within and outside the site will not be detrimental to road safety and would not have an unacceptable impact on the highway network. It should also determine whether highway improvements or other measures, such as routeing agreements, are necessary to mitigate impacts the impacts of the proposals.
5. Where minerals and waste development will result in significant road transport movements, justification is required to explain how alternatives to road-based methods of transportation such as rail, inland waterways, conveyors, pipelines and the use of reverse logistics have been actively considered.

Implementation

- 5.118 Good connectivity will be established through the Transport Assessment or Statement. Good connectivity will be determined where there is safe site access and suitable access to the Strategic Road Network, rail or waterways. Routeing agreements will be required to ensure that access is not permitted on roads which result in unacceptable transport impacts on the highway network and sensitive receptors.

- 5.119 Road safety and capacity are issues of paramount importance. Highways England is responsible for considering assessments of the transport impacts of minerals or waste development on the Strategic Road Network. The Highways authorities, including the Central and Eastern Berkshire Authorities, are responsible for considering assessments of the transport impacts on the local highway network. In addition to potential capacity congestions, and safety impacts along the highway network, the potential and perceived impact of transportation on amenity may include vibration, visual intrusion and impacts on air quality. It is therefore beneficial for mineral and waste development to be located either close to the Strategic Road Network, or where there is potential for the sustainable movement of materials and/or where operational road miles can be minimised.
- 5.120 Where the source of waste for a facility may arise from a range of geographic locations, the impact of developing a network of smaller facilities, rather than one larger central facility, should be assessed through the Transport Assessment and Environmental Statement, including the likely transport impacts of both options on congestion, emissions, communities and sites of historic or ecological importance. It is also important that potential cross-boundary impacts and cumulative impacts of minerals and waste development with other local developments are considered.
- 5.121 Alternative methods of transport may provide opportunities to reduce and manage impacts of traffic and reduce potential emissions associated with HGV movements. This may help to offset potential impacts on the climate and air quality. Alternative methods may include the use of field conveyors, internal site haul roads, pipelines and the use of rail and inland waterways to transport minerals and waste.
- 5.122 The use of one of the above methods, in particular the use of field conveyors and/or site haul roads at mineral sites, could be implemented in combination with road transport, in order to help reduce the impacts from road transport. However, such mechanical transport mechanisms will also need to be assessed in terms of the impact on health and public amenity in terms of noise, vibration, particulates and air quality.
- 5.123 The Central & Eastern Berkshire Authorities recognise that these methods may only be appropriate in certain circumstances and will not always be available or suitable as a direct substitution for road transport.
- 5.124 Reverse logistics involves reducing vehicle movements by bulking when transferring minerals and waste so that, for example, an HGV always enters

and exits a site with a full load. The use of alternative methods of transportation and reverse logistics will be supported, as appropriate.

- 5.125 All minerals and waste development should give the greatest consideration to potential highway and transportation impacts that may be associated with the development. Planning conditions and legal agreements can be used to control and/or manage highway impacts. This may include conditions on hours of working and restrictions on the number of lorry movements, routeing agreements or legal agreements for mitigation which may include highway improvement and/or maintenance works.

Monitoring

5.126 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Transport impacts.	Planning permissions against Highways England advice	Number of planning permissions against Highways England advice > 0
	Planning permissions against Local Highway Authority advice	Number of planning permissions against Local Highway Authority advice > 0

High Quality Design of Minerals and Waste Development

- 5.127 The sustainable design and operation of minerals and waste development in Central and Eastern Berkshire is critical in ensuring potential impacts are reduced or avoided. It is also important that the impact of such developments on the qualities of place are taken into account, both to enhance the built environment but also to overcome resistance to the siting of such facilities close to the communities from which waste arises. National planning policy⁶³ attaches great importance to the design of the built environment and is a key aspect of sustainable development.
- 5.128 It is important that all minerals and waste developments are designed to minimise the impact upon the environment and the local communities in Central and Eastern Berkshire. It is equally important to encourage all new developments to include high quality design as a standard. There is a need to mitigate the impacts and adapt to climate change. This can be supported by reducing the amount of greenhouse gas emissions and other forms of emissions, minimising energy and water consumption, reducing waste production and reusing or recycling materials.
- 5.129 Sustainable design initiatives can be achieved by a variety of means such as the incorporation of renewable energy, energy management systems, grey water recycling systems, sustainable drainage systems, energy efficient appliances and the use of recycled and recyclable building materials.

Policy DM13

High Quality Design of Minerals and Waste Development

1. Proposals for minerals and waste development must demonstrate that they have taken every opportunity to make a positive contribution to the quality and character of the area.
2. The design of appropriate facilities for minerals and waste development should:
 - a. Help to reduce greenhouse gas emissions;
 - b. Maximise the re-use or recycling of materials in its construction;
 - c. Minimise impact on resources;
 - d. Protect and enhance the character and quality of the site's setting and the contribution to place making in the area; and
 - e. Protect and, wherever possible, enhance soils and not result in the net loss of best and most versatile agricultural land.

⁶³ National Planning Policy Framework (Para. 124) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Implementation

- 5.130 The principles of high-quality design apply to all developments, but particularly in new development areas. Building activity is a significant contributor to waste production and improved waste management in this sector should be encouraged through the selection of materials and construction techniques.
- 5.131 It may be appropriate for large-scale facilities in prominent locations to create a positive architectural statement. All minerals and waste development should also be in accordance with the latest guidance on modern design standards.
- 5.132 Landscape Character Assessments and other relevant landscape planning guidance should be used to assess the capacity of landscapes to accept development, to inform the appropriate scale and character of the development, and guide restoration.
- 5.133 Design and access statements will be required, where appropriate, for minerals and waste developments.

Monitoring

- 5.134 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Improving design quality.	Planning permissions not in accordance with Policy DM13 (1).	Number of planning permissions not in accordance with Policy DM13 (1) > 0.

Ancillary development

- 5.135 The operation of a mineral or waste site may require the erection of various ancillary structures or buildings to maximise opportunities at a site, to allow for investment or to ensure a sustainable operation. This minor development is associated with the primary permitted minerals or waste development. For example, sand and gravel dug from the ground generally requires washing, grading and sorting before it can be put to use. Waste may also require sorting and grading before it can be recycled or disposed. Mineral and waste sites may also need such ancillary structure as site offices, weighbridges or vehicle maintenance buildings.
- 5.136 Certain buildings and structures can be erected at minerals and waste sites without separate planning permission because general permission is granted for them under the General Permitted Development Order.
- 5.137 Where ancillary development is required which does not fall within the General Permitted Development Order, planning permission will be required.

Policy DM14 **Ancillary development**

1. Proposals for buildings and/or structures ancillary to minerals processing or manufacturing, or for structures ancillary to the existing minerals or waste operation, will be supported where they are appropriate and located within the development footprint of the existing site.
2. Proposals will need to demonstrate how the ancillary development will benefit the site and ensure a sustainable operation.
3. Development permitted in accordance with this policy will be subject to a requirement that:
 - a. it is used only as ancillary to the primary permission of the site; and
 - b. it will only be permitted for the life of the primary permission.

Implementation

- 5.137 Ancillary development must relate to the existing permitted minerals and/or waste operation and must not conflict with any of the other policies contained within this Plan.
- 5.138 Proposals that do not relate to the materials being produced, imported or exported at an existing site will not be supported as being ancillary development.

- 5.138 Appropriate development must be associated with the primary permitted development and comply with the other relevant policies within this Plan.
- 5.139 The development footprint is considered to be the outline of the permitted operation to which the proposed development is ancillary. It is not the extent of the landownership.
- 5.140 There will need to be a consideration of the cumulative effects of permitting the ancillary development in combination with the existing operation.

Monitoring

- 5.141 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Maximising existing infrastructure.	Permissions not in accordance with Policy DM14.	Number of permissions not in accordance with Policy DM14 > 0.

Operator past performance

- 5.141 The planning regime has, as a principle, the expectation that effective planning authority monitoring, and enforcement, will take place and that other regulatory regimes will function to help control the potential negative impacts of development. Each planning application is considered on its own merits, within the overall strategic direction of relevant plans. At the same time, when making planning decisions, it is necessary to take all relevant information into account and Planning Practice Guidance⁶⁴ states that the planning history of a site may be a relevant consideration in the determination of an application.
- 5.142 An operator's record of running established minerals or waste sites within their control can provide information on how appropriately the impacts of development have been managed by that operator. In some circumstances, where there is sufficient evidence, this information can be a useful indicator of how proposed future minerals or waste sites might be managed by that operator.
- 5.143 This Plan seeks to protect communities near minerals and waste development from any significant adverse effects.

Policy DM15

Past operator performance

1. Where an applicant or operator has been responsible for an existing or previous minerals or waste development site, an assessment of their operational performance at that existing or previous site will be made.
2. Where issues have been raised about the operation of an existing or previous development site, how the operator or applicant has responded, particularly where there is evidence of any significant adverse effects, will be taken into consideration in decision-making on minerals or waste applications submitted by the same applicant or operator.

Implementation

- 5.144 Any site can experience issues, and these will vary in complexity. It is important that operators listen to the concerns of the monitoring officers or the community and take active steps to rectify issues, especially substantiated complaints and breaches, quickly, effectively and proportionately.

⁶⁴ Planning Practice Guidance (Paragraph: 010 Reference ID: 21b-010-20190315, 15/03/2019 revision) - <https://www.gov.uk/guidance/determining-a-planning-application#how-decisions-on-applications>

- 5.145 Liaison panels can be an effective way of bringing together various interested parties, keeping relevant stakeholder informed, opening communication channels and resolving issues. Liaison panels, where appropriate, should be established and managed by the relevant operator of the site. It is encouraged that interested parties, such as parish councils, are invited to join as active members of the panel to enable effective representation of local interests.
- 5.146 A minerals or waste development may be authorised or unauthorised. An intentional unauthorised development can be a material consideration⁶⁵, as it could potentially have a variety of significant adverse effects, being much less likely to have implemented avoidance or mitigation measures.
- 5.147 The (re)occurrence of any significant adverse effects and how they have been addressed will be an indicator of whether an operator or applicant can deliver future development effectively. The applicant will need to provide information and relevant records on existing development site performance as part of the planning application, as well as submitting information on how any previous performance issues will be avoided and/or addressed in the future for the proposed development.
- 5.148 A Monitoring Assessment will be required, to support the determination of a planning application, particularly where developments have a long or complex history of issues. Where there is no history of an operator within the Plan areas, it may be possible to obtain the relevant information through liaison with monitoring officers in locations where they have previously had active sites. It would be expected that the planning authority prepares the Monitoring Assessment with relevant input (e.g. monitoring officer, environmental health officer or Environment Agency).
- 5.149 The record of performance of an operator or applicant, as assessed, will form a material consideration in the decision-making process and may be used:
- As a basis to request additional information to support an application in relation to any issues raised through the Assessment and how these may be mitigated as part of the proposal;
 - To apply an appropriate condition to a permission to address an issue which has been raised through the Assessment where this has not been rectified by the applicant to an acceptable level; or
 - To tip the balance in determining an application where all matters are equal in relation to impacts.

⁶⁵ As per the 31 August 2015 letter to Chief Planning Officers by the Department of Communities and Local Government Chief Planner

Monitoring

5.150 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Taking past performance into account	Permissions for proposals by existing operators accompanied by Monitoring Assessments.	Number of permissions where issues outlined in Monitoring Assessments are not addressed through additional information requests and/or conditions > 0.

6. Minerals Delivery Strategy

Minerals in Central and Eastern Berkshire

- 6.1 Until the 20th Century, chalk and clay were the main minerals produced in the area, generally to meet local needs. Chalk and clay continue to be extracted as a by-product at sand and gravel quarries, but now on a very small scale in comparison to previous times.
- 6.2 The chalk is now mainly used as agricultural lime, and sometimes as ‘fill’ material for civil engineering projects. The clay was formerly used chiefly for brick and tile making, but more recently its main use has been for the lining for waste landfill sites to prevent the spread of pollution and for other engineering applications.
- 6.3 Since the Second World War, the main type of minerals production in Berkshire has been of aggregates for the construction industry, the bed rock for future development. Construction aggregates are hard granular materials and in the context of the extraction industry of Central and Eastern Berkshire comprise sands and gravels.
- 6.4 The geology of Berkshire determines where these deposits are available for extraction. Further supplies of aggregate are imported from elsewhere in southern England or obtained by recycling of construction and demolition waste. Most aggregate is processed by the operator, either on-site or at central processing facility nearby and sold direct for use in the construction industry.
- 6.5 This section sets out the policies relating to the following issues:
- Managing the supply of aggregate;
 - Safeguarding minerals resources, and minerals infrastructure;
 - The locations for extraction; and
 - Provision of non-aggregate minerals.
- 6.6 All policies include an explanation of the existing situation, supporting text regarding the policy and details on how the policy would be implemented and monitored.

Sustainable mineral strategy

- 6.7 Minerals make a significant contribution to the nation's prosperity and quality of life and are needed to build and maintain local communities.
- 6.8 The supply of minerals to Central and Eastern Berkshire comprises imports of crushed rock, marine-won and land-won sand and gravel, recycled aggregate as well as locally won sand and gravel.
- 6.9 Data on the consumption of aggregates (the types of mineral used by the construction industry) as well as the movements of aggregates (imports and exports) is recorded on a Berkshire-wide level rather than by each mineral planning authority. This data is published by the Ministry of Housing, Communities and Local Government (MHCLG) every four years as part of the Aggregate Mineral survey for England and Wales undertaken by the British Geological Survey (BGS)⁶⁶.

Table 1: Total consumption of Primary Aggregate in Berkshire, 2009 and 2014

Berkshire Imports (Tt)	Land Won Sand and Gravel		Marine Sand and Gravel		Total sand and gravel		Crushed Rock		Total Primary Aggregates	
	2009	2014	2009	2014	2009	2014	2009	2014	2009	2014
	298	353	98	152	396	505	861	1,161	1257	1,666
Consumption* (Tt)	807	601	98	152	905	753	875	1,161	1780	1,914
Consumption %	45.3%	31%	5.5%	8%	50.8%	39%	49.2%	61%	100%	100%
Imports/ Consumption %	36.93%	58.7%	100%	100%	43.76%	67%	98.4%	100%	71%	87%

Source: Collation of the results of the 2009 and 2014 Aggregate Minerals survey for England & Wales.

* Consumption is determined by total sold internally plus total imported.

- 6.10 Table 1 shows the consumption of aggregate both imported and from external areas and supplied from sources within Berkshire. Unfortunately, comparable data is not available for 2005.
- 6.11 In 2014, Berkshire was producing 1051 Thousand tonnes (Tt) with sales split by 248 Tt sold internally within Berkshire. A further 548 Tt was sold in the South East region, the principal destinations being Surrey and Buckinghamshire (including Milton Keynes) and 255 Tt sold to locations elsewhere (predominately West London).

⁶⁶ A further survey is scheduled for 2020 but this may be subject to delays due to the Corona Virus.

- 6.12 There is no marine-won sand and gravel produced within Berkshire as it is land locked nor is there any crushed rock due to geological constraints and therefore, these aggregates are imported into the Plan area. In 2014, Berkshire was also importing 353 Tt of land-won sand and gravel.
- 6.13 Although it is not possible to determine the amount of these imports that reach Central and Eastern Berkshire, the movements need to be taken into consideration when forecasting future demand.
- 6.14 Table 1 also shows an overall increase in supply of primary aggregates from sources within Berkshire during this period. The Table does however show that there is an increasing reliance on Primary Aggregate imports within Berkshire.
- 6.15 Soft sand is found in Central and Eastern Berkshire within the Reading Formation, a bedrock deposit which is predominately clay bearing but also contains sand beds and therefore, the deposits are variable in terms of quality and location. As a result, reliable information about the distribution of commercial reserves of soft sand is not available. This situation reflects the fact that there have been no operational soft sand quarries in over 10 years and only a small level of incidental extraction.
- 6.16 Soft sand supply in the South East is recognised as an issue by the South East England Aggregate Working Party (SEEAWP). The Mineral Planning Authorities in the South East worked collectively to prepare a Position Statement which provides an agreed source of evidence and current policy on soft sand supply in the South East. The Position Statement will underpin effective cooperation and collaboration between the Minerals Planning Authorities of the South East of England in addressing the strategic cross-boundary matter of soft sand supply.
- 6.17 Soft sand is currently being supplied to Central and Eastern Berkshire by mineral planning authorities outside of the Plan area. A Soft Sand Study⁶⁷ has been prepared to explore the options for supply in the short and longer-term. The Study outlines those areas currently supplying the Plan area and those that have potential to supply in the future. The Study concludes that Central and Eastern Berkshire is in an enviable position as it has a number of supply sources and therefore, is not dependent on any single area.
- 6.18 Demand for soft sand in Central and Eastern Berkshire during the Plan period could be in the region of 1.0 million tonnes (0.065 million tonnes per annum)⁶⁸.

⁶⁷ Soft Sand Study (March 2020) – www.hants.gov.uk/berksconsult

⁶⁸ Minerals: Background Study (July 2020) – www.hants.gov.uk/berksconsult

- 6.19 Recycled and secondary aggregates can be used as a substitute for some land-won sharp sand and gravel extraction, providing a more sustainable source of supply. These have combined benefits of reducing the need for land won (or marine aggregate) and reducing the amount of waste requiring disposal by landfill.
- 6.20 When used locally, recycled aggregate can reduce the impact of transport and cut carbon emissions.
- 6.21 There is no reliable or comprehensive data on the production or use of recycled aggregates. Historically, the production and sales of recycled and secondary aggregate have been recorded on a Berkshire county-wide level. However, sales data for Central and Eastern Berkshire has been recorded since 2014. Sales of recycled and secondary aggregate in Berkshire during this period suggest an overall increase in sales but with a spike in sales in 2016 (see Table 2). Similarly, the wider South East has seen an overall increase but with a spike in 2017. In comparison, Central and Eastern Berkshire has seen a steady increase in sales.

Table 2: Sales of recycled and secondary aggregate in the Central and Eastern Berkshire, Berkshire, and the South East (thousand tonnes)

Year	Central & Eastern Berkshire	Berkshire Sales	South East
2014	85	408	3,628
2015	103	400	4,223
2016	128	498	4,034
2017	131	451	4,875
2018	138	459	4,581
5 Year Average	132	443	4,268

Source: Aggregate Monitoring survey data and South East Aggregate Monitoring Report⁶⁹

- 6.22 There are no known commercial resources of oil and gas in Central and Eastern Berkshire. Whilst there is coal present within the Plan area, this resource is not currently prospective for exploitation.
- 6.23 Both chalk and clay are not currently being extracted for an industrial purpose.
- 6.24 There are several options available to Central and Eastern Berkshire to supply the Plan area with minerals and there is a need for this to be supported to allow

⁶⁹ South East Aggregate Monitoring Report 2018 - <https://documents.hants.gov.uk/see-awp/SEEAWP-annual-report-2018.pdf>

for flexibility in demand and changes in market. Therefore, the Central & Eastern Berkshire Authorities will plan to facilitate minerals of the right type, in the right place and at the right time.

Policy M1

Sustainable minerals development strategy

The long term aims of the Plan are to provide and/or facilitate a steady and adequate supply of minerals to meet the needs of Central and Eastern Berkshire in accordance with all of the following principles:

- a) Work with relevant minerals planning authorities to maintain the supply of aggregate not available within Central and Eastern Berkshire;
- b) Deliver and/or facilitate the identified aggregate demand requirements (Policy M3);
- c) Facilitate the supply of other mineral to meet local demands (Policy M6);
- d) Be compliant with the spatial strategy for minerals development (Policy M4).
- e) Take account of wider Local Plans and development strategies for Central and Eastern Berkshire.

Implementation

- 6.25 The Central & Eastern Berkshire Authorities will work jointly to maintain the supply of minerals that serve the wider Plan area. They will also work closely with relevant mineral planning authorities to plan for the provision of aggregates from outside of the Plan area that supply Central and Eastern Berkshire. This will be established through Statements of Common Ground.
- 6.26 Statements of Common Ground will be regularly reviewed through the 'duty to cooperate' to ensure the issues outlined are still relevant.
- 6.27 The spatial strategy for minerals development is outlined in Policy M4 which includes allocated sites and locational criteria for new aggregate provision.
- 6.28 The Joint Minerals & Waste Plan needs to enable minerals and waste development that complements the delivery of the strategies outlined in the wider Local Plans and vice versa.

Monitoring

6.29 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Effective engagement with relevant mineral planning authorities.	Up-to-date Statement of Common Ground and annual 'duty to cooperate' (reported in the Local Aggregate Assessment).	n/a

Safeguarding Mineral Resources

- 6.30 Minerals are a valuable but finite resource that can only be won where they naturally occur. Safeguarding of viable or potentially viable mineral deposits from sterilisation by surface development is an important component of sustainable development. Safeguarding means taking a long-term view to ensure that sufficient resources will be available for future generations, and importantly, options remain open about where future mineral extraction might take place with the least environmental impact. National planning policy⁷⁰ is that planning authorities should safeguard mineral deposits that are of local or national importance against non-minerals development by defining Mineral Safeguarding Areas (MSAs) in their plans and not normally permit development in Mineral Safeguarding Areas if it constrains their potential future use⁷¹.
- 6.31 Minerals of local and national importance will be safeguarded and defined by Mineral and Waste Safeguarding Areas (MWSA). This safeguarding will be achieved by encouraging extraction of the underlying minerals prior to development proceeding, where practicable, if it is necessary for the development to take place within the MWSA.
- 6.32 In Central and Eastern Berkshire, clay and chalk are only extracted for local needs and not for industrial purposes. Neighbouring planning areas have not raised a shortfall in provision of clay and chalk and therefore, the minerals are not considered of sufficient importance to warrant safeguarding. The key mineral deposit in Central and Eastern Berkshire is sand and gravel. The deposits of sand and gravel, although widespread, are relatively shallow, and the material can be processed away from the site, where required. The location of sand and gravel often closely coincides with existing settlement patterns. As such, there is a strong potential for new surface development to be proposed on or close to these important mineral deposits.
- 6.33 For these reasons, it is particularly important to have a firm framework for the safeguarding of sand and gravel resources which are or could be of potential importance.
- 6.34 The geological deposits in which soft sand is found are much more variable than deposits of sharp sand and gravel. As a result, information about the distribution of commercial reserves of soft sand is not available.

⁷⁰ National Planning Policy Framework (Para. 204 (c)) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁷¹ National Planning Policy Framework (Para. 206)

- 6.35 Neighbouring areas which contain soft sand resources include West Berkshire, Hampshire, Surrey, Buckinghamshire and Oxfordshire. There are also soft sand resources within the wider South East, most notably Kent and West Sussex. However, several authorities have a significant proportion of their soft sand resources located within Areas of Outstanding Natural Beauty (West Berkshire and Surrey) or within the South Downs National Park (Hampshire and West Sussex).
- 6.36 The presence of such designations restricts the availability of soft sand resources in these areas. As such, soft sand supply issues may occur in the near future, in particular in the wider region (West Berkshire, Hampshire, Surrey and West Sussex) as resources outside of the designated areas deplete.
- 6.37 Central and Eastern Berkshire is already dependent on soft sand supplies from outside of the Plan area. Therefore, securing future supplies may become more of an issue as other mineral planning authority areas seek to source their supplies from elsewhere (outside of designated areas). As such, it is considered that deposits of soft sand where they are identified, are also safeguarded.
- 6.38 It is important to note that there is no automatic presumption that planning permission for the winning and working of sand and gravel will be granted in MWSAs.

Policy M2

Safeguarding sand and gravel resources

1. Sharp sand and gravel and soft sand resources of economic importance, and around active mineral workings, are safeguarded against unnecessary sterilisation by non-minerals development.
2. Safeguarded mineral resources are defined by the Minerals and Waste Safeguarding Area illustrated on the Policies Map.
3. Non-minerals development in the Minerals and Waste Safeguarding Area may be permitted if it can be demonstrated that the option of prior extraction has been fully considered as part of an application, and:
 - a. Prior extraction is maximised, taking into account site constraints and phasing of development; or
 - b. It can be demonstrated that the mineral resources will not be sterilised; or
 - c. It would be inappropriate to extract mineral resources in that location, with regard to other policies in the wider Local Plans.

Implementation

- 6.39 The extent of MWSA will be based on information about aggregate sand and gravel resources from the British Geological Survey and other sources of geological information, plus existing mineral working permissions and the nature and duration of any such operations. In some instances, the MWSAs will apply to sand and gravel deposits beneath existing built up urban areas. This ensures sand and gravel deposits and the possibility for prior extraction is taken into account when proposals for large scale redevelopment are considered. The broad extent of sand and gravel resources to which the MWSA will apply are shown on the Key Diagram and Policies Map.
- 6.40 In assessing development proposals within the MWSA, the Central & Eastern Berkshire Authorities will have regard, amongst other things, to the size and nature of the proposed development, the availability of alternative locations and the need for phasing of the proposed development. Account will also be taken of the quantity and quality of the sand and gravel that could be recovered by prior extraction and the practicality and environmental impacts of doing so. A minimum plot size of 3 hectares⁷² will apply in the safeguarding process to

⁷² Minerals and Waste Safeguarding Study (July 2020) – www.hants.gov.uk/berksconsult

avoid repeated consideration of prior extraction where this can be assumed to be uneconomic, due to the small size of the parcels of land involved. However, applications will be monitored to ensure a piecemeal approach is not taken which could accumulate to have an impact on resources.

- 6.41 Developers are responsible for preparing a Mineral Resource Assessment which will need to assess the actual or potential commercial value of the underlying mineral deposit. The developer should determine the type, depth and quality of sand and gravel deposits within the site. In order to demonstrate that prior extraction has been fully considered, the developer must undertake an assessment of the practicality of prior extraction, either for use in the development itself or elsewhere.
- 6.42 In reviewing the potential for prior extraction developers should consider whether the extraction of part of the sand and gravel deposit within the site can be undertaken, even if removal of the entire deposit appears impractical. This might apply, for example, in a case – perhaps on a site close to land liable to flood where the removal of the upper levels of the deposit could be undertaken, whereas the removal of the entire deposit would render the land unsuitable without the importation of inert material to raise the ground level above flood levels.
- 6.43 In considering proposals for prior extraction, it will also be important to ensure that the environmental impacts of the development are contained. In most cases, the shallowness of the layers of sand and gravel means it can be extracted without blasting. As a result, it is unlikely that the extraction operation will give rise to additional environmental effects, over and above those of the development operation itself, that would preclude prior extraction.
- 6.44 Safeguarding does not necessarily mean that other forms of development should not take place where sand and gravel deposits occur. However, developers will need to demonstrate, through the preparation of a Mineral Resource Assessment, that the sand and gravel deposit has no commercial value, or that they have fully explored the use of the underlying sand and gravel in preparing development proposals. Alternatively, the policy includes provision for temporary developments and can allow specific projects of demonstrable overriding importance in the Central & Eastern Berkshire Authorities' Local Plans to proceed.
- 6.45 It is expected that, as a minimum requirement, incidental recovery of sand and gravel as part of a non-mineral development will take place.

6.46 National Planning Guidance⁷³ states that a Minerals Consultation Area (MCA) should be produced based on the MSA. The Central and Eastern Berkshire Authorities' Mineral and Waste Consultation Area (MWCA) includes a buffer of 250 metres around quarries and 50 metres around other mineral operations. The MWCA will be applied by the Central & Eastern Berkshire Authorities to determine whether they need to consult a neighbouring Mineral Planning Authority or each other on an application and to ensure that minerals and waste issues are taken into consideration when determining non-minerals or waste applications.

6.47 A list of safeguarded sites (operational and planned) is outlined in Appendix E and will be maintained by the Central & Eastern Berkshire Authorities. This will be updated as permissions are granted, and sites are completed and no longer require safeguarding.

Monitoring

6.48 Monitoring Indicator:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Mineral Safeguarding	Area (Hectares) of MWSA on completed sites above 3 ha in size, sterilised by non-minerals development.	Year on year increase over 5 years.

⁷³ National Planning Practice Guidance (Paragraph: 003 Reference ID: 27-003-20140306)

Managing the supply of aggregate

6.49 The requirement under national planning policy⁷⁴ is that minerals policies should make provision for ensuring a steady and adequate supply of aggregates for the construction industry and wider economy by means of maintaining a 'landbank'.

Local Aggregate Assessment

6.50 The Local Aggregate Assessment (LAA) reviews the demand and supply of aggregate in the area and is reported annually. The LAA contains:

- A forecast of demand for aggregates based on the rolling average of 10-years sales and other relevant local information. The 3-years sales data should also be reviewed as this may indicate an increase in future supply;
- Analysis of all supply options including land-won, marine-won (dredged) and recycled or secondary aggregate. Imports and exports of aggregate also need to be considered;
- An assessment of the local issues that may influence the situation such as environmental constraints or economic growth.
- If there is considered to be a shortage in supply, the conclusions need to outline how this is to be addressed.

Landbank

6.51 A landbank is a stock of mineral planning permissions which together allow sufficient minerals to be extracted to meet a defined period at a given rate of supply. The landbank is recalculated each year and is then reported in the LAA.

6.52 Landbanks are used as a monitoring tool by Mineral Planning Authorities to forecast whether a steady and adequate supply of aggregate can be maintained in their Plan area. If the landbank cannot be maintained, this can act as a trigger to highlight to the Mineral Planning Authorities that the existing sites are not sufficient and therefore, new permissions are required.

6.53 National planning policy⁷⁵ also requires mineral planning authorities to make provision for the maintenance of a landbank of at least seven years for sand and gravel. Reserves of sand and gravel in Central and Eastern Berkshire with planning permission for extraction (permitted reserves) at 31st December 2018 were 6.053 Million tonnes (Mt).

⁷⁴ National Planning Policy Framework (Para. 207) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁷⁵ National Planning Policy Framework (Para. 207 (f))

- 6.54 Star Works Quarry in Wokingham Borough had a remaining soft sand reserve at the end of December 2018. However, the inactive quarry will require approval of working conditions before any extraction can proceed, and therefore it cannot be included in the total permitted reserves.
- 6.55 Total permitted reserves are therefore 5.857 Mt (discounting Star Works Quarry). The Central and Eastern Berkshire – Local Aggregate Assessment for the period 2018, determined the LAA Rate as 0.628 Mt⁷⁶. This LAA Rate has been applied as the Plan Provision rate as it has been robustly justified⁷⁷ and agreed by the SEEAWP. Application of the LAA Rate results in a landbank of 9.3 years.
- 6.56 The Plan period is up to 2036. If the LAA rate is projected forward from 2018 to 2036 a total of **11.304 Mt** of sharp sand and gravel would be required over the course of the Plan. Taking into account that current permitted reserves for Central and Eastern Berkshire are 5.857 Mt (not including Star Works Quarry). This means that there is a total requirement of **5.447 Mt** of sharp sand and gravel (0.628 Mt per annum).
- 6.57 A change in local circumstances will have an impact on demand and therefore, the landbank. The proposed Heathrow airport expansion, subject to ongoing legal challenges and consultations, is such an example which would create a local increase in demand for aggregate. However, there is currently a significant level of uncertainty over the proposals for the Heathrow airport expansion with regard to timings and construction methods which would influence demand. It is therefore, accepted that the provision rate may change over the Plan period in order to maintain the landbank and a steady and adequate supply of aggregate. This will be monitored through the Local Aggregate Assessment and reviewed within three years, where necessary.
- 6.58 Soft sand and crushed rock are provided from outside of the Plan area and the continuation of this supply will be enabled in cooperation with other Mineral Planning Authorities (as outlined in Policy M1).
- 6.59 Due to geological constraints, the supply of crushed rock over the Plan period will all be met from outside the Plan area, most notably Somerset. The security of supply is established through Local Aggregate Assessments⁷⁸.

⁷⁶ Central and Eastern Berkshire: Local Aggregate Assessment 2019 – www.hants.gov.uk/berksconsult

⁷⁷ The Assessment was undertaken following SEEAWP LAA: Supplementary Guidance - <https://documents.hants.gov.uk/see-awp/SEEAWP-SupplAAGuidance-July2019.pdf>

⁷⁸ Somerset Local Aggregate Assessment (Fourth Edition, 2016) – <http://www.somerset.gov.uk/EasySiteWeb/GatewayLink.aspx?allId=124408>. 28.4 years of supply of crushed rock.

Policy M3
Sand and gravel supply

1. Provision will be made for the release of land to allow a steady and adequate supply of sand and gravel for aggregate purposes in Central and Eastern Berkshire at an average rate of 0.628 million tonnes a year to 2036, subject to the impact of local circumstances on demand.
2. A landbank of permitted reserves for the winning and working of sharp sand and gravel sufficient for at least 7 years' supply will be maintained through the Plan period.

Implementation

- 6.60 The policy seeks to ensure a steady and adequate supply of sand and gravel during the Plan period and maintain at least 7 years of permitted reserves.
- 6.61 Annual monitoring will be undertaken by the Central & Eastern Berkshire Authorities and reported in the Local Aggregate Assessment to ensure that, if required, permissions can be granted for mineral extraction before the landbank falls below 7 years.
- 6.62 It should be noted that the mineral extraction sites have been identified as locations where planning permission is most likely to be granted to maintain the landbank and where policies to ensure extraction in these locations and others, likely to come forward during the course of the Plan, do not have a significant impact. However, the Central & Eastern Berkshire Authorities cannot dictate that acceptable applications are submitted, and the required level of production is maintained.
- 6.63 It is recognised that the landbank can only be maintained if industry comes forward with planning applications in acceptable locations. The implementation of Policy M3 is therefore, reliant on the aggregate industry as well as the Central & Eastern Berkshire Authorities as the relevant Minerals Planning Authority.
- 6.64 Soft sand supplies that arise within the Plan area, will be addressed by Policy M4.
- 6.65 The effectiveness of the policy will need to be carefully monitored through the Local Aggregate Assessment to ensure that changes in local circumstances are reflected in any future provision rate. However, it should also be recognised

that these changes maybe time-limited due to their association with specific large-scale infrastructure projects such as proposed Heathrow airport expansion, rather than a long-term trend.

Monitoring

6.66 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Steady and Adequate Supply	Sand and gravel sales fail to achieve provision rate.	Breach over 3 consecutive years.
	Sand and gravel sales exceed provision rate.	Increasing trend in sales (above provision rate) over 5 consecutive years.
	Landbank falls below 7 years of permitted reserves.	Breach over 3 consecutive years.

Locations for sand and gravel extraction

- 6.67 There are a number of existing sites which currently extract sharp sand and gravel. There are no soft sand sites but there has been incidental soft sand extraction and a former soft sand quarry which has not been operational for a number of years. These sites have a role in the supply of sand and gravel during the Plan period.
- 6.68 Star Works is inactive but retains approved soft sand reserves. The site now forms a landfill which is due to close in the near future and there are no current plans to extract the remaining reserves. Waste uses continue to operate on other parts of the site.
- 6.69 There is a requirement to provide an additional **5.447 Mt** of sharp sand and gravel (**0.628 Mt per annum**) during the Plan period. As such, there is a need to identify sites for local land-won aggregate.
- 6.70 The new sites identified in Policy M4 have been nominated by industry and have been assessed to be appropriate for development subject to the relevant development considerations outlined in Appendix A.
- 6.71 The exact timings of sites coming forward will depend on the market conditions, extraction rates at existing sites and planning permission being granted.
- 6.72 Despite new site allocations, there is still likely to be a shortfall in supply during the Plan period⁷⁹. The aggregate industry has not identified sufficient sites to plug this gap at present. The minerals industry is market-led, and it recognised that there is likely to be a need for future requirements, particularly considering major infrastructure projects in the area such as the proposed Heathrow airport expansion. In order to provide flexibility in supply and to allow industry to bring forward appropriate sites, Policy M4 (3) outlines a contingency approach to ensure that the landbank is maintained and therefore a steady and adequate supply.

⁷⁹ Minerals Background Study (July 2020) – www.hants.gov.uk/berksconsult

Policy M4

Locations for sand and gravel extraction

A steady and adequate supply of locally extracted sand and gravel will be provided by:

1. The extraction of remaining reserves at the following permitted sites:
 - a. Horton Brook Quarry, Horton
 - b. Riding Court Farm, Datchet
 - c. Sheephouse Farm, Maidenhead
 - d. Poyle Quarry, Horton
 - e. Water Oakley, Holyport
2. Extensions to the following existing sites:
 - a. Horton Brook & Poyle Quarry, Horton (MA1)
 - b. Poyle Quarry, Horton (MA 2)
3. Proposals for new sites not outlined in Policy M4 (1 and 2) will be supported, in appropriate locations, where:
 - a. They are situated within the Area of Search (as shown on the Policies Map); and
 - b. They are needed to maintain the landbank; and/or
 - c. Maximise opportunities of existing infrastructure and available resources; or
 - d. At least one of the following applies:
 - i. The site contains soft sand;
 - ii. The resources would otherwise be sterilised; or
 - iii. The proposal is for a specific local requirement.

Implementation

6.73 The allocation of sites does not convey that planning permission will be automatically granted but indicates the locations that could provide sustainable development subject to the development considerations being addressed (see Appendix A).

6.74 The Area of Search is shown on the Policies Map. However, the criteria defining the Area and therefore, the extent will change as land uses change and new designations are made or amended. Sites identified within the Area of Search will still be subject to planning permission.

- 6.75 Proposals for new sites will be supported where they are in 'appropriate locations' and therefore, comply with all relevant policies within this Plan and M4 (4a, b or c).
- 6.76 Minerals extraction is not considered inappropriate in Green Belt locations subject to certain provisions (see DM6).
- 6.77 Landbanks can be used as an indicator for whether additional provision needs to be made for new aggregate extraction. Applications for the extraction of sand and gravel will not necessarily be refused if the landbank stands at over 7 years. National planning policy⁸⁰ states that provision should be made to maintain the landbank at 'at least' 7 years for sand and gravel. However, consideration should also be given to the productivity of existing sites and the need to ensure that large landbanks are not bound to only a few sites which could lead to the stifling of competition.
- 6.78 Conversely if the overall landbank of aggregates at the time of an application for mineral extraction stands at less than 7 years, this does not mean that an application will inevitably be approved. Government guidance confirms that landbank policies do not remove the discretion of Mineral Planning Authorities to refuse applications which are judged to have overriding objections. Whilst Mineral Planning Authorities should use the size of the landbank as an indicator for when new permissions for extraction of aggregates are likely to be needed, consideration should be given to other allocations and policies in the Plan.
- 6.79 The acceptability of extending existing quarries will be assessed on a case-by-case basis and will include the assessment of cumulative impacts which may be associated with continued working and other economic considerations such as market areas.
- 6.80 The performance of operators will be a material consideration in decision-making as outlined in Policy DM15.
- 6.81 Due to the variable nature of soft sand deposits in the Plan area, where suitable resources are identified in appropriate locations, these should be exploited to supplement supply, provided that the development is undertaken in accordance with the relevant Development Management policies.

⁸⁰ National Planning Policy Framework (para. 207 (f)) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

- 6.82 Opportunities for prior extraction should be fully considered as part of an application for non-minerals development within the Minerals and Waste Safeguarding Area in accordance with Policy M2.
- 6.83 A 'specific local requirement' as referenced in M4(3)(diii) is defined as a project within Central and Eastern Berkshire or a neighbouring planning authority area and may include beneficial uses where the primary purpose for its extraction is not for the mineral and it takes place to support other non-mineral developments in a given location e.g. creation of agricultural reservoirs, recreational lakes or borrow pits for a special localised need.
- 6.84 Although borrow pits are not generally supported, there are some circumstances where they are the only sustainable way of providing aggregates for another planned local development project such as the construction of new roads or major built development. This is particularly likely to be the case where a borrow pit would minimise the potential impacts on local communities and the environment. Borrow pits can help to safeguard resources of higher-grade material for primary uses. Proposals for borrow pits will only be permitted where there is a clearly identified need, where the aggregate extracted is for use only within the specific construction projects in which it is related to, and the site is located on land surrounding the construction project, within a 'corridor of disturbance' which would be determined on a case-by-case basis.
- 6.85 Significant infrastructure projects, such as the Heathrow airport expansion proposal, are likely to require borrow pits. Where these sites are already identified in the Joint Minerals & Waste Plan the development considerations should be taken into consideration in the delivery of the Nationally Significant Infrastructure Project.

Monitoring

- 6.86 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Sand and gravel supply	Landbank falls below 7 years of permitted reserves.	Breach over 3 consecutive years.

Supply of recycled and secondary aggregates

- 6.87 Recycled aggregates are those derived from construction, demolition and excavation activities that have been reprocessed to provide materials or a product suitable for use within the construction industry. It includes materials such as soils and subsoil, concrete, brick or asphalt for re-use that would otherwise be disposed. On the other hand, secondary aggregates are usually by-products of other construction or industrial processes. For example, Incinerator Bottom Ash (IBA) at energy recovery facilities is a by-product of the incineration process that can be processed into a secondary aggregate for road construction. Other secondary aggregates include spent railway ballast, recycled glass, plastics and rubber (tyres).
- 6.88 Highway maintenance work has the potential to comprise a relatively large source of recycled aggregate through recycled road planings, asphalt, concrete kerbs and soils.
- 6.89 A significant amount of recycled and secondary aggregate is processed on development and construction sites, but an increasingly large amount is processed at free standing sites or sites located within existing minerals and waste activities such as mineral extraction, waste transfer, materials recovery and landfilling.
- 6.90 No secondary aggregate is produced within Central and Eastern Berkshire.
- 6.91 National policy requires the 'contribution that substitute or secondary and recycled materials can make to the supply of materials to be taken into account, before considering extraction of primary materials'⁸¹. The Central & Eastern Berkshire Authorities do not control how much aggregate is recycled but can enable and encourage recycling facilities to meet demand.
- 6.92 Given the urbanised nature of much of Central and Eastern Berkshire and the development required as part of future development plans, the main source of non-primary aggregates will be recycled aggregates. It will therefore be important that adequate recycling facilities are available to enable aggregates to be recovered from construction and demolition waste.
- 6.93 It is estimated that, based on operator returns to the Aggregate Monitoring survey and Environment Agency permits, the recycling capacity for aggregate in 2018 was 0.39 Million tonnes (Mt). However, due to the temporary nature of the operations and the reality of operations taking place at the sites, the

⁸¹ National Planning Policy Framework (Para. 204 (b)) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

capacity is likely to be more in the region of **0.05 Mt.** The operations will be safeguarded (see Policy M8) and the capacity should be considered as a minimum to be maintained.

Policy M5

Supply of recycled and secondary aggregates

1. Recycled and secondary aggregate production will be supported, in appropriate locations, to encourage investment in new and existing infrastructure to maximise the availability of alternatives to local land-won sand and gravel.
2. The supply of recycled aggregate will be provided by maintaining a minimum of 0.05 million tonnes per annum.

Implementation

- 6.94 Proposals for new sites will be supported where they are in 'appropriate locations' and therefore, comply with all relevant policies within this Plan and W4 (2).
- 6.95 Recycling capacity can be provided by mobile plant operating on construction sites, but further permanent facilities will be necessary to increase the capacity baseline.

Monitoring

6.96 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Aggregate recycling capacity	Aggregate production capacity reduced by more than 5000 tonnes or 10% whichever is greater.	Breach over 2 consecutive years

Energy minerals

Oil and Gas

- 6.97 Oil and gas are nationally important mineral resources and it is government policy that exploration should be supported, and resources exploited subject to environmental considerations.
- 6.98 Oil and gas resources (known as ‘hydrocarbons’) are classed as either ‘conventional’ or ‘unconventional’. Conventional resources are situated in relatively porous sandstone or limestone rock formations. Unconventional sources are found where oil and gas has become trapped within a non-traditional reservoir such as shale rock and as such will require non-traditional methods of extraction.
- 6.99 As shale is less permeable (or easily penetrated by liquids or gases), it requires a lot more effort to extract the hydrocarbons from the rock. However, recent technological advancements have resulted in horizontal drilling which has made tapping into shale deposits more financially viable.
- 6.100 Hydraulic fracturing (sometimes referred to as ‘fracking’) is a technique used in the extraction of oil or gas from shale rock formations by injecting water at high pressure. This process has caused some controversy. Whilst the government identified a pressing need to establish (through exploratory drilling) whether or not there are sufficient recoverable quantities of unconventional oil and gas present to facilitate economically viable full-scale production, hydraulic fracturing will not proceed in England following the publication of new evidence⁸² highlighting that it is not currently possible to accurately predict the probability or magnitude of earthquakes linked with the operation.
- 6.101 There are no known commercial resources of oil and gas in Central and Eastern Berkshire, although viable conventional resources of oil and gas have been identified and are being exploited in neighbouring counties, such as Hampshire.
- 6.102 Oil and Gas licences are granted by the Oil and Gas Authority and confer rights for persons to search for, bore and produce petroleum resources. Oil and gas activity comprise a number of different stages including the exploration of oil and gas prospects, appraisal of any oil and gas found, production and distribution. The production and distribution of oil and gas usually involves the location of gathering stations which are used to process the oil and gas extracted. All stages require planning permission from the relevant mineral

⁸² Oil and Gas Authority Report - <https://www.ogauthority.co.uk/exploration-production/onshore/onshore-reports-and-data/preston-new-road-pnr-1z-hydraulic-fracturing-operations-data/>

planning authority. The development of gathering stations requires more rigorous examination of potential impacts than exploration or appraisal.

- 6.103 There are currently no licence areas within Central and Eastern Berkshire. A former licence area within Windsor (PEDL 236) was relinquished in 2014.
- 6.104 There have also been two exploratory wells within the Central and Eastern Berkshire area, but these were completed in 1966 and 1974 respectively.
- 6.105 The lack of a current licence area and the fact that earlier exploratory wells did not lead to further appraisal or production suggests that there are no opportunities presently for the provision of oil and gas.
- 6.106 It is considered that should technology advances and more information on geological conditions become available, and the situation changes; there are sufficient policies within national planning policy⁸³ to determine any application for oil and gas.

Coal

- 6.107 There is a significant coal seam in West Berkshire which runs into the western edge of Central and Eastern Berkshire. It is deep underground and not considered to be viable for extraction. Due to the depth of the deposits, open cast mining would be impractical, and any exploitation would need to be by underground mining. The coals are present in a thin gas seam and the coal measures are considered as not prospective for coalbed methane.
- 6.108 Whilst it is considered unlikely that an application will come forward for coal extraction, in such event, national planning policy⁸⁴ would provide sufficient guidance in determining any such application.

⁸³ National Planning Policy Framework (most notably Para. 205) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁸⁴ National Planning Policy Framework (most notably Para. 211)

Other non-aggregates

Chalk

- 6.109 In Berkshire, chalk was of some local importance and the use of chalk for agricultural purposes dates back to Roman times.
- 6.110 The geological outcrops of chalk in Berkshire are fairly extensive, but demand for new workings is very limited.
- 6.111 The continuing demand for chalk as agricultural lime is very low. The last active chalk pit in Berkshire, at Pinkneys Green (Hindhay Quarry) near Maidenhead is currently being restored. Some of the chalk from this pit was also used as bulk fill.
- 6.112 Due to lack of demand for chalk for industrial processes there is no requirement to make 15 years provision of chalk (as cement primary) as outlined in national planning policy⁸⁵. As such, no allocations for chalk extraction are required and any future proposals can be determined using Policy M6.

Clay

- 6.113 Common clay was one of the main minerals produced in Berkshire until the 20th century. The most important were the land clay pits of the Lambeth Group and some of these were worked for over 200 years.
- 6.114 Some clay is dug intermittently from deposits near Reading and elsewhere for use as bulk fill or for sealing sites which are to be filled with putrescible waste. These are generally 'one-off' operations, and there appears to be no demand for claypits to be established to serve these markets on a long-term basis.
- 6.115 In the past, Berkshire had numerous small workings for clay for making bricks and tiles, but the mass production of bricks at much larger brickworks elsewhere in the region and the more general use of concrete tiles, has led to the closure of all the brick and tile works within the Berkshire area.
- 6.116 The last remaining brick and tile works was located at Star Works, Knowl Hill, between Reading and Maidenhead. Although the site contains extensive permitted reserves of clay, the manufacture of bricks and tiles ceased during the 1990s.

⁸⁵ National Planning Policy Framework (Para. 208 (c)) – https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

6.117 There have not been any operational claypits permitted to support industrial processes for over 10 years.

6.118 Due to the lack of current brick and tileworks within Central and Eastern Berkshire, there is no requirement to make 25 years provision of brick-making clay as outlined in national planning policy⁸⁶. As such, no allocations for clay extraction are required to support the supply and any future applications can be addressed by Policy M6. However, demand for these minerals will be monitored in case demand increases and markets change.

Policy M6
Chalk and clay

1. Proposals for the extraction of chalk and clay to meet a local requirement will be supported, in appropriate locations, subject to there being no other suitable, sustainable alternative source of mineral available.

Implementation

6.119 Proposals for the extraction of non-aggregate minerals will be supported where they are in 'appropriate locations' and therefore, comply with all relevant policies within this Plan. Chalk and clay in particular will be assessed to consider whether the material concerned is needed to meet a specific local requirement which would supply Central and Eastern Berkshire or the immediate surrounding planning authority areas.

6.120 The supply of clay to landfill sites outside the Plan area would not be favoured because it would likely result in transportation over greater distances. The policy does not seek to establish a maximum or guide distance because there is insufficient evidence available to define such a figure, and criteria may vary. However, in practice it is considered unlikely that a proposal to supply a landfill beyond the 'local requirement' range would be promoted, because the practicalities of distance and alternative supplies closer to the point of use would preclude such proposals being commercially realistic. Similar considerations apply to the supply of chalk for production of agricultural lime.

⁸⁶ National Planning Policy Framework (Para. 208 (c)) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Monitoring

6.121 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Chalk extraction	Amount of chalk extraction in tonnes per annum.	Increase in sales over 5 years.
Clay extraction	Amount of clay extraction in tonnes per annum.	Increase in sales over 5 years.

Aggregate wharves and rail depots

- 6.122 Central and Eastern Berkshire has many close functional interrelationships with its neighbouring authorities. Minerals won and processed in Central and Eastern Berkshire are not necessarily used within the Plan area. Some are likely to be transported elsewhere and at the same time minerals, such as crushed rock, which is not found within Central and Eastern Berkshire, are supplied from elsewhere.
- 6.123 All movements of mineral within the Plan area are undertaken by road as there are currently no aggregate rail depots or wharves within Central and Eastern Berkshire.
- 6.124 National policy encourages the use of sustainable transport⁸⁷. During the life of the Plan, opportunities to utilise navigable stretches of the Thames, or canals or waterways within Central and Eastern Berkshire for water-based transportation of minerals may arise.
- 6.125 Central and Eastern Berkshire is well connected by rail, but it is dependent on rail depots at Theale in West Berkshire. However, establishing aggregate rail depots is difficult due to the limited locations. Freight path capacity, including the timetabling for Crossrail, will also be a restricting factor in supply. The rail depot in neighbouring Slough currently supplies the immediate operations and no further material is transported from the site. However, should the proposed Heathrow airport expansion proceed, the site may provide an opportunity for an aggregate rail depot which could supply the Plan area.
- 6.126 The Kennet & Avon Canal which joins Bristol and Reading via Newbury is a small waterway and is not considered to have significant potential for freight movement⁸⁸. It is currently unknown whether the River Thames is suitable for freight from Windsor Bridge to Staines Bridge although large barges are able to use this waterway⁸⁹. However, this may be limited as the river is non-tidal from Teddington Lock.
- 6.127 The potential for a rail depot or aggregate wharf in the Plan area could reduce local road impacts, although the likelihood of this opportunity is dependent on a number of factors including location of minerals, connectivity and cost.

⁸⁷ National Planning Policy Framework (Para. 102) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁸⁸ WA Policy on Freight on Inland Waterways (2012) - www.waterways.org.uk/pdf/freight_policy

⁸⁹ The River Thames and Connecting Waterways 2013-2014 -

www.gov.uk/government/uploads/system/uploads/attachment_data/file/289796/LIT_6689_3e9c5e.pdf

Policy M7

Aggregate wharves and rail depots

1. Proposals for aggregate wharves or rail depots will be supported:
 - a. At Monkey Island Wharf, Bray (TA 1); and
 - b. In appropriate locations with good connectivity to:
 - i. The Strategic Road Network; and/or
 - ii. The rail network; and/or
 - iii. Minerals infrastructure.

Implementation

- 6.128 The allocation of sites does not convey that planning permission will be automatically granted but indicates that the locations could provide sustainable development subject to the development considerations being addressed (see Appendix A),
- 6.129 Proposals for new sites will be supported where they are in 'appropriate locations' and therefore, comply with all relevant policies within this Plan.
- 6.130 In order to ensure that the proposal allows for the sustainable movement of materials, the site would need to have good connectivity to strategic transport infrastructure or minerals infrastructure such as a quarry or processing plant. Good connectivity is defined by Policy DM11.

Monitoring

- 6.131 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Aggregate rail depot capacity	Capacity (tonnes per annum).	A reduction in capacity over 5 years.
Aggregate wharf capacity	Capacity (tonnes per annum).	A reduction in capacity over 5 years.

Safeguarding other minerals development infrastructure

- 6.132 Safeguarding minerals infrastructure that supports the supply of minerals is just as important as safeguarding mineral resources. Safeguarding minerals infrastructure is a requirement of national planning policy⁹⁰ which states that Mineral Planning Authorities should safeguard: “existing, planned and potential sites for: the bulk transport, handling and processing of minerals; the manufacture of concrete and concrete products; and the handling, processing and distribution of substitute, recycled and secondary material”.
- 6.133 A particular problem that mineral infrastructure faces is the encroachment of incompatible land uses, such as housing, into the locality which may give rise to additional complaints about the existing mineral operations. This may result in a hindrance to operations and restrictions placed on the mineral site which impacts on supply.
- 6.134 Safeguarding potential sites for rail depots and wharves prevents future decisions being made without consideration of potential minerals and waste interests on appropriate sites.
- 6.135 Safeguarding also allows the Central & Eastern Berkshire Authorities to resist other types of future development which could be incompatible with existing minerals infrastructure and operations.

⁹⁰ National Planning Policy Framework (Para. 204 (e)) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Policy M8

Safeguarding minerals infrastructure

1. Facilities for the bulk transport, handling and processing of minerals; the manufacture of concrete and concrete products; and the handling, processing and distribution of substitute, recycled and secondary material within the Plan area will be safeguarded for their on-going use.
2. Where this infrastructure is situated within a host quarry, wharf or rail depot, they will be safeguarded for the life of the host site.
3. Existing, planned and potential sites that enable the supply of minerals in Central and Eastern Berkshire will be safeguarded against development that would prejudice or jeopardise its operation by creating incompatible land uses.
4. Non-mineral development that might result in the loss of permanent mineral infrastructure will only be supported in the following circumstances:
 - a. The site is relocated with appropriate replacement capacity being provided within the Plan area; or
 - b. New capacity is provided within the Plan area which allows for the closure of sites; or
 - c. The requirements of the need for the alternative development are set out in wider Local Plans and development strategies outweigh the need for safeguarding.

Implementation

- 6.136 Any existing or planned mineral operation including rail depot or wharf will be automatically safeguarded and a list of safeguarded sites will be maintained by the Central & Eastern Berkshire Authorities. Safeguarded minerals sites will be shown on the Minerals and Waste Safeguarding Area and associated Consultation Area.
- 6.137 New or replacement capacity would only be considered to satisfy the circumstances outlined in Policy M8 if the capacity is provided within the Plan area.

- 6.138 In line with the “agent of change” principle in national planning policy⁹¹, potentially encroaching development will need to provide adequate mitigation measures to avoid prejudicing or jeopardising the safeguarded site or provide evidence that the safeguarded site will be unaffected.
- 6.139 There may be circumstances where the continued safeguarding of the site may be undesirable due to potential redevelopment opportunities such as regeneration. In these cases, some circumstances may enable the release of existing safeguarded sites.
- 6.140 In cases where aggregate rail depots or aggregate wharves in other Minerals Planning Authority areas provide a supply of aggregate to Central and Eastern Berkshire and are under threat of losing their safeguarding status which would result in a loss of capacity, the Central & Eastern Berkshire Authorities will provide support to defend the safeguarding or support the replacement of the capacity.
- 6.141 Statements of Common Ground with relevant Mineral Planning Authorities will regularly reviewed through the ‘duty to cooperate’. Support will be provided through information sharing, where relevant.

Monitoring

- 6.142 Monitoring Indicator:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Safeguarded permanent mineral sites.	Safeguarded permanent minerals and waste sites developed for other development uses without replacement capacity.	Number of safeguarded permanent minerals and waste sites developed for other development uses without replacement capacity > 0
	Loss of permanent mineral capacity.	Amount of capacity lost (in tonnes) through developed safeguarded permanent mineral sites.

⁹¹ National Planning Policy Framework (Para. 182) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

7. Delivery Strategy for Waste

- 7.1 This section addresses the development principles, spatial strategy and waste capacity needs over the plan period for waste management within Central and Eastern Berkshire.

Waste in Central and Eastern Berkshire

- 7.2 Waste is produced by households, businesses, industry, construction activities, government and non-government organisations, in different quantities and with different characteristics based on local circumstances. The UK already contains a wide network of waste management facilities. However, changes in waste production and efforts to make the best use of the resources contained within waste mean that these facilities and the need for them are continually changing.
- 7.3 Waste Planning Authorities (WPAs) are obliged to prepare Local Plans which identify sufficient opportunities to meet the identified needs of their area for waste management for all waste streams⁹². The review of waste properties enables its classification as non-hazardous, inert and hazardous.
- 7.4 The majority of non-hazardous waste is produced mainly from municipal solid waste (MSW) (sometimes referred to as 'household waste') and commercial and industrial waste (C&I) sources, while inert wastes derive mainly from construction, demolition and excavation (CD&E) activities. Although a minor contribution to the overall arisings, hazardous waste is produced from all three waste sources.
- 7.5 Waste can be managed in different ways, but the waste (management) hierarchy (see Figure 5) is a framework that has become a cornerstone of sustainable waste management, setting out the order in which options for waste management should be considered based on environmental impact (with disposal as the lowest priority). Waste planning has a role to play in driving waste 'up the hierarchy' by ensuring the right amount of appropriate facilities for each part of the hierarchy are planned for in the right place.

⁹² National Planning Policy for Waste (Para. 3) -

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

Figure 3: The Waste Management Hierarchy



Source: Waste Framework Directive (Directive 2008/98/EC)

- 7.6 In 2018 there were more than 30 waste management facilities in Central and Eastern Berkshire. However, these do not provide sufficient waste management treatment capacity for the estimated waste arisings (i.e. waste tonnage produced) in the area throughout the Plan period.
- 7.7 Accordingly, a number of significant movements of waste originating within Central and Eastern Berkshire are treated outside of the Plan area. In particular, identified long term movements of waste from Central and Eastern Berkshire are treated at facilities within the neighbouring Waste Planning Authorities of Oxfordshire, Slough and Surrey.
- 7.8 This section sets out the policies relating to the following issues:
- Safeguarding waste management facilities;
 - Waste capacity requirements;
 - The locations for waste management; and
 - Re-working landfills.
- 7.9 All policies include an explanation of the existing situation, supporting text regarding the policy and details on how the policy would be implemented and monitored.

Sustainable waste development strategy

7.10 Delivering sustainable waste management involves developing strategies and devising policies which will encourage the prudent use of resources whilst also taking into account the potential for waste growth.

7.11 In support of sustainable waste development, the Plan and its associated waste policies aim to support the revised Waste Framework Directive (2008/98/EC)⁹³ targets, of;

“by 2020, the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50 % by weight; and

by 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the list of waste shall be increased to a minimum of 70 % by weight.”

7.12 Bracknell Forest Council, Reading Borough Council and Wokingham Borough Council formed a municipal waste management partnership called Re3 in 1999. Re3 produced a Joint Municipal Waste Management Strategy for the period 2008 to 2013. This was updated in 2016/17⁹⁴ and includes a target to achieve 50% reuse and recycling by 2020. In support of this target, Wokingham Borough Council introduced food waste collection in April 2019. Work is ongoing regarding an overarching update. This Plan will support any subsequent update.

7.13 More recently, the Government’s Resources and Waste Strategy⁹⁵ sets a blueprint for eliminating avoidable plastic waste, doubling resource productivity and eliminating avoidable waste by 2050. As well as a move towards a circular economy, the Strategy sets out challenging targets including:

- 50% recycling rate for household waste (2020);
- 65% recycling rate for municipal solid waste (2035);
- Municipal waste to landfill 10% or less (2035).

⁹³ Waste Framework Directive -

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

⁹⁴ Re3 Joint Municipal Management Strategy (2008 – 2013) -

<http://wokingham.moderngov.co.uk/documents/s10056/Re3%20Waste%20Strategy%20App.pdf>

⁹⁵ Our waste, our resources: a Strategy for England (2018) -

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

- 7.14 A number of significant movements of waste originating in the Plan area for treatment outside of the Plan area have been identified. These movements are scheduled to continue through much of the Plan period and their continuation has been considered in developing the Plan, though the long-term ambition is to achieve waste net self-sufficiency.
- 7.15 As net self-sufficiency seeks to cover the quantity of waste produced in the Plan area, but not necessarily the exact types of waste produced, it is recognised that a certain amount of waste movements in and out of the Plan area will continue.
- 7.16 In line with the Waste Management Plan for England⁹⁶ therefore, the Central & Eastern Berkshire Authorities will plan to provide new waste management facilities of the right type, in the right place and at the right time.

Policy W1

Sustainable waste development strategy

1. The long term aims of the Plan are to provide and/or facilitate sustainable management of waste for Central and Eastern Berkshire in accordance with all of the following principles:
 - a. Encourage waste to be managed at the highest achievable level within the waste hierarchy;
 - b. Locate near to the sources of waste, or markets for its use;
 - c. Maximise opportunities to share infrastructure at appropriate existing mineral or waste sites;
 - d. Deliver and/or facilitate the identified waste management capacity requirements (Policy W3);
 - e. Be compliant with the spatial strategy for waste development (Policy W4).
 - f. Where W1 (e) cannot be achieved, work with other waste planning authorities to provide the most sustainable option for waste management.

Implementation

- 7.17 Proposals will need to demonstrate how the development achieves the highest achievable level within the waste hierarchy and how much residual waste (requiring disposal) will typically be created per annum.

⁹⁶Waste Management Plan for England - <https://www.gov.uk/government/publications/waste-management-plan-for-england>

- 7.18 Depending on the facility type, waste management activities will be supported in principle where waste will be managed as close to its source as possible to reduce long distance transport, or where it is demonstrated that it represents sustainable development.
- 7.19 The Central & Eastern Berkshire Authorities will work jointly in planning for the provision of larger facilities that serve the wider Plan area. They will also work closely with neighbouring Waste Planning Authorities to plan for the provision of facilities that serve the wider South East.
- 7.20 Statements of Common Ground will be regularly reviewed through the 'duty to cooperate' to ensure the relationship with other Waste Planning Authorities outlined are still relevant.
- 7.21 Waste management capacity requirements are set out in Policy W3.
- 7.22 The spatial strategy for waste development is outlined in Policy W4 which includes identified waste sites and location criteria for new waste management development.

Monitoring

7.23 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Effective engagement with other waste planning authorities.	Up-to-date Statements of Common Ground and annual 'duty to cooperate'	n/a
Application of the waste hierarchy.	Recovery capacity	Percentage of recovery capacity delivered is greater than recycling capacity delivered
	Landfill capacity	Percentage of landfill capacity delivered is greater than recovery capacity delivered

Safeguarding of waste management facilities

- 7.24 The Central & Eastern Berkshire Authorities have a network of waste treatment and transfer facilities which are critical to meeting the long-term waste management needs of the Plan area. In addition, there are also a number of significant long-term movements of waste arisings within the Plan area moving outside of the Plan area for treatment.
- 7.25 However, treatment capacity within the Plan area is less than the waste arisings generated. As such, it is considered that all waste management capacity facilities, including treatment and transfer facilities and those which provide a temporary function should be safeguarded from encroachment or loss to other forms of development, particularly in light of increasing pressures on land for competing uses such as housing.
- 7.26 It is important that existing and allocated waste sites are not hindered by 'encroachment' of inappropriate development in close proximity in order that the operational potential of the waste site is not negatively impacted.

Policy W2

Safeguarding of waste management facilities

1. All existing, planned and allocated waste management facilities shall be safeguarded against development that would prejudice or jeopardise their operation by creating incompatible land uses.
2. New waste management facilities will be automatically safeguarded.
3. Non-waste development that might result in a loss of permanent waste management capacity may be considered in the following circumstances:
 - a. The planning benefits of the non-waste development clearly outweigh the need for the waste management facility at the location taking into account wider Local Plans and development strategies; and
 - b. An alternative site providing an equal or greater level of waste management capacity of the same type has been found within the Plan area, granted permission and shall be developed and operational prior to the loss of the existing site; or
 - c. It can be demonstrated that the waste management facility is no longer required and will not be required within the Plan period

Implementation

- 7.27 Waste management sites are less geographically and geologically restricted than mineral sites but can face pressures from incompatible non-waste development. This is because many waste management activities can be located on industrial land, where land rental values can be high. Waste management typically generates less high value end products which means activities on prime industrial locations are not always viable to sustain.
- 7.28 Planning policy has a role to play in protecting waste management sites from competing pressures. It is important to avoid the loss of facilities or allocated waste management sites as this capacity may not be replaced elsewhere. This limits the ability to manage waste close to where it is generated and in sustainable locations in terms of transport, and the ability to maintain provision to meet waste management needs.
- 7.29 Furthermore, to encourage proposals for the necessary level of capacity required over the Plan period, new developed waste management facilities should be automatically safeguarded until the required capacity requirements have been met.
- 7.30 Safeguarded waste sites will be shown on the Minerals and Waste Safeguarding Area and associated Consultation Area.
- 7.31 It is recognised that it is not always appropriate to protect existing waste management sites from redevelopment or encroachment by other uses. Many planning permissions for waste management activities are temporary, which may reflect the aim of returning the land to its previous use or developing / restoring it for an alternative use longer term. Where temporary facilities are safeguarded, this will be for the duration of the planning permission related to the specific activity.
- 7.32 It may be appropriate to redevelop some safeguarded sites if they offer strong regeneration potential. The impact on the overall waste handling capacity would need to be assessed in order to maintain capacity levels. Any change in site use would need to be considered on a case-by-case basis to ensure sufficient waste capacity was maintained in the Plan area.
- 7.33 Sites for waste recovery to land operations using CD&E waste are not safeguarded as these generally involved other land uses and constitute a form of engineering works.
- 7.34 In the case of encroaching future development, it must be demonstrated that mitigation measures are in place to ensure that the proposed development is

adequately protected from any potential adverse impacts from the existing waste development.

- 7.35 Encroaching development is considered as any development which impacts upon the waste management activities or associated activity (such as transport) of a site.
- 7.36 In line with the “agent of change” principle in national planning policy⁹⁷, it will be expected that the potentially encroaching development will need to provide adequate mitigation measures to avoid prejudicing or jeopardising the safeguarded site or provide evidence that the safeguarded site will be unaffected. Different sites will require different assessments, for example encroachment on an inert waste recycling site might require a noise impact assessment while encroachment on a wastewater treatment works would require an odour impact assessment.
- 7.37 Where this infrastructure is located outside of the Plan area, the Central & Eastern Berkshire Authorities will provide support to the relevant Waste Planning Authority should there be the need to defend the safeguarding or support the replacement of the capacity.
- 7.38 Replacement capacity would only be considered to satisfy the circumstances outlined in Policy W2 if the capacity is provided within the Plan area. Alternative facilities will need to be applied for and developed with the specific intent that they are providing replacement capacity.
- 7.39 The replacement capacity can be provided in various ways, including new sites, expansion or intensification of existing sites and across multiple sites. It would be expected that the replacement capacity matches the type of waste management capacity that is being lost or achieves a higher level within the waste hierarchy.

⁹⁷ National Planning Policy Framework (Para. 182) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Monitoring

7.40 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Safeguarding permanent waste infrastructure.	Safeguarded permanent waste sites developed for non-waste uses without replacement capacity.	Number of safeguarded permanent waste sites developed for non-waste uses without replacement capacity > 0
	Loss of permanent waste management capacity	Amount of capacity lost (in tonnes) through developed safeguarded permanent waste sites.

Waste capacity requirements

- 7.41 Waste capacity requirements have been estimated through national data from waste management facilities and national and local information on waste capacity within and near the Plan area. Further details can be found in the Waste Background Study⁹⁸.
- 7.42 The Central & Eastern Berkshire Authorities will aim to provide and/or facilitate sustainable management of waste for Central and Eastern Berkshire within the Plan area. However, given the extent of existing movements of waste to treatment facilities outside of the Plan area, it is recognised that this may be difficult to prevent and that they will have to work with other Waste Planning Authorities outside of the Plan area.
- 7.43 Planning for the management of waste in line with this principle conforms with both National Planning Policy for Waste⁹⁹ and Planning Practice Guidance¹⁰⁰ which highlights that there is no expectation that each local planning authority should deal solely with its own waste to meet the requirements of self-sufficiency.
- 7.44 These movements of waste have an implication on the waste treatment capacity required within Central and Eastern Berkshire. The amount of waste 'imports' and 'exports' to and from the Plan area are not static. However, the capacity requirements identified provide what is considered the minimum additional amount of waste treatment capacity needed within Central and Eastern Berkshire.
- 7.45 Should the waste movements cease within the Plan period, it is expected that additional waste treatment capacity would be required within the Plan area. However, market forces may result in the capacity shortfall being addressed elsewhere.
- 7.46 The capacity requirements outlined in this Plan take into consideration current levels of capacity and seek to address the future arisings expected up to 2036. The key arisings and expected capacity gap are discussed in Table 3.
- 7.47 It is important to note that any calculations of waste arisings and capacity are estimates based on a number of assumptions and approximations. Furthermore, waste arisings are subject to significant yearly fluctuations.

⁹⁸ Waste Background Study (July 2020) – www.hants.gov.uk/berksconsult

⁹⁹ National Planning Policy for Waste (2014) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

¹⁰⁰ Planning Practice Guidance (Waste – Para. 007) - <https://www.gov.uk/guidance/waste>

Table 3 Estimated arisings and capacity gaps (based on 2018 data calculations, as detailed in the Waste Background Study)

Type of waste	Estimated arisings in 2036	Existing and allocated treatment capacity	Capacity gap based on difference between predicted arisings and treatment capacity
	Tonnes per annum		
Non-hazardous	870,000	326,000	543,000
Inert	1,172,000	598,000	574,000
Hazardous	24,100	24,500	-400
Total	2,066,100	948,500	1,116,600

7.48 Each of the above waste streams consists of different materials that may need differing waste facilities. The non-hazardous waste stream can also be subdivided into materials that can be recycled and materials that need to go to recovery in order to divert them from landfill, as well as a small proportion of waste sludge.

7.49 The capacity gap for the main types of materials in each stream is considered in this Plan, while acknowledging that these may change in the future depending on markets, technologies and changes in waste composition.

Recycling capacity requirements for non-hazardous waste

7.50 Recycling is higher up the waste hierarchy than recovery or landfill, so is a preferable form of waste management. It includes a variety of waste streams, such as dry-mixed recyclables, composting and metals.

7.51 In total, taking into account forecast waste growth and the integration of a headroom capacity, detailed material analysis of waste known to be exported from the Plan area shows that around equal quantities of waste are leaving to be recycled, as are being recovered outside the Plan area. However, in order to promote recycling in line with the waste hierarchy, the Plan will aim to provide more recycling than recovery provision, around **300,000 tpa by 2036**.

Residual capacity requirements for non-hazardous waste

Recovery capacity

- 7.52 Treatment through means of recovery is encouraged, if recycling is not possible, in order to keep waste away from landfill.
- 7.53 The Royal Borough of Windsor & Maidenhead sends residual household waste to the Ardley Energy Recovery Facility (ERF) in Oxfordshire under a contractual agreement due to run to 2030, although two 5-year extensions have been agreed within the current arrangement which could extend this to 2040.
- 7.54 In addition, residual household waste from the Re3 Authorities (Bracknell Forest, Reading and Wokingham) is sent to the Lakeside ERF in Slough under a contract to 2031. This facility is immediately adjacent to the Plan area and meets the proximity principle for managing waste, that waste is managed as close as possible to the source.
- 7.55 The long-term contracts with these two facilities and the close working relationship, particularly between the Central & Eastern Berkshire Authorities and Slough Borough Council, mean that these waste movements are likely to continue in the future and address some of the capacity needs for arisings from the Plan area. However, any changes to the ability to send waste for recovery to these two facilities, particularly the Lakeside ERF, will significantly impact the projected waste capacity gap in the Plan area.
- 7.56 The Government has indicated that it prefers the proposed additional runway at Heathrow airport as an airport expansion option¹⁰¹ and, should the proposal proceed, Heathrow will submit a Development Consent Order (DCO) application to the Planning Inspectorate.
- 7.57 It is currently uncertain as to whether the Lakeside ERF will be lost or alternatively relocated. A planning application has been submitted for relocation to a site nearby. However, relocating such a facility is a complex project that is still subject to negotiation and practical considerations, as well as planning consents and other permits.
- 7.58 The potential loss of this facility would have a significant impact on waste capacity requirements within the Plan area and across the wider region. There are a number of other waste streams processed in facilities that are part of the Lakeside complex or nearby that could also be affected by the proposed

¹⁰¹ Government announcement regarding Heathrow expansion - www.gov.uk/government/news/government-decides-on-new-runway-at-heathrow

expansion of Heathrow and would further exacerbate the provision of waste capacity in the area.

7.59 In addition to these movements, some non-hazardous waste originating from the Plan area, which has the potential to be treated through recovery, is currently sent to non-hazardous landfills outside of the Plan area.

7.60 As discussed in the Recycling capacity requirements section, while similar amounts of waste are known to go to recycling and recovery facilities outside the Plan area, in line with the waste hierarchy more recycling capacity is planned, leaving around **245,000 tpa** of recovery capacity to be provided.

7.61 The recovery requirement can be delivered through a range of technologies including anaerobic digestion, combined heat and power, gasification and pyrolysis.

Landfill capacity

7.62 Despite the level of effective technology currently available to divert waste away from landfill, there is still a requirement for this option for dealing with wastes which cannot currently be recycled, or which are contrary to the input specification of recovery and pre-recovery treatment facilities.

7.63 Non-hazardous waste arising from Central and Eastern Berkshire is currently sent to landfill. Nearly half is sent to the Sutton Courtenay Landfill (Oxfordshire), which has planning permission until 2030 with no further non-hazardous landfill provision planned in Oxfordshire.

7.64 In 2017, Star Works landfill site at Knowl Hill near Maidenhead was the only operational landfill site within Central and Eastern Berkshire which accepted non-hazardous waste. This operation has since ceased, and the landfill is due to be restored by 2021¹⁰².

7.65 The South East Waste Planning Advisory Group (SEWPAG) has recognised that, with the early closing of landfill sites and the successful diversion of waste from landfill, there is likely to be a move towards regionally strategic landfill sites in the near future¹⁰³.

7.66 Additional non-hazardous landfill capacity will therefore be considered where there is a clearly demonstrated need.

¹⁰² Subject to any applications for extension of time.

¹⁰³ The Central & Eastern Berkshire Authorities are members of SEWPAG and signatories of a number of relevant position statements

Hazardous waste capacity requirements

- 7.67 Hazardous waste and the facilities required to manage it are often of a regional or national nature as the quantities of waste from each local authority are too small to justify a greater number of facilities. As such, this waste can travel further than other types of waste.
- 7.68 The hazardous waste generated within the Plan area is treated in various facilities across a number of local authority areas.
- 7.69 It is estimated that there is no further requirement for additional treatment capacity by the end of the Plan period. However, provision of additional hazardous waste facilities may still be necessary due to the specialist nature of this waste and the likelihood that it is transported further than other types of waste.

Sludge, liquid, effluent and waste water treatment capacity requirements

- 7.70 There is currently very limited capacity for sludge treatment within the Plan area. The majority of this arising is managed by Thames Water facilities in neighbouring areas, most notably in Slough and Surrey.
- 7.71 This may be a particular waste stream that needs to be accommodated within the Plan area, in order to enable this type of waste to be managed as close to where it is produced as possible.
- 7.72 Capacity requirements for the treatment of waste water are usually considered in the Business Plans of the relevant water companies. Thames Water's 2020-2025 Business Plan¹⁰⁴ outlines that it will invest in 48 wastewater treatment sites and there are plans to increase the reuse of wastewater.

Inert recycling and recovery capacity

- 7.73 The majority of inert waste is treated outside of the Plan area, predominantly at facilities in West Berkshire and Oxfordshire.
- 7.74 Even considering various planned schemes, and end dates of existing treatment capacity within the Plan area, there is still likely to be a need for around **575,000 tpa by 2036** of additional inert recycling, or recovery capacity.

¹⁰⁴ Here for you: Our Business Plan 2020 to 2025 (Thames Water) - <https://corporate.thameswater.co.uk/-/media/Site-Content/Thames-Water/Corporate/AboutUs/Our-strategies-and-plans/PR19/Our-plan-2020-to-2025.pdf>

- 7.75 This need can be delivered through a range of technologies such as recycled aggregate processing or through infill of material used in restoration or engineering projects to mitigate flood risk, such as that at Green Park Village in Reading.
- 7.76 Policy M3 aims to provide a steady and adequate supply of sand and gravel at an average rate of 0.628 Mtpa. Depending on restoration proposals, future sites in the Plan area that provide this supply may necessitate inert infill and provide inert recovery capacity.
- 7.77 It is recognised that there are data limitations to any waste arisings methodology and that the use of assumptions reduces the accuracy of the figures¹⁰⁵. Furthermore, inaccuracies in waste data coding and collection, as well as year on year variations, add further uncertainty. Therefore, the identified level of capacity provision provides a guide for the types of capacity that will be required in the form of a minimum treatment capacity requirement for the Plan area over the Plan period.

Policy W3

Waste capacity requirements

1. Additional waste infrastructure capacity within the Plan area will be granted in appropriate locations, to provide a minimum of:
 - 300,000 tpa non-hazardous recycling capacity;
 - 245,000 tpa non-hazardous recovery capacity;
 - 575,000 tpa of inert recycling or recovery capacity.
2. Hazardous waste management facilities, waste water or sewage treatment plants and non-hazardous waste landfill for residual waste will be supported, in appropriate locations, where there is a clear and demonstrable need.

Implementation

- 7.78 Proposals will need to demonstrate how the development achieves the highest possible level within the waste hierarchy and how much residual waste (requiring disposal) will typically be created per annum.

¹⁰⁵ Waste: Background Study (July 2020) – www.hants.gov.uk/Berksconsult

- 7.79 Depending on the facility type, waste management activities will be supported in principle where waste will be managed as close to its source as possible to reduce long distance transport, or where it is demonstrated that it represents sustainable development.
- 7.80 The Central & Eastern Berkshire Authorities will work jointly in planning for the provision of larger facilities that serve the wider Plan area and will also work closely with neighbouring Waste Planning Authorities to plan for the provision of facilities that serve the wider South East.
- 7.81 Proposals for non-hazardous landfill will be required to demonstrate their need as well as ensuring that;
- a) no acceptable alternative form of waste management further up the waste hierarchy is achievable; and
 - b) the site does not affect a Principal Aquifer and is outside Groundwater Protection and Flood Risk Zones; and
 - c) the site provides for landfill gas collection and energy recovery.
- 7.82 Where Energy recovery development is being proposed, it must:
- a) be used to divert waste from landfill, where other waste treatment options further up the waste hierarchy have been discounted; and
 - b) provide and be designed to allow for the exploitation of both heat and power generated by the facility; and
 - c) provide sustainable management arrangements for waste treatment residues arising from the facility.
- 7.83 Proposals to treat sludge, liquid, effluent and waste water will need to demonstrate;
- a) There is a clearly demonstrated need to provide additional capacity via extensions or upgrades for the treatment of sludge, liquid, effluent and waste water, particularly in planned areas of major new development; and
 - b) they do not breach either relevant 'no deterioration' objectives or environmental quality standards; and
 - c) where possible (subject to relevant regulations), they make provision for the beneficial co-treatment of sewage with other wastes and biogas is recovered for use as an energy source.
- 7.84 Other liquid waste treatment plant proposals that contribute to the treatment and disposal of oil and oil/water mixes and leachate will be expected to be located as near as possible to its source.
- 7.85 Aggregate recycling facilities accept hard inert material which is crushed and filtered to produce recycled and secondary aggregates of various grades. The

softer materials like soils, chalk and clay can also be recovered whereby they may be used as beneficial fill materials for landscaping, for example. To increase the management of inert waste higher up the waste hierarchy, all inert waste elements capable of producing high quality recycled aggregates should be removed for recycling.

Monitoring

7.86 Monitoring of waste arisings and progress in increasing capacity will be particularly important as waste quantities can vary considerably from year to year, making predictions of growth less reliable. Growth rates will be regularly checked, while allowing enough time for yearly fluctuations to even out.

7.87 Monitoring Indicators:

Monitoring Issue	Monitoring Trigger	(Threshold) for Policy Review
Capacity of waste management facilities	Net loss of waste management capacity from closure of sites	Breach over 3 consecutive years
Significant changes to waste arisings	Year on year growth of more than 5%	Cumulative breach over 5 years
Loss of the Lakeside ERF	Facility no longer accepting Plan area waste	Loss of Lakeside facility without replacement.
Hazardous waste capacity	Hazardous waste treatment and transfer management capacity	Hazardous waste treatment and transfer management capacity is lower than arisings*

*Transfer included as it is recognised that this waste generally travels further due to its specialist nature

7.88 The following minimum targets for waste management provision will also be monitored to ensure that Policy W3 is on track to address the increase in required capacity through the Plan period.

Non-hazardous recycling or recovery (cumulative extra capacity)			
	By 2025	By 2030	By 2036
	Tonnes per annum		
Non-hazardous recycling capacity	95,000	190,000	300,000
Non-hazardous recovery capacity	75,000	155,000	245,000
Inert recycling or recovery capacity	180,000	360,000	575,000

Locations and sites for waste management

7.89 Modern waste management facilities can be located on different types of land, if the location is appropriate for the proposed activity. In Central and Eastern Berkshire, the existing network of facilities is generally focused on the main urban areas, although some facilities such as composting tend to be in more rural areas.

Types of waste management facilities

- 7.90 Recycling and recovery facilities enclosed in buildings are typically of an industrial nature and deal with largely segregated materials. Activities involve preparing or sorting waste for re-use and include materials recovery facilities (MRF), waste transfer stations (WTS), dis-assembly and re-manufacturing plants, and reprocessing industries. Potential nuisances such as dust and noise can be mitigated as the activity is enclosed, meaning these facilities are compatible with industrial estates.
- 7.91 Smaller-scale facilities (with an approximate throughput of up to 50,000 tonnes per annum and requiring sites of 2 hectares or less) will normally be compatible with most general industrial estates.
- 7.92 Larger scale enclosed premises (typically requiring sites of 2-4 hectares, with a throughput in excess of 100,000 tonnes per annum) and facilities with a stack are likely to be located on larger industrial estates or suitable brownfield sites.
- 7.93 Sites suitable for general industrial uses are those identified as suitable for B2 (including mixed B2/B8), or some uses within the B8 use class¹⁰⁶ (namely open-air storage). Waste management uses would not normally be suitable on land identified only for B1 (light industrial uses), although a limited number of low impact waste management uses (e.g. the dis-assembly of electrical equipment) may be suitable on these sites. Some industrial estates will not be considered suitable for certain waste management facilities because for instance the units are small, the estate is akin to a business park or it is located close to residential properties.
- 7.94 Energy Recovery Facilities (ERFs) which include advanced thermal treatment processes such as pyrolysis and gasification/plasma conversion require built facilities and, in some cases, a stack (i.e. chimney). Sites must be carefully selected and sensitively designed to avoid visual and other amenity and

¹⁰⁶ The Town and Country Planning (Use Classes) Order 1987 - <http://www.legislation.gov.uk/uksi/1987/764/schedule/made> - as amended by The Town and Country Planning (Use Classes) (Amendment) (England) Order 2010 - <http://www.legislation.gov.uk/uksi/2010/653/article/2/made>

environmental impacts and to provide renewable energy to serve the surrounding area. The location of these facilities is influenced by the location of those using the heat and energy generated and the need to access fuel feedstock. This means that where appropriate, energy recovery Combined Heat and Power (CHP) plants (which may also include non-waste fuel sources) may be encouraged alongside new and existing developments, or near sources of fuel feedstock. Small-scale community-based CHP schemes may be suitable within planned major development or regeneration areas or in mixed-use schemes. CHP could also be used in remote rural areas that do not have access to mains gas supplies.

- 7.95 Recycling and recovery activities which predominantly take place in the open (outside buildings) or involve large areas of open-air storage include biological waste treatment (including composting), construction, demolition and excavation (CD&E) recycling, end-of-life vehicle processing and some Household Waste Recycling Centres or Civic Amenity sites. Because these activities can create noise, odours and other emissions, they are not easily assimilated in built-up areas.
- 7.96 Some activities will be more 'hybrid' in nature, requiring sites with buildings and open storage areas. These may include outdoor MRF or waste transfer station (WTS), wharves and rail sidings for waste transshipment and/or storage. In most cases, the co-location of waste management facilities or processes to increase the recycling and recovery of waste is supported, particularly when the feedstock or outputs are well related.

Locations and sites in Central and Eastern Berkshire

- 7.97 A number of sites have been identified as being appropriate locations, in principle, for hosting waste management activities which are outlined in Appendix A.
- 7.98 These sites are not sufficient to meet the future waste management requirements of Central and Eastern Berkshire up to the end of the Plan period and therefore, it is expected that further new sites will come forward through market-led delivery.
- 7.99 A review of industrial estates and employment land¹⁰⁷ has identified industrial estates and/or employment sites that are suitable for locating waste management facilities in the boroughs of Bracknell Forest, Reading and

¹⁰⁷ Waste: Proposals Study (July 2020) – www.hants.gov.uk/berksconsult

Wokingham. These estates and sites are existing, or proposed, allocations for land uses which are considered compatible to waste uses.

- 7.100 This Plan does not seek to allocate the industrial estates or employment sites as this provision is made within the wider Development Plan.
- 7.101 The review concluded that 25 sites (referred to as ‘Preferred Waste Areas’) are potentially suitable for waste uses ranging from ‘Activities requiring a mix of enclosed buildings/plant and open ancillary areas (possibly involving biological treatment)’ to ‘Activities requiring enclosed building with stack (small scale)’ (see Appendix B and Appendix C for more details).
- 7.102 All waste management has transport implications and transport impacts, and these should be minimised by ensuring that sites have good connectivity to the strategic network which is the principal transport network for moving waste in the Plan area.
- 7.103 The spatial approach to delivering new waste management capacity aims to allow waste capacity to be sited as close to the source and markets of the waste. Waste facilities will also need to support planned areas of major new development.

Policy W4

Locations and sites for waste management

1. The delivery of waste management infrastructure will be supported within:
 - a. Preferred Waste Areas listed in Appendix C; or
2. Where waste management infrastructure cannot be accommodated within the Preferred Waste Areas:
 - a. Allocated sites:
 - i. Berkyn Manor Farm, Horton (WA 1)
 - ii. Horton Brook Quarry, Horton (WA 2)
 - iii. The Compound, Stubbings, Maidenhead (WA 3)
 - b. Appropriate locations, where the site has good connectivity to the strategic road network; and
 - i. Areas of major new development; or
 - ii. Sources of waste; or
 - iii. Markets for the types of waste to be managed; and
 - iv. One or more of the following features:
 - Is existing or planned industrial or employment land; or
 - Is a suitable reuse of previously developed land; or
 - Is within redundant farm or forestry buildings and their curtilages or hard standings; or
 - Is part of an active quarry or active landfill operation; or
 - Is within or adjoins sewage treatment works and the development enables the co-treatment of sewage sludge with other wastes; or
 - There is a clear proven and overriding need for the proposed facility to be sited in the proposed location.

Implementation

- 7.104 The allocation of sites does not convey that planning permission will be automatically granted but indicates the locations that could provide sustainable development subject to the development considerations being addressed (see Appendix A).

- 7.105 Proposals for new sites will be supported where they are in ‘appropriate locations’ and therefore, comply with all relevant policies within this Plan.
- 7.106 The sites outlined in Policy W4 (2/a) are entirely located within the Green Belt which has special protection in respect to development. However, these sites are allocated for waste management purposes for the following reasons, in accordance with National Policy¹⁰⁸:
- a) Consideration is given first to locating waste management facilities within Preferred Waste Areas, which are not located within the Green Belt.
 - b) Where there is no capacity within the Preferred Waste Areas or the locational needs of the waste management facility prevents it being accommodated within the Preferred Waste Areas, the lack of available sites outside of the Green Belt will need to be taken into consideration as part of the exceptional circumstances.
- 7.107 The Preferred Waste Areas identified in Appendix C have been assessed on their suitability for waste management. However, planning permission will not be automatically granted, and the proposals will need to comply with all relevant policies within this plan as well as consider the wider Local Plans and development strategies for Central and Eastern Berkshire.
- 7.108 Proposals for further waste management development will be supported where they are in ‘appropriate locations’ and therefore, comply with all relevant policies within this Plan. Evidence of the requirement for a particular location will need to be provided in addition to compliance with the other relevant policies in the Plan.
- 7.109 All sites must have ‘good connectivity’ to the sources, or markets and strategic transport routes as defined by Policy DM11.
- 7.110 Opportunities to provide waste treatment facilities at existing developed locations in addition to those outlined in Appendix C such as employment sites where general industrial and distribution activities are located (B2/B8 land uses)¹⁰⁹, or on previously developed land are strongly supported.

¹⁰⁸ National Planning Policy for Waste (Para. 6) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

¹⁰⁹ The Town and Country Planning (Use Classes) Order 1987 -

<http://www.legislation.gov.uk/ukxi/1987/764/schedule/made> - as amended by The Town and Country Planning (Use Classes) (Amendment) (England) Order 2010 - <http://www.legislation.gov.uk/ukxi/2010/653/article/2/made>

- 7.111 In accordance with the other policies in this Plan, activities involving open areas will only be supported if they do not have adverse environmental impacts, and noise and emissions are controlled by effective enclosure and other techniques.
- 7.112 There may be a special need or circumstances where both enclosed and open-air facilities can be justified on sites outside main urban areas. Facilities may require a more rural location because this is closer to the source of the waste being treated or the activity is related to an agricultural activity. For instance, anaerobic digestion (AD) plants and composting facilities may need to be located where there is an available feedstock and where residues can be disposed to land for beneficial purposes. Proposals would generally be of a smaller scale than that proposed in urban areas or on edge of the urban / rural area (the urban fringe).
- 7.113 Proposals requiring a more rural location will be required to demonstrate a special need or explain why the waste management activity should be located at that particular site.
- 7.114 Facilities for recycling, particularly inert or construction, demolition and excavation (CD&E) waste, that produce recycled or secondary aggregate, are sometimes located in historic landfills or current/former quarries. In almost all cases, it is expected that that former quarries or landfills will be restored but there may be exceptions where the benefits from continued development at some host locations are considered to be more sustainable than re-locating the development elsewhere. CD&E waste recycling facilities can also be acceptable on some industrial sites, particularly in close proximity to sources of waste.
- 7.115 New waste water and sewage treatment plants, extensions to existing works, or facilities for the co-disposal of sewage with other wastes will be supported where the location minimises any adverse environmental or other impact that the development is likely to give rise to, and the site is considered appropriate by meeting all relevant policies within this Plan.
- 7.116 The co-location of activities with existing operations will be supported, where appropriate, if commensurate with the operational life of the site, and where it would not result in intensification of uses that would cause unacceptable harm to the environment or communities in a local area (including access routes), or prolong any unacceptable impacts associated with the existing development.

7.117 A number of development projects¹¹⁰ are planned over the Plan period. These projects will have implications for waste management and also provide opportunities to host appropriate waste management development, particularly within major areas of development such as at Grazeley, a possible Garden Settlement which includes land in Wokingham and Reading.

Monitoring

7.118 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Appropriately located waste management.	Permissions in accordance with Policy W4 (2/b)	Number of permissions in accordance with Policy W4 (1/a and 2/a) > than those in accordance W4 (2/b)

¹¹⁰ Minerals / Waste: Background Study (July 2020) – www.hants.gov.uk/berksconsult

Re-working landfills

- 7.119 There may be opportunities for the re-working of former landfill sites to either remove existing landfilled materials in order to reuse the land or void, or to exploit benefits from the in-situ material itself. Such materials may be valuable and therefore the re-working of such sites would enable the value to be recovered in addition to providing additional landfill capacity if needed.
- 7.120 One former landfill site within Central and Eastern Berkshire has already been successfully reworked, albeit to enable the delivery of residential development rather than the reuse for waste. The former Badnell's Pit in Maidenhead was given permission by the Planning Inspectorate in March 2006 for the removal of landfill waste and replacement with clean fill.
- 7.121 Having been subject to unregulated landfill activities between the 1940s and 1960s, the site was heavily contaminated and there were concerns that removal of the material would cause a serious risk to health. However, the Planning Inspectorate concluded that, subject to conditions, the benefits of the proposed development were sufficient to outweigh the harm that might be caused. The site is now known as Boulters Meadow and is a residential development with over 400 homes.

Policy W5

Reworking landfills

1. Proposals for the re-working of landfill sites will only be permitted in appropriate locations where the proposals would result in beneficial use of the land and of the material being extracted; and, where appropriate, the landfill by-products.

Implementation

- 7.122 The extent of the opportunities for re-working of landfill sites in Central and Eastern Berkshire is unknown and it is likely that considerable work may need to be undertaken to ascertain the 'value' of the sites in Central and Eastern Berkshire by any potential developer. However, pressure on land for housing may result in these opportunities becoming more economically beneficial. Therefore, consideration should be given to the wider Development Plan for Central and Eastern Berkshire.

7.123 By-products associated with the landfill may include the leachate and/or the gas.

7.124 Proposals for re-working landfills will only be permitted which comply with all relevant policies within this Plan.

7.125 Proposals brought forward for the re-working of landfill will also need to consider backfill materials, if applicable, as part of the planned restoration.

Monitoring

7.126 Monitoring Indicators:

Monitoring Issue	Monitoring Indicator	(Threshold) for Policy Review
Appropriate re-working of landfills.	Permissions not in accordance with Policy W5	Number of Permissions not in accordance with Policy W5 > 0

Appendix A – Allocated Sites

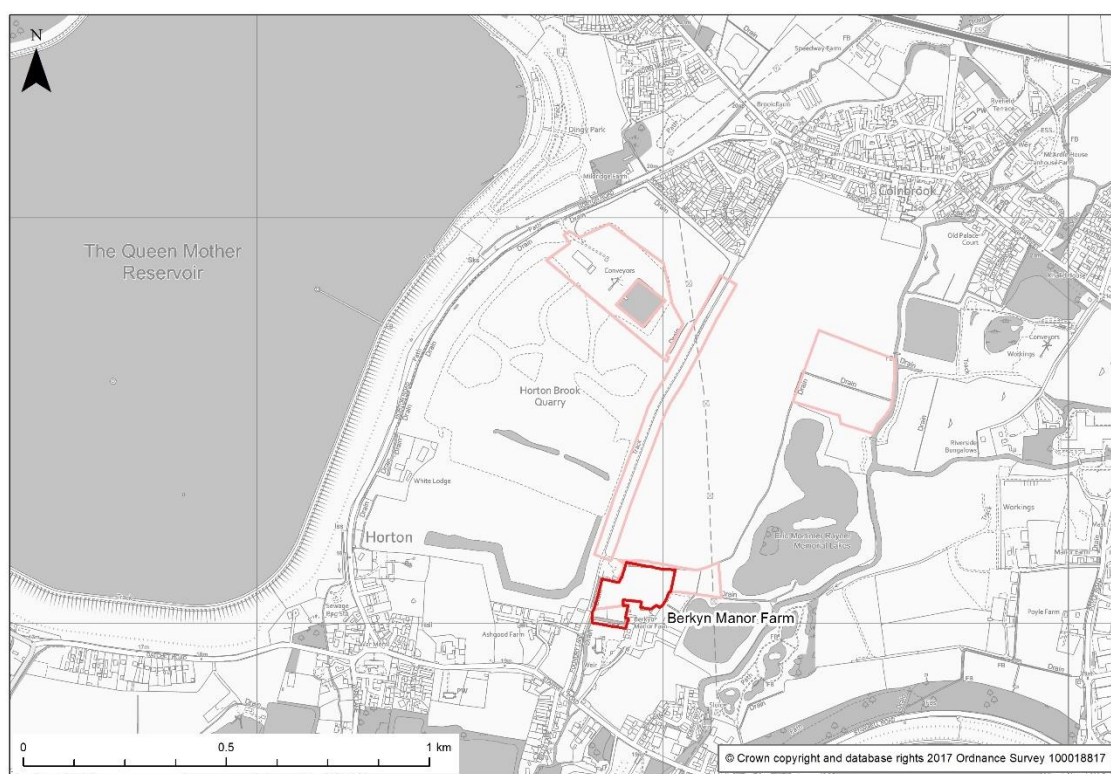
1. The following appendix provides information on the minerals and waste sites (listed alphabetically) that are allocated within the Plan:

Site Reference	Site Name	Location	Local Plan Authority	Proposal
WA 1	Berkyn Manor Farm	Horton	RBWM	Waste Management
WA 2	Horton Brook Quarry	Horton	RBWM	Waste Management
MA 1	Horton Brook and Poyle Quarry Extension	Horton	RBWM	Sand and Gravel Extraction
TA 1	Monkey Island Wharf	Bray	RBWM	Aggregate Wharf
MA 2	Poyle Quarry Extensions	Horton	RBWM	Sand and Gravel Extraction
WA 3	Stubbings Compound	Pinkneys Green	RBWM	Waste Management

2. The delineation of the site is shown by the red boundary. In the case of mineral extraction sites, it does not mean that working would extend to the site boundary as the allocation needs to include provision for buffer zones and mitigation measures. These will be determined through detailed site investigation, taking into account the development considerations for each site. Such measures will be covered by the planning permission, including the relevant conditions and / or legal agreements. It may also include provision for ancillary development such as plant, offices, access and weighbridge.
3. In the case of waste sites, types of waste activity that are considered suitable are provided. More detail on these activities is provided in Appendix B.
4. Development considerations are identified in the text accompanying each map in this appendix. They should be addressed alongside the other policies of the Plan. Development should be designed with appropriate mitigation measures, where applicable, to avoid or mitigate its impacts on the environment and local communities. Development considerations apply to minerals and waste developments in Central and Eastern Berkshire but may also include impacts that extend beyond the Plan boundary.

5. Development cannot be permitted if it may negatively affect the integrity of European protected sites. The development requirements for maintaining this integrity are identified with an asterisk (*) in the text and must be addressed.
6. The Plan does not specify how the development considerations may be addressed. This will be assessed at the planning application stage, which should present the most appropriate responses, which are likely to include detailed site appraisals and Environmental Impact Assessment (EIA). These will identify what effects the development will have, and how to tackle them. All assessment information and suggested mitigation measures should be clearly identified and form part of the pre-application discussions and consultation with communities.
7. For any development proposal at the sites identified in the Plan, all elements of the Plan need to be considered as well as the site-specific development considerations outlined in this Appendix.

Berkyn Manor, Horton (WA 1)



Local Planning Authority: The Royal Borough of Windsor & Maidenhead

Existing Use: Working farm estate with some industrial use.

Proposal: Green waste and / or energy recovery.

Waste activity categories:

Category	Activity
1	Open sites or ancillary open areas (possibly biological treatment)
2	Mix of enclosed buildings/plant and open ancillary areas (possibly involving biological treatment)
3	Enclosed industrial premises (small scale)
4	Enclosed industrial premises (large scale)

Area: 2.7 ha

Development Considerations:

Ecology

- Protection of South West London Waterbodies Special Protection Area (SPA)/Ramsar*.
- Impacts on all roosting and foraging areas used by qualifying bird species of South West London Waterbodies SPA and Ramsar, in particular open grasslands within and adjacent to the site*.

- Impacts to Wraysbury reservoir Site of Special Scientific Interest (SSSI), Staines Moor SSSI, Wraysbury No.1 Gravel Pit SSSI, Wraysbury and Hythe End Gravel Pit SSSI.
- Impacts to Queen Mother Reservoir Local Wildlife Site (LWS), Arthur Jacob Nature Reserve LWS, Colne Brook LWS Horton and Kingsmead Lakes LWS.
- Consideration of hydrological impacts.
- Retention and buffering of hedgerows within site.
- Consideration of the Colne Valley Gravel Pits and Reservoirs Biodiversity Opportunity Area in restoration or operational landscaping.
- The restoration of the site must consider to the Colne and Crane Valleys Green Infrastructure Strategy (2019) and to the Joint Connectivity Statement¹¹¹.

Landscape & Townscape

- Existing vegetation should be conserved and protected, and additional buffer planting established to all boundaries.
- Enhanced screening is required.

Historic Environment:

- A Heritage Impact Statement is required.
- The setting of Grade II Listed Building to the south needs to be considered.

Transport:

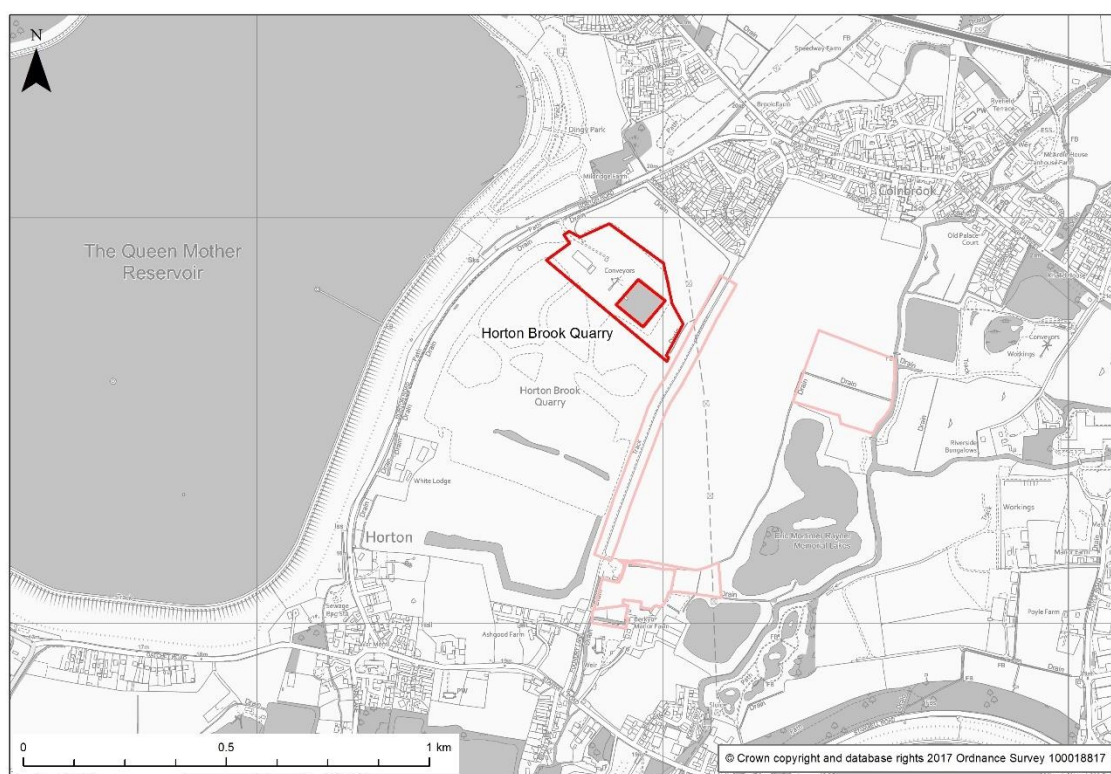
- A new access onto Poyle Road is required for mineral use and further investigation is required for a suitable access onto Stanwell Road for waste uses.
- A Transport Assessment or Statement is required.
- A HGV Routeing Agreement will be required.

Flood Risk & Water Resources

- A Flood Risk Assessment and Hydrological/Hydrogeological Assessment will be required.
- Proximity to major / minor aquifers, in addition to Source Protection Zones.

¹¹¹ Joint Connectivity Statement between the Colne Valley Regional Park, Slough Borough Council, RBWM and the Buckinghamshire authorities.

Horton Brook Quarry, Horton (WA 2)



Local Planning Authority: The Royal Borough of Windsor & Maidenhead

Existing Use: Existing operational sand and gravel quarry.

Proposal: Inert recycling.

Waste activity categories:

Category	Activity
1	Open sites or ancillary open areas (possibly biological treatment)
2	Mix of enclosed buildings/plant and open ancillary areas (possibly involving biological treatment)
3	Enclosed industrial premises (small scale)
4	Enclosed industrial premises (large scale)

Area: 55 ha

Development Considerations:

Ecology

- Protection of South West London Waterbodies Special Protection Area (SPA)/Ramsar*.
- Impacts on all roosting and foraging areas used by qualifying bird species of South West London Waterbodies SPA and Ramsar, in particular open grasslands within and adjacent to the site*.

- Impacts to Wraysbury reservoir Site of Special Scientific Interest (SSSI), Staines Moor SSSI, Wraysbury No.1 Gravel Pit SSSI, Wraysbury and Hythe End Gravel Pit SSSI.
- Impacts to Queen Mother Reservoir Local Wildlife Site (LWS), Arthur Jacobs Nature Reserve LWS, Colne Brook LWS, and Horton and Kingsmead LWS
- Retention and protection of a part of the site for nature conservation purposes during operation.
- Considerations of the objectives of the Colne Valley gravel Pits and Reservoirs Biodiversity Opportunity Areas (BOA) in restoration or operational landscaping proposals.

Landscape & Townscape

- Proposals should ensure adequate space is set aside for the establishment of a strong new landscape structure for this group of sites (Poyle Quarry and extensions, Berkyn Manor and Horton Brook) including large scale native species tree belts.
- Integrate new structures with effective screen planting, including along boundaries.
- Restoration proposals should have reference to the Colne Valley Gravel Pits and Reservoirs BOA.
- Restoration of the site must give consideration to the Colne and Crane Valleys Green Infrastructure Strategy (2019) and to the Joint Connectivity Statement¹¹².

Transport:

- A Transport Assessment or Statement is required.
- An HGV Routeing Agreement will also be required (or maintain existing).

Flood Risk & Water Resources

- A Flood Risk Assessment and Hydrological/Hydrogeological Assessment will be required.
- Proximity to major / minor aquifers, in addition to Source Protection Zones.
- Consideration of the Colne Brook and its river corridor.

Utilities

- Statutory safety clearance of National Grid infrastructure.

¹¹² Joint Connectivity Statement between the Colne Valley Regional Park, Slough Borough Council, RBWM and the Buckinghamshire authorities.

Existing Use: Bridleway (Colne Valley Way).

Area: 3.75 ha

Ecology

- Central and Eastern Berkshire: Joint Minerals & Waste Plan
Proposed Submission (July 2020)*

Landscape & Townscape

- The Colne Valley Way Trail will need to be temporarily diverted and re-established as part of the restoration and applicants will need to work closely with the relevant authorities and the Colne Valley Regional Park.
- The bridleway route and restoration of the site must seek to improve connectivity and enhance the local public access network and give consideration to the Colne and Crane Valleys Green Infrastructure Strategy (2019) and to the Joint Connectivity Statement¹¹³.

Transport:

- A Transport Assessment or Statement is required.
- An HGV Routeing Agreement will also be required (or maintain existing).

Historic Environment

- The archaeological potential is high and will need to be addressed during the determination of the planning application.

Flood Risk & Water Resources

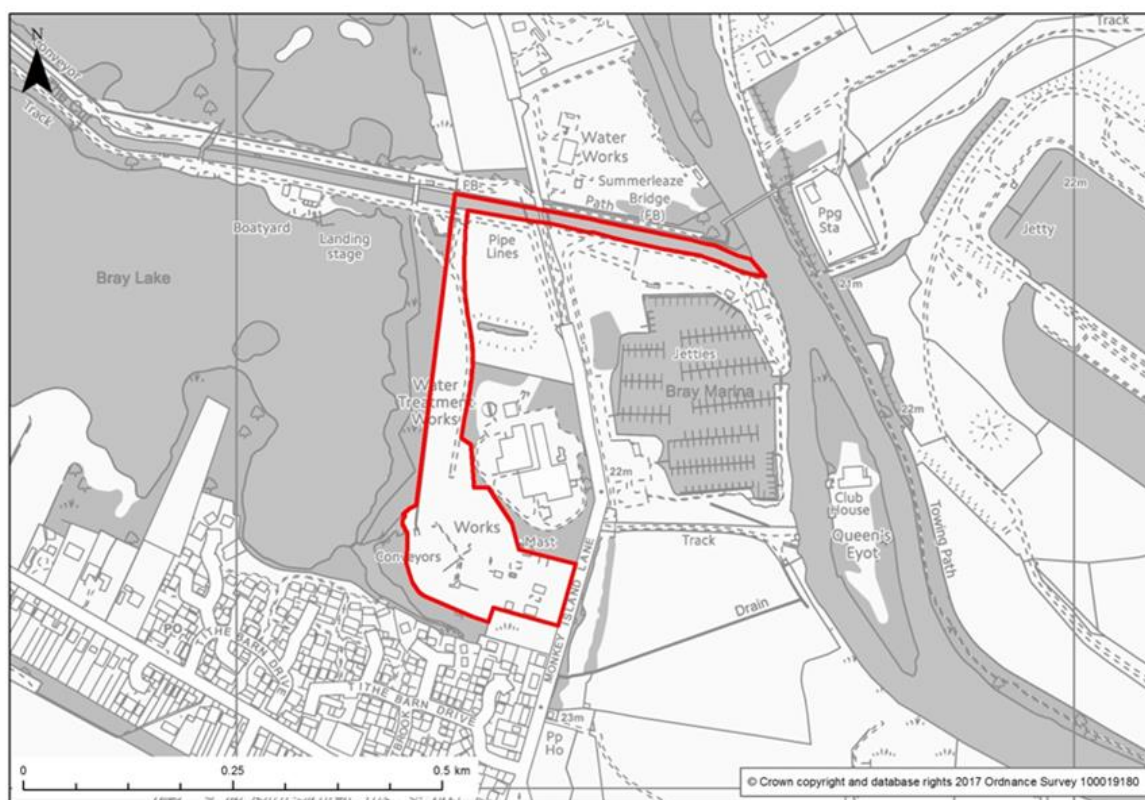
- A Flood Risk Assessment and Hydrological/Hydrogeological Assessment is required.

Utilities

- Statutory safety clearance of National Grid infrastructure.

¹¹³ Joint Connectivity Statement between the Colne Valley Regional Park, Slough Borough Council, RBWM and the Buckinghamshire authorities.

Monkey Island Lane Wharf, Bray (TA 1)



Local Planning Authority: The Royal Borough of Windsor & Maidenhead

Existing Use: No current use.

Proposal: Transport sand and gravel along the River Thames, through a waterway known as the 'Cut' to a proposed new barge unloading facility. Sand and gravel then sent to Monkey Island Lane processing plant via conveyor.

Development Considerations:

Ecology

- Protection of Bray Pennyroyal field Site of Special Scientific Interest (SSSI) and Bray Meadows SSSI.
- Impacts to Greenway corridor Local Wildlife Site (LWS) within site, ensuring functionality as wildlife corridor is not compromised, and losses compensated.
- Impacts to Bray Pit Reserve LWS.
- Retention of semi-natural habitats within site to accommodate protected species.
- Consideration of pollution impacts to riverine habitats.

Landscape & Townscape

- Strengthen existing landscape structure with new tree and hedgerow planting to integrate new structures.

- Maintain and enhance the setting of the public access route to Bray Lake Recreation Area.

Historic Environment

- Archaeological issues would remain a material consideration and will need to be addressed during the determination of the planning application.

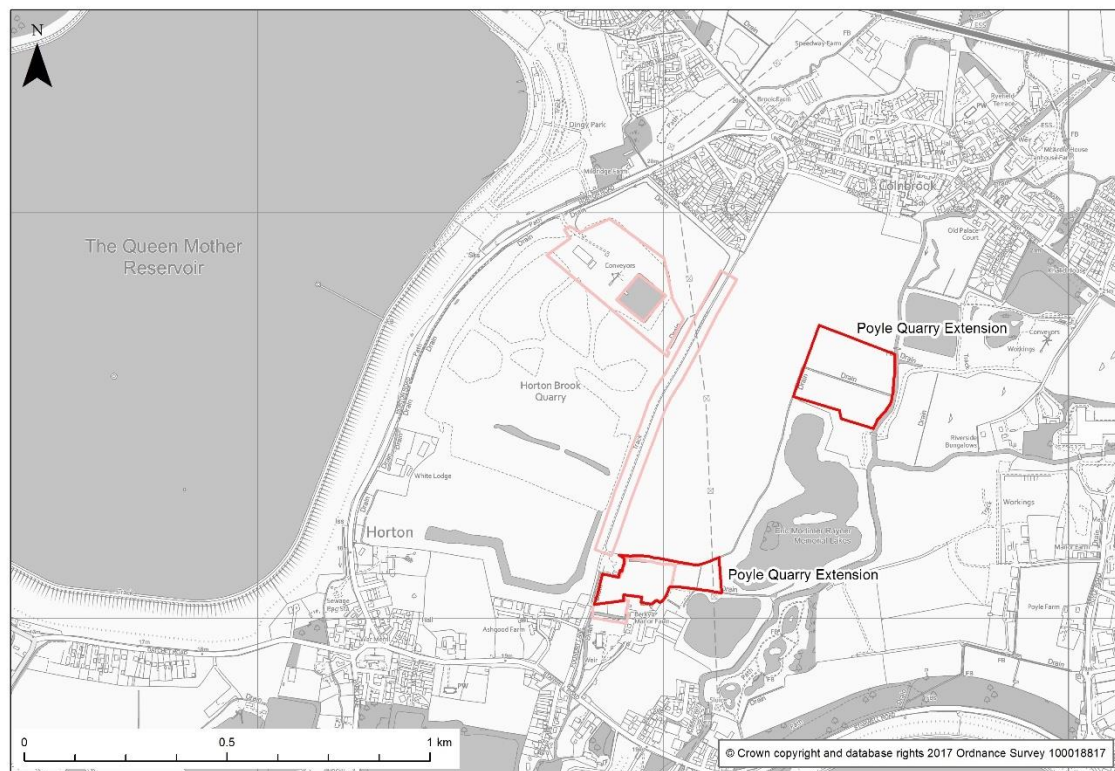
Transport:

- A Transport Assessment or Statement is required.
- An HGV and Barge Routeing Agreement will be required.

Flood Risk & Water Resources

- Site largely within Flood Zone 2/3 and Groundwater Source Protection Zone (1) – a Flood Risk Assessment and Hydrogeological Risk Assessment will be required.
- Proximity to major / minor aquifers, in addition to Source Protection Zones.
- Site will be accessed via the River Thames and the Cut – A Section 60 Accommodations License (which applies to mooring piles, slipways, landing stages and other private structural encroachments in the public river) will need to be secured. Consideration of The Cut, the River Thames and its river corridors.

Poyle Quarry (Extensions), Horton (MA 2)



Local Planning Authority: The Royal Borough of Windsor & Maidenhead

Existing Use: Arable fields

Proposal: Extension to Poyle Quarry extracting 250,000 tonnes of sand and gravel with no processing on site.

Area: 4 ha and 2 ha

Restoration: Agriculture at original ground levels.

Development Considerations:

Ecology

- Protection of South West London Waterbodies Special Protection Areas (SPA) and Ramsar*.
- Impacts on all roosting and foraging areas used by qualifying bird species of South West London Waterbodies SPA and Ramsar, in particular open grasslands within and adjacent to the site*.
- Impacts on Arthur Jacob Nature Reserve Local Wildlife Sites (LWS), Queen Mother Reservoir LWS, Colne Brook LWS and Horton and Kingsmead Lakes LWS.
- Consideration of indirect impacts such as air and noise pollution.

Landscape & Townscape

- Proposals should ensure adequate space is set aside for the establishment of a strong new landscape structure for this group of sites (Poyle Quarry and extensions, Berkyn Manor and Horton Brook) including large scale native species tree belts.
- Consideration needs to be given to the realignment of the Colne Valley Way, and the quality of its setting.
- Restoration proposals should have reference to the Colne Valley Gravel Pits and Reservoirs Biodiversity Opportunity Area.

Historic Environment

- A Heritage Impact Assessment is required.
- The archaeological potential is high and will need to be addressed during the determination of the planning application.
- The setting of Grade II Listed Building to the south needs to be considered.

Transport

- Provision of a new access will be required, most likely onto Poyle Road.
- A Transport Assessment or Statement is required.
- An HGV Routing Agreement will be required.

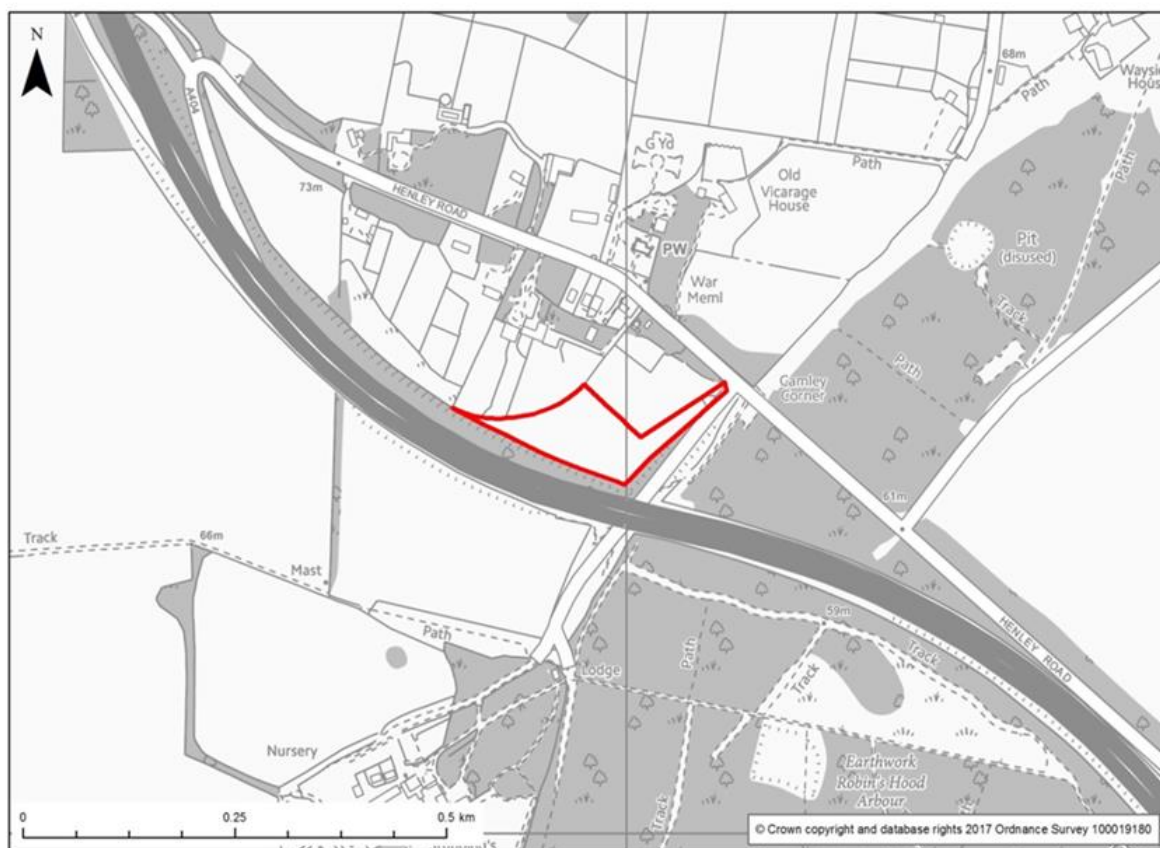
Flood Risk & Water Resources

- Both sites partly within Flood Zones 2 and/or 3
- The site is not located within a Source Protection Zone (SPZ) but the closest SPZ is located to the west of the site approximately under 1km away.
- Proximity to major / minor aquifers, in addition to Source Protection Zones. A Flood Risk Assessment and Hydrological/Hydrogeological Assessment will be required.
- Consideration of the River Colne and its river corridor.

Utilities

- Statutory safety clearance of National Grid infrastructure.

Stubbings Compound, Pinkneys Green, Maidenhead (WA 3)



Local Planning Authority: The Royal Borough of Windsor & Maidenhead

Existing Use: Hardstanding with permission for agricultural barn.

Proposal: Green waste processing (excluding open windrow composting).

Waste activity categories:

Category	Activity
2	Mix of enclosed buildings/plant and open ancillary areas (possibly involving biological treatment)
3	Enclosed industrial premises (small scale)

Area: 2 ha

Development Considerations:

Ecology

- Impacts and adequate buffering of Maidenhead Thicket Local Wildlife site (LWS).
- Impacts to Carpenters Wood, Dungrove Hill LWS, and Temple Golf Course LWS.
- Retention and buffer of mature boundaries.

- Consideration of surface water discharge to ground pollution.

Landscape & Townscape

- Enhanced screen planting is required for adjacent residential properties.

Transport:

- A Transport Assessment or Statement will be required – this would need to demonstrate sufficient splays from the existing access.
- An HGV Routeing Agreement will be required.

Flood Risk & Water Resources

- Site in Groundwater Source Protection Zone (3) – a Hydrogeological Risk Assessment will be required.
- Proximity to major / minor aquifers, in addition to Source Protection Zones.

Appendix B – Waste Facility Categories

1. A range of different waste management facilities have been classified based on the types of activities involved. These categories should be used to inform the suitability of the allocation sites for waste activities.

Category 1: Activities requiring open sites or ancillary open areas (possibly involving biological treatment)

Description / overview	<ul style="list-style-type: none"> • Activities requiring space for storage of waste and machinery (e.g. recycling crusher and screener; vehicle dismantlers). Open sites can accommodate processing equipment (e.g. storage containers/skips, loaders for shipment) • Activities similar to some agricultural practices require large open spaces (e.g. composting plants using open air windrows (elongated piles)). Large areas of land are converted to hard-standing areas for the running of machinery, and soil and ground water protection measures • Small proportion of the site may include building (e.g. for staff facilities)
Waste facilities	<ul style="list-style-type: none"> • Open windrow composting (composting sites typically require sites 2-3 hectares) • Aggregate recycling / construction and demolition waste processing (typically require 2 hectares or greater) • Processing incinerator bottom ash (IBA) • End of Life Vehicle (ELV) processing / scrap metal yard • Soil hospital (remediation of contaminated soils) • Household Waste Recycling Centre (HWRC) or Civic Amenity Site (typically approximately 0.8hectare site required)
Examples of waste streams handled	<ul style="list-style-type: none"> • Unsorted or segregated household waste • Construction waste (soils, rubble etc) • Incinerator bottom ash • Scrap vehicles • Biodegradable municipal solid wastes and industrial wastes converted to composted products (garden type waste collected separately or co-collected with kitchen waste that is suitable for open windrow composting)
Appropriate locations for these activities (including site requirements)	<ul style="list-style-type: none"> • Typically located in rural or urban fringe sites (where access is good). • Close proximity to development areas (markets) is preferable (it is often not viable to transport

	<p>materials such as recycled aggregate long distances).</p> <ul style="list-style-type: none"> • Larger scale centralised composting facilities can be located at selected composting sites, but smaller facilities can be located at landfill sites, sewage treatment works, industrial sites and transfer stations. • Small scale composting operations are also located on farms, due to their ability to exploit existing infrastructure, equipment, and labour associated with normal farm activities¹¹⁴. • Aggregate recycling sites and ELV sites can be located on industrial estates alongside heavier industrial uses (affordable sites of an adequate size can be very difficult to obtain for these uses however). • Aggregate recycling activities (usually temporary operations) can also be located at mineral workings and landfill sites and at demolition and construction sites where the spoil is to be used in the project itself. • Rail sidings can be used for activities whereby materials are loaded for shipment to market (transhipment of waste). • Household Waste Recycling Centres and Civic Amenity sites require good access from the primary road network and sufficient vehicle queuing space.
Locations where activities would be unsuitable	<ul style="list-style-type: none"> • Would not normally be compatible with a business park environment or an urban setting, or close to villages. • An appropriate distance of 'buffer' would be required between operations and sensitive receptors. • Should be located at appropriate distances from sensitive habitats (where there are potential dust and bioaerosol impacts).

¹¹⁴ Most on-farm facilities possess waste management exemptions, and all community-run sites are exempt and so are restricted in size

Category 2: Activities requiring a mix of enclosed buildings/plant and open ancillary areas (possibly involving biological treatment)

Description / overview	<ul style="list-style-type: none"> Activities which involve temporary storage of waste usually consist of buildings where vehicles deliver waste either onto the floor, into bays, or into compaction units. Inert wastes in particular may be transferred to such sites and stored in the open. Facilities may require extensive plant and specialist machinery. For instance, hard standing areas to site recycling bins, skips and possibly compactors which can be fully / partially enclosed or open. Unsorted waste may be stored in open bunkers or skips, housed within a building. Facilities may be co-located on sites (e.g. storage alongside a Waste Transfer Station). Sites usually require a minimum of 0.5 hectares (but size depends on throughput).
Waste facilities	<ul style="list-style-type: none"> Outdoor Waste Transfer Station (where space required for open storage). Anaerobic digestion (AD) plant (small scale) (agricultural / rural locations) (unsorted waste, segregated waste and residual waste may be stored in open bunkers, possibly outside). Enclosed composting systems¹¹⁵. MBT (Mechanical Biological Treatment) plant (including biological treatment e.g. AD)¹¹⁶. Sites for aggregating waste wood (sorting and processing). Biological treatment of liquid waste and leachate (can involve enclosed buildings and tanks in open areas). Wastewater Treatment Works.
Examples of waste streams handled	<ul style="list-style-type: none"> Unsorted or segregated household or commercial waste Green waste Specialist wastes (e.g. liquid waste and leachate)
Appropriate locations for these	<ul style="list-style-type: none"> Enclosed composting facilities are suited to areas allocated for employment / industrial uses in urban areas and are compatible with the more

¹¹⁵ e.g. In-vessel composting (IVC) allows collected food waste to be composted on a large scale. IVC is not considered as environmentally beneficial as anaerobic digestion. For effective waste handling, a covered waste reception area, as well as hard standing for post composting and a covered storage area are needed.

¹¹⁶ The term 'mechanical and biological treatment' (MBT) is commonly used to describe a hybrid process which combines mechanical and biological techniques used to sort and separate mixed household waste.

activities (including site requirements)	<p>intensive B2 activities under the Use Classes Order.</p> <ul style="list-style-type: none"> • Small scale AD plants (throughput of circa 5000 tonnes per annum) can be located on sites less than 0.5 hectares (Wastewater Treatment Works in particular can provide suitable locations). • Facilities to recycle agricultural waste can be located on farms (digestate from AD plants may be used by neighbouring farms). • Options for locating wastewater treatment plant are very limited and are typically linked to existing infrastructure.
Locations where activities would be unsuitable	<ul style="list-style-type: none"> • An appropriate distance of 'buffer' would be required between operations producing bioaerosols / odours, and sensitive receptors. • Should be located at appropriate distances from sensitive habitats (where there are potential dust and bioaerosol impacts). • Facilities involving open-air activities with potential to generate noise would not normally be compatible with a business park environment, an urban setting, or close to villages.

Category 3: Activities requiring enclosed industrial premises (small scale)

Description / overview	<ul style="list-style-type: none"> Waste developments are increasingly enclosed within new or existing structures, often sited on brownfield or industrial land; allowing for a large proportion of the perceived issues / problems to be mitigated for, i.e. dust and noise. 'Small scale' enclosed premises are typically <1-2 hectares (throughput of approx. 50,000 tonnes per annum). Usually located on industrial estates. Enclosing activities helps to mitigate against many noise / odour issues.
Waste facilities	<ul style="list-style-type: none"> Plant for Refused Derived Fuel production (small scale e.g. Mechanical Heat Treatment / Autoclaving)¹¹⁷. Autoclaving is a pressurised steam treatment process that can produce fuel pellets or pulp (by 'cooking' waste). Dis-assembly and re-manufacturing plant (Waste Electronic & Electrical Equipment recycling). Enclosed waste transfer station (designed to process dry, separated recyclables). Small-scale recyclables processing facility.
Examples of waste streams handled	<ul style="list-style-type: none"> All types of non-hazardous waste typically handled (e.g. dry mixed recyclables) Inert waste may also be handled (e.g. sorting of construction waste, glass etc) Clean waste wood can be handled for recycling Waste Electronic & Electrical Equipment
Appropriate locations for these activities (including site requirements)	<ul style="list-style-type: none"> As activities can be similar to other industrial activity, these facilities can be located on land previously used for general (B2) industrial activities or B1 uses (light industry appropriate in a residential area). The requirement for good transport infrastructure is essential and therefore, where possible, should be located close to the primary road network or have potential access to rail. Placement of sites near to the source of waste is increasingly important, by limiting movement of waste from source the impact of sites decreases.

¹¹⁷ Refuse-derived fuel, (RDF), is made by refining municipal solid waste in a series of mechanical sorting and shredding stages to separate the combustible portion of the waste. Either a loose fuel, known as fluff, floc or coarse RDF (c-RDF), or a densified pellet or briquette (d-RDF) is produced.

Locations where activities would be unsuitable	<ul style="list-style-type: none"> • Sites with existing access issues should be avoided where possible. • Areas should be avoided where facilities seeking expansion of existing hardstanding would encroach into flood zones.
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Category 4: Activities requiring enclosed industrial premises (large scale)

Description / overview	<ul style="list-style-type: none"> • Large buildings required to process mixed waste primarily via mechanical and / or biological means. • Various physical separation and waste reduction techniques can be used either as standalone operations or in combination. Such activities are typically housed in an enclosed 'warehouse' type building. • 'Large scale' enclosed premises typically require site of 2-4 hectares (throughput can be up in excess of 100,000 tonnes per annum).
Waste facilities	<ul style="list-style-type: none"> • Materials Recovery Facility (MRF) (for dry recyclables). • Enclosed Anaerobic Digestion (AD) plant (large scale). • Enclosed MBT (Mechanical Biological Treatment) (large scale integrated plant)¹¹⁸.
Examples of waste streams handled	<ul style="list-style-type: none"> • Unsorted 'black bag' wastes (AD and MBT) • Residual household waste following doorstep separation of dry recyclables / green waste • Residual waste following separation of recyclables / organics at another facility.
Appropriate locations for these activities (including site requirements)	<ul style="list-style-type: none"> • Large scale processing operations can take place in a range of buildings and at different locations. Preference should be given to industrial or degraded sites or sites on or close to existing waste management facilities. • B1 / B2 and B8 use class designations may potentially be acceptable. • Sites need to be suitable for use by HGVs. • Consideration should be given to the potential for co-location with rail or barge transfer operations.
Locations where activities would be unsuitable	<ul style="list-style-type: none"> • Mixed household waste has the potential to cause additional nuisance from litter, odour and leachate. The planning and siting considerations will therefore be different to dry recyclables processing. • Locating sites close to residential development should be avoided. Some operations which involve mechanical processing and external loading and unloading of material may be

¹¹⁸ The term 'mechanical and biological treatment' (MBT) is commonly used to describe a hybrid process which combines mechanical and biological techniques used to sort and separate mixed household waste and produce a Refused Derived Fuel (RDF).

	<p>inherently noisy which will also affect the choice of site.</p> <ul style="list-style-type: none"> • Sites with existing access issues should be avoided where possible. • Areas should be avoided where facilities seeking expansion of existing hardstanding would encroach into flood zones.
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Category 5: Activities requiring enclosed building with stack (small scale)

Description / overview	<ul style="list-style-type: none"> Plants with a throughput of approx. 50,000 tonnes per annum. Smaller scale thermal treatment facilities are often designed to receive a specific component of the waste stream. Can offer a waste management option which is more likely to be accepted by local residents. Energy is generated. Often combustion chambers are fired up according to the need to respond to fluctuations in the supply of waste. Gasification is a thermal process in which carbon is converted to a syngas leaving a solid residue. Pyrolysis takes place either in the complete absence of oxygen or with limited oxygen. Require site of <1-2 hectares.
Waste facilities	<ul style="list-style-type: none"> Pyrolysis and gasification technologies (advanced thermal treatment). Small scale incinerator. Small thermal plants (Combined Heat & Power (CHP) plant)¹¹⁹. Small thermal treatment plants (furnaces or kilns) are also used to treat clinical wastes at hospital sites.
Examples of waste streams handled	<ul style="list-style-type: none"> Capable of handling a wide range of waste materials. Can be specifically designed to take a pre-processed feedstock or refuse derived fuel (RDF) (see categories 3 and 4 above). Can be used to treat clinical wastes at hospital sites. Unburned residue (bottom ash) is produced after combustible material is burnt. There are three products of pyrolysis: gas, liquid and a solid known as char.
Appropriate locations for these activities (including site requirements)	<ul style="list-style-type: none"> Localities which are as close as possible to the source of waste arisings in order to minimise transport. Sites which offer the potential for CHP and export of energy to businesses which would otherwise use fossil fuel sources. May also be

¹¹⁹ The revised Waste Framework Directive sets a threshold above which energy efficient municipal waste incinerators can be classified as recovery facilities, and below which they continue to be classified as disposal facilities.

	<p>considered as part of large scale residential developments.</p> <ul style="list-style-type: none"> • Can be more suited to rural areas and areas of dispersed population centres than large-scale facilities. • Most small thermal plants have been designed to treat specific industrial waste streams as part of combined heat and power (CHP) arrangements. CHP may be connected to existing decentralised energy networks in town and city centres for instance. • Preference should be given to areas allocated for business use or in traditional commercial/industrial urban areas. • Existing waste sites should also be considered. Plants can be located alongside modern industrial buildings or as a part of business parks where CHP potential can be developed. • Pyrolysis and gasification- the scale of individual buildings and process components is likely to be compatible with most small / medium sized industrial activities.
Locations where activities would be unsuitable	<ul style="list-style-type: none"> • Should be located appropriate distances from sensitive habitats and other sensitive receptors (e.g. residential). • Safeguarding zones around aerodromes where building height is restricted should be avoided. • Pyrolysis and gasification facilities should avoid sites closer than 250m of housing etc where possible or demonstrate emission standards can be met where closer.

Category 6: Activities requiring enclosed building with stack (large scale)

Description / overview	<ul style="list-style-type: none"> Plants with a throughput of approx. 200,000 tonnes per annum. Plants typically designed to handle large volumes of mixed waste following the 'mass combustion' approach. Designed to burn waste as efficiently as possible, usually recovering energy. The volume of waste needing disposal following treatment is reduced by approximately 90%, reducing the need for landfill. The whole process is typically contained within a single building. Legislation requires that all new and existing plants operate to extremely high environmental standards. Require site of 2-5 hectares.
Waste facilities	<ul style="list-style-type: none"> Energy Recovery Facility ('mass burn' with energy generation)¹²⁰; Fluidised bed incinerators generally require some form of refuse derived fuel (RDF). Biomass plant (including proportion of waste biomass feedstock)
Examples of waste streams handled	<ul style="list-style-type: none"> Can receive between 90,000 and 600,000 tonnes of waste per year. Capable of handling a wide range of waste materials. Contaminated paper (e.g. with grease from food) can be more suited to energy recovery.
Appropriate locations for these activities (including site requirements)	<ul style="list-style-type: none"> Often located in or near urban areas. Compatible with the more intensive Class B2 activities under the Use Classes Order. Existing waste sites should also be considered. Should be located as close as possible to the source of waste arisings in order to minimise transport. Should be located on sites which offer the potential for combined heat and power (CHP) and export of energy to nearby businesses.
Locations where activities would be unsuitable	<ul style="list-style-type: none"> Not normally be compatible with a hi-tech business park environment or a rural/semi rural setting.

¹²⁰ The revised Waste Framework Directive sets a threshold above which energy efficient municipal waste incinerators can be classified as recovery facilities, and below which they continue to be classified as disposal facilities

	<ul style="list-style-type: none"> • Should be located appropriate distances from sensitive habitats and other sensitive receptors (e.g. residential). • Safeguarding zones around aerodromes where building height is restricted should be avoided.
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Category 7: Landfilling

Description / overview	<ul style="list-style-type: none"> • Modern landfill practice requires a significant degree of engineering in order to contain tipped waste, control emissions and minimise potential environmental effects. • The majority of landfills are operated on a phased cell system whereby, as one cell is being filled, another is being prepared, and another is being completed / restored¹²¹.
Waste facilities	<ul style="list-style-type: none"> • Waste disposal mainly below ground level (infilling a void). Landraise, also generically referred to as landfill, refers to waste disposal mainly above pre-existing ground levels. • The primary by-products where biodegradable materials are disposed of are landfill gas and leachate (requiring ancillary operations including abstraction systems). • Inert waste can be used to restore minerals workings. • Sites may include a separate protective cell for hazardous materials.
Examples of waste streams handled	<ul style="list-style-type: none"> • Most types of non-hazardous waste may be disposed of via landfill although as disposal is increasingly discouraged, the future role of landfill is likely to be limited to the residues of other waste management operations such as incinerator ashes and materials recovery facility (MRF) rejects etc. • Hazardous wastes (although certain hazardous wastes are banned from landfill disposal). • Inert waste (non-biodegradable) is a restoration material and is not classed as landfilling.
Appropriate locations for these activities (including site requirements)	<ul style="list-style-type: none"> • Landfill sites sited where an existing void is available, such as in existing mineral workings. • The location of land-raise sites is less limited and may include derelict land, or extensions to existing landfills. • Landfill sites tend to be located in rural areas. • Range in size from just a few hectares (Ha) to over 100 Ha. The larger sites are more economically viable.
Locations where activities would be unsuitable	<ul style="list-style-type: none"> • Sites close to housing, commercial or recreational areas etc. should generally be avoided.

¹²¹ Cells are holes which are lined with a waterproof liner and contain systems to manage landfill gas and leachate/ liquids. When complete the cells are covered with clay to seal the waste.

	<ul style="list-style-type: none"> • Areas overlying principal aquifers or close to potable waters should also be avoided. • Sensitive habitats should be avoided. • Bird strike' zones around aerodromes should be avoided.
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Appendix C – Preferred Waste Areas

1. The following appendix provides information on the industrial estates and industrial land (listed alphabetically by Authority) that are Preferred Waste Areas within the Plan:

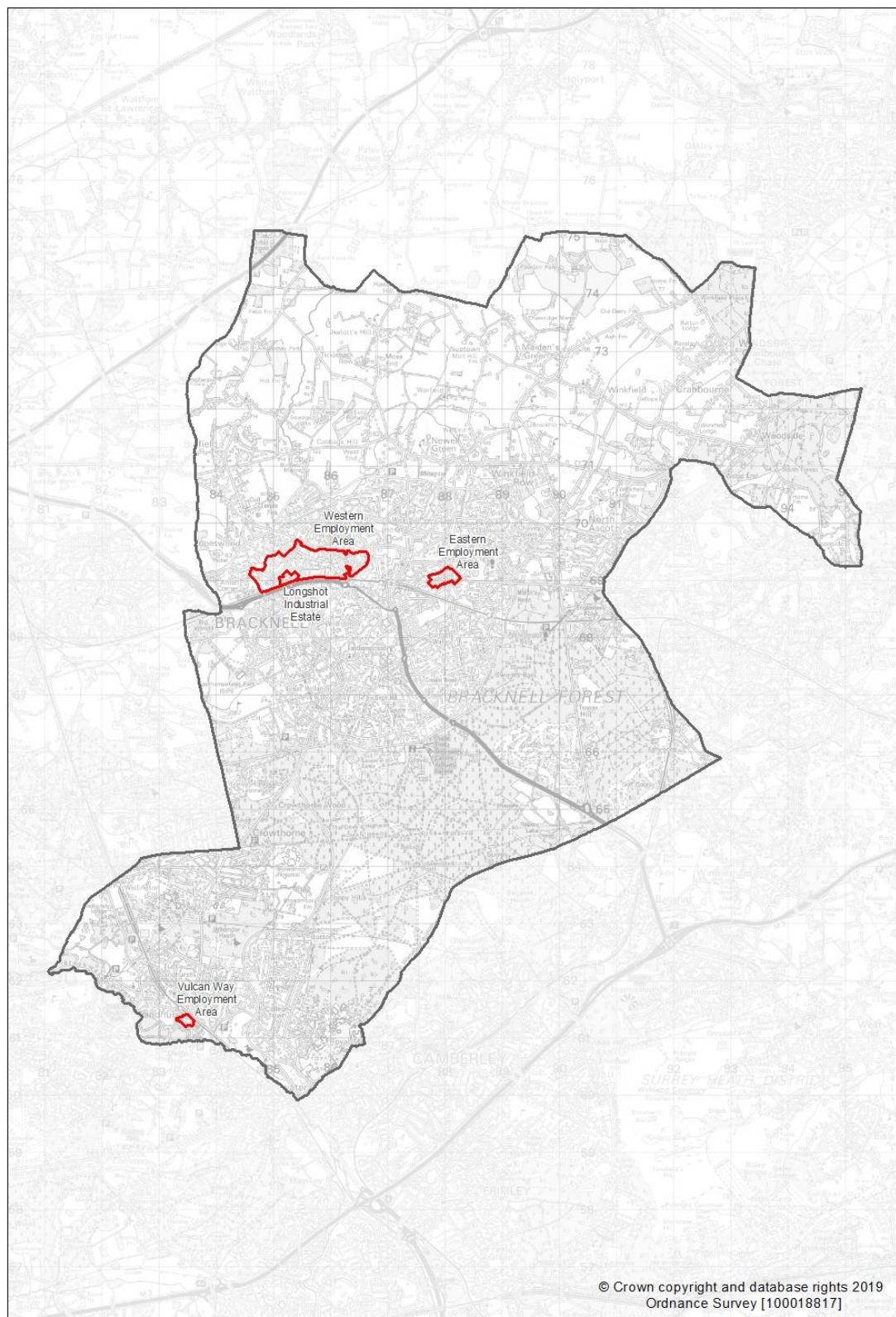
Preferred Waste Area	Local Planning Authority
Western Employment Area (parts), Bracknell	Bracknell Forest
Longshot Industrial Estate (within Western Employment Area), Binfield	Bracknell Forest
Eastern Employment Area, Bracknell	Bracknell Forest
Vulcan Way Employment Area, Sandhurst	Bracknell Forest
Bennet Road Area, Reading	Reading
North of Basingstoke Road, Reading	Reading
Elgar Road, Reading	Reading
Portman Road / Deacon Way Area, Reading	Reading
Richfield Avenue / Tessa Road Area, Reading	Reading
Paddock Road Industrial Estate, Reading	Reading
South of Basingstoke Road, Whitley	Reading
Wigmore Lane, Reading	Reading
Bridgewater Close, Reading	Reading
Island Road Major Opportunity Area, Reading	Reading
Newlands Farm, Crowthorne	Wokingham
Toutley Road Depot, Emmbrook	Wokingham
Molly Millars Lane Area (parts), Wokingham	Wokingham
Suttons Industrial Park, Earley	Wokingham
Hogwood Lane Business Area (parts), Wokingham	Wokingham
Headley Road Industrial Estate, Wokingham	Wokingham
Headley Park, Wokingham	Wokingham
Ruscombe Business Park (parts), Ruscombe	Wokingham
Nine Mile Ride Industrial Park, Wokingham	Wokingham
Brookside Business Park, Swallowfield	Wokingham
Cutbush Lane Business Area, Wokingham	Wokingham

2. The delineation of the site is shown by the red boundary. The types of waste activity that are considered suitable are provided. More detail on these activities is provided in Appendix B.
3. Development should be designed with appropriate mitigation measures, to avoid or mitigate its impacts on the environment and local communities. These will need to be addressed at the planning application stage, which should present the most appropriate responses, which are likely to include detailed site appraisals and Environmental Impact Assessment (EIA). These will identify what effects the development will have, and how to tackle them. All assessment information and suggested mitigation measures should be clearly

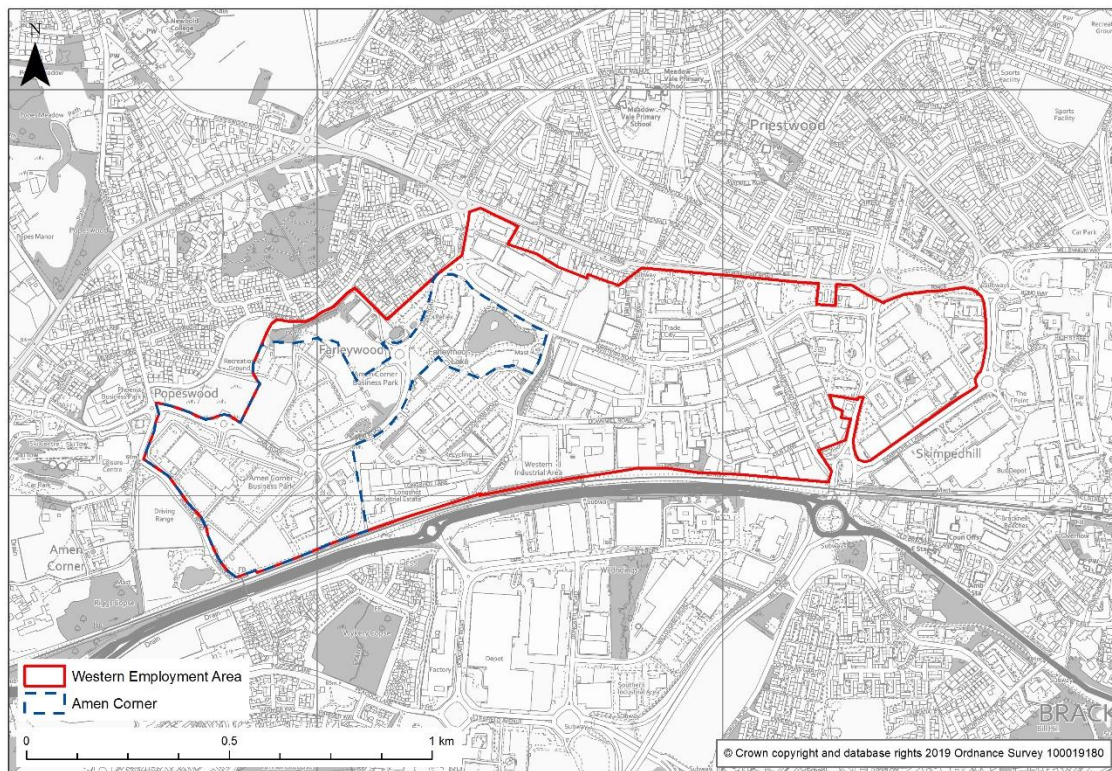
identified and form part of the pre-application discussions and consultation with communities.

4. For any development proposal at the sites identified in the Plan, all elements of the Plan need to be considered as well as the wider Local Plans and development strategies for Central and Eastern Berkshire.

Bracknell Forest

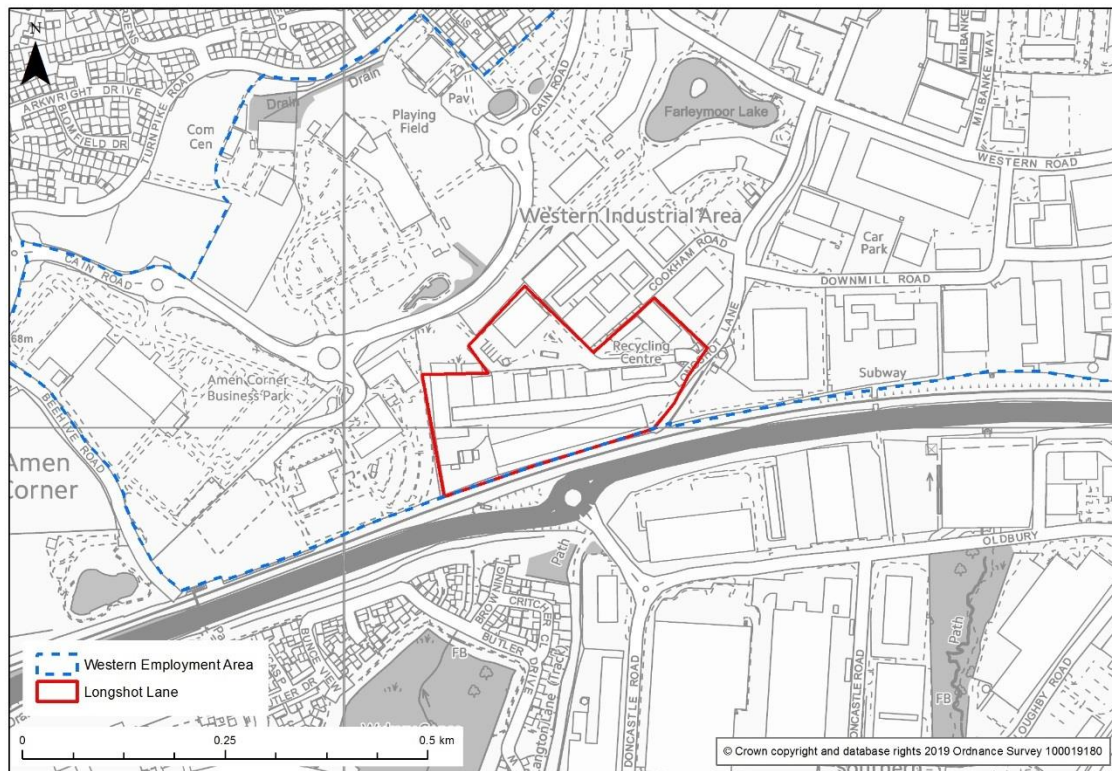


Site Name	Western Employment Area
Location	Western Road, Bracknell, RG12 1RE
Current use (specify class classification)	B1 / B8
Part of this industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> • Category 3: Activities requiring enclosed industrial premises (small scale) • Category 4: Activities requiring enclosed industrial premises (large scale). 	

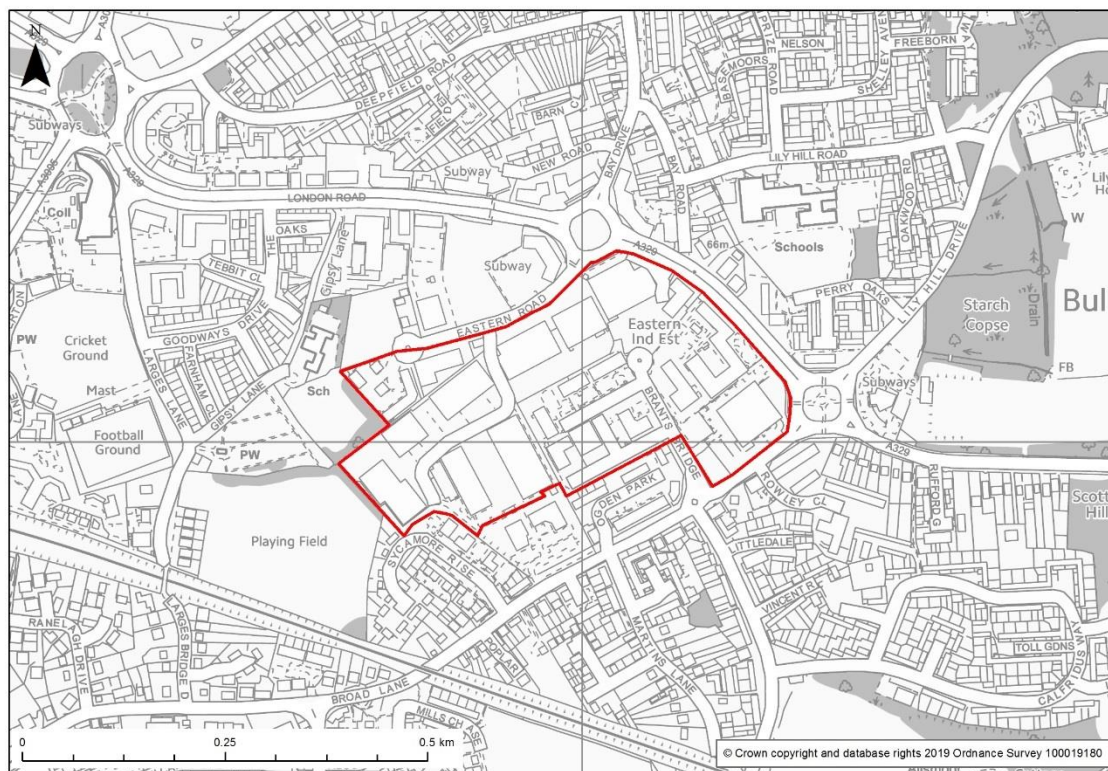


N.B. Amen Corner is an area within the Western Employment Area that is occupied by a number of large HQ style office buildings and is considered to be unlikely to be suitable as waste operations are not considered compatible with high value business parks.

Site Name	Longshot Industrial Estate (within Western Employment Area)
Location	Longshot Lane, Binfield, Bracknell RG12 1RL
Current use (specify class classification)	B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



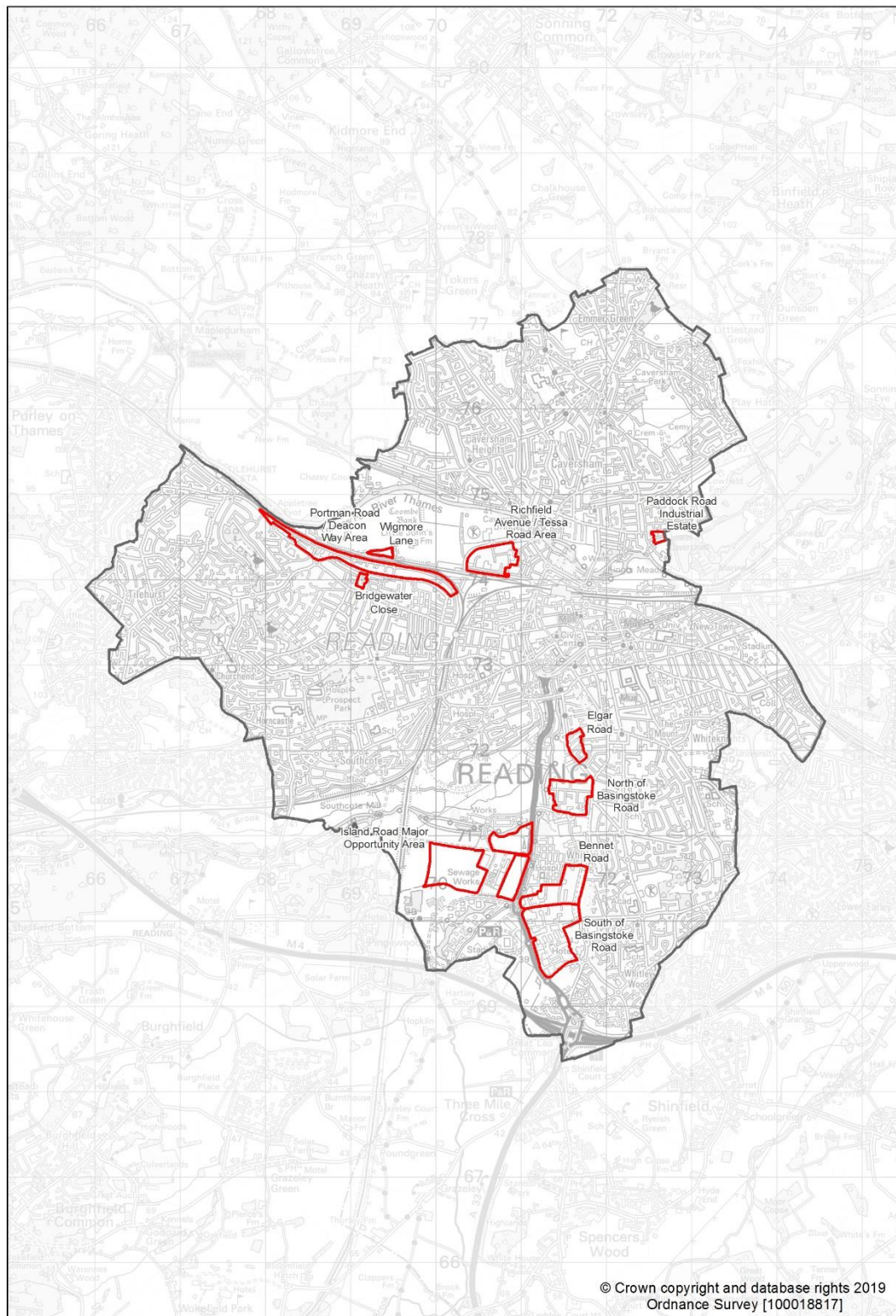
Site Name	Eastern Employment Area
Current use (specify class classification)	B1 / B8
<p>This industrial area is considered potentially suitable for the following waste categories:</p> <ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



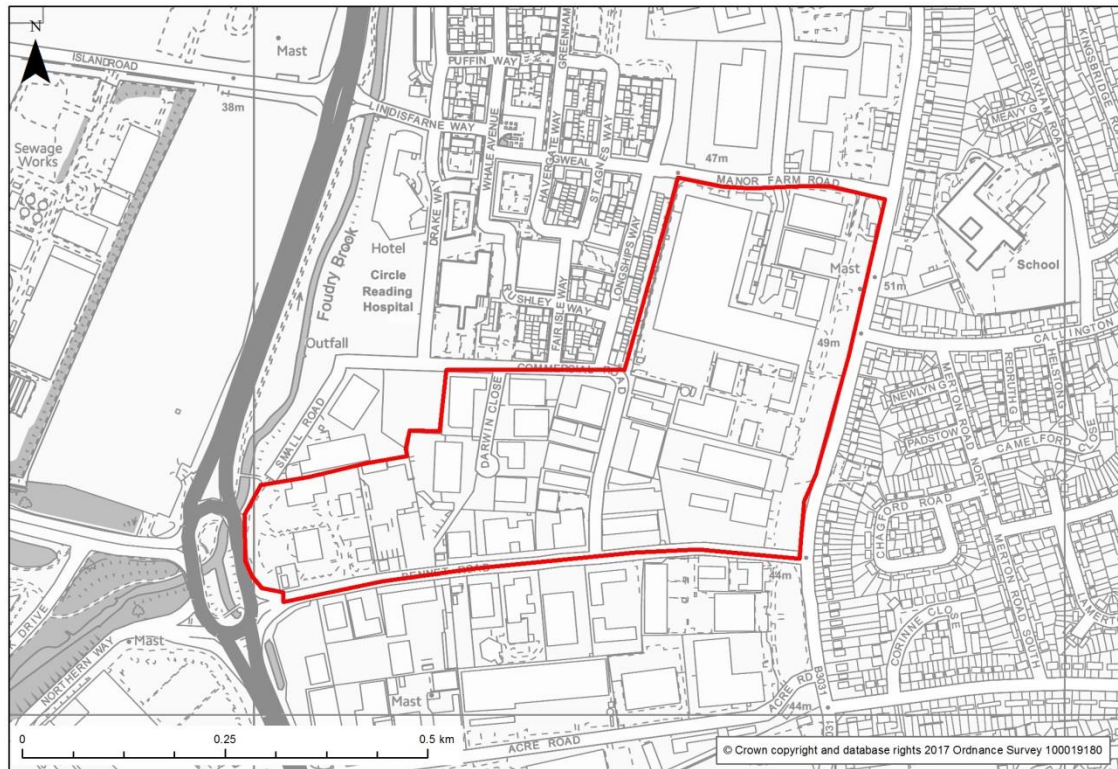
Site Name	Vulcan Way Employment Area (including lakeside Business Park)
Location	Sandhurst, Bracknell, GU47 9DB
Current use (specify class classification)	B2
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



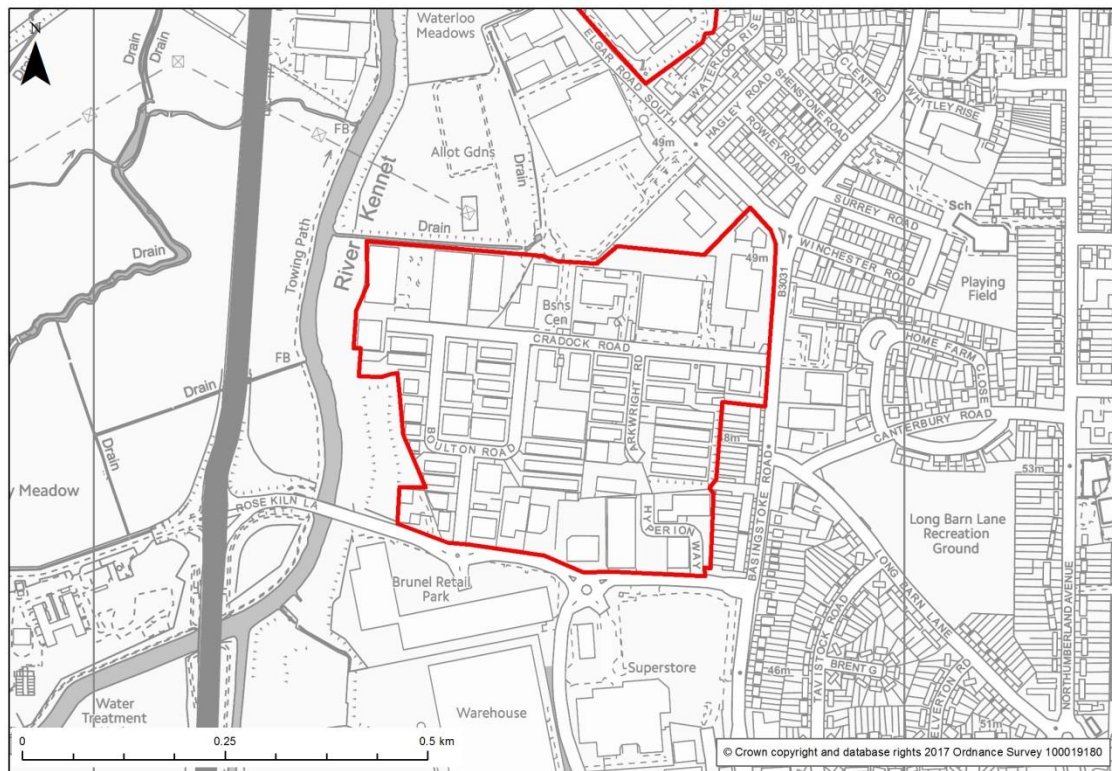
Reading



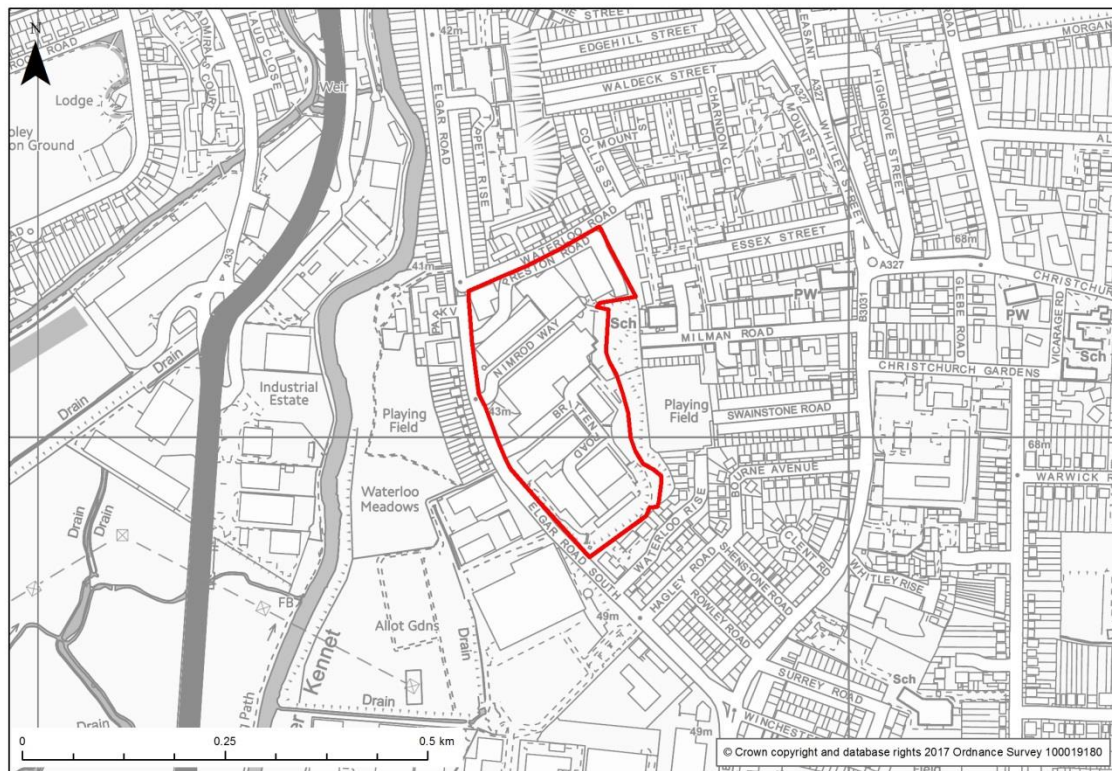
Site Name	Bennet Road Area
Location	Bennet Road, Reading, RG2 0QX
Current use (specify class classification)	B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



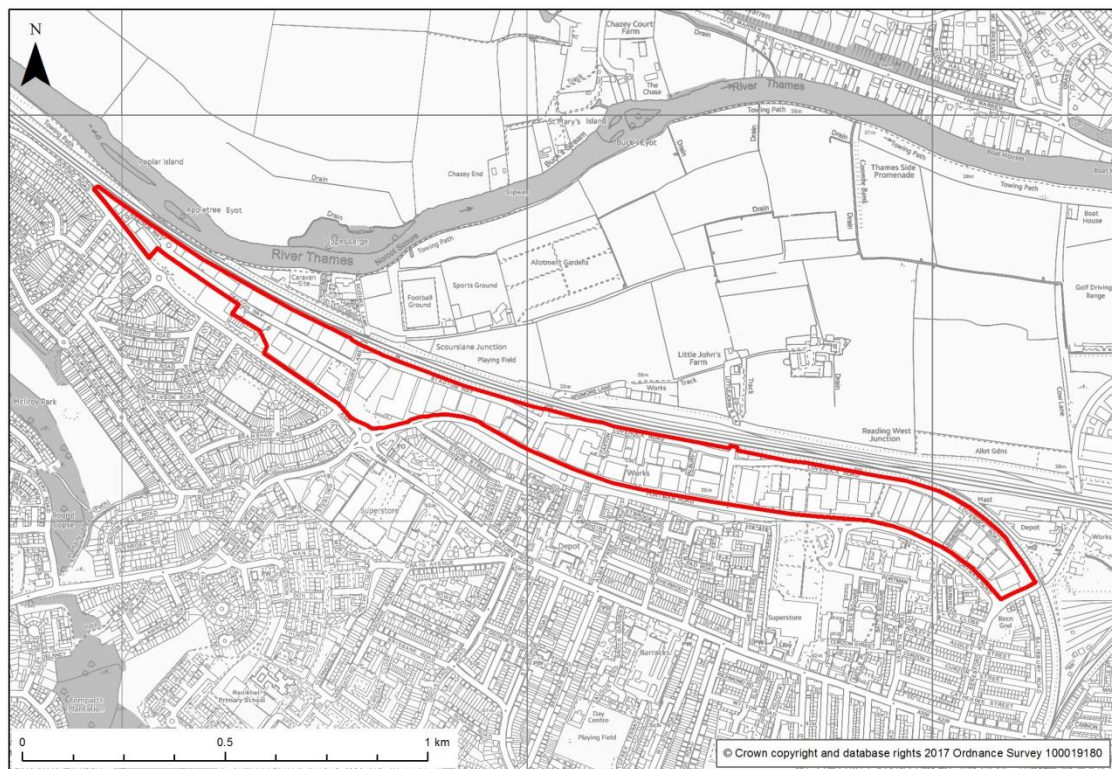
Site Name	North of Basingstoke Road
Current use (specify class classification)	B1(C) / B2 & B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



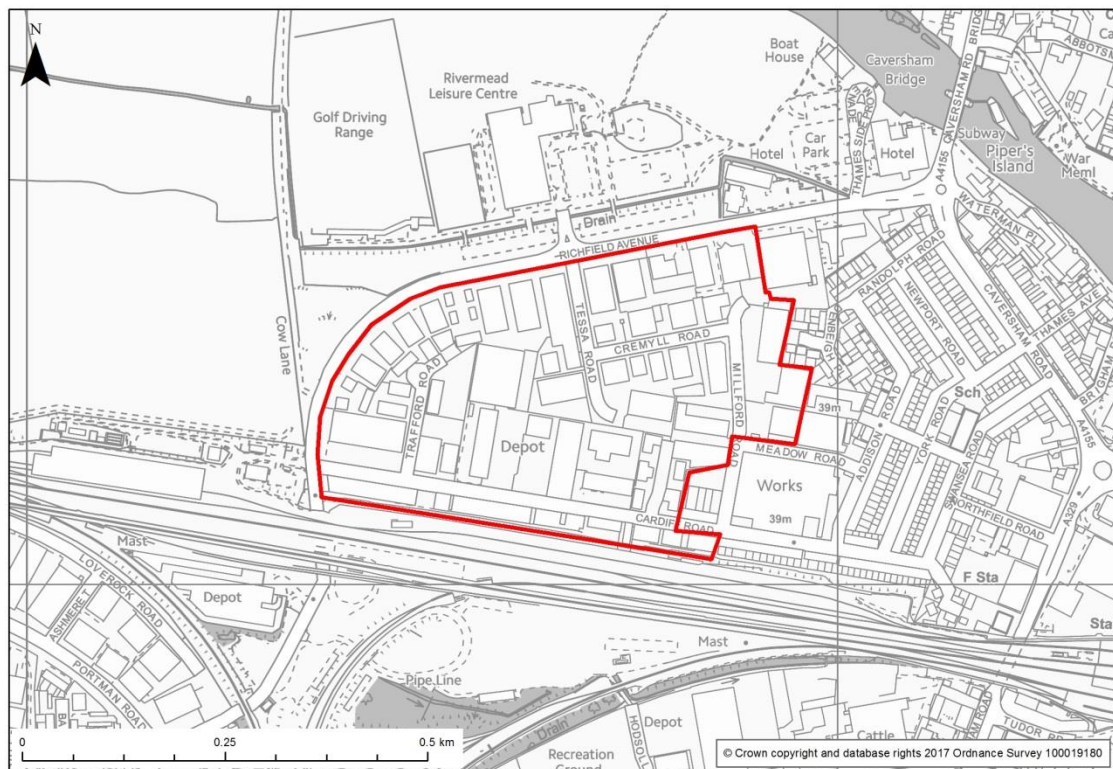
Site Name	Elgar Road
Current use (specify class classification)	B1(C) / B2 & B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



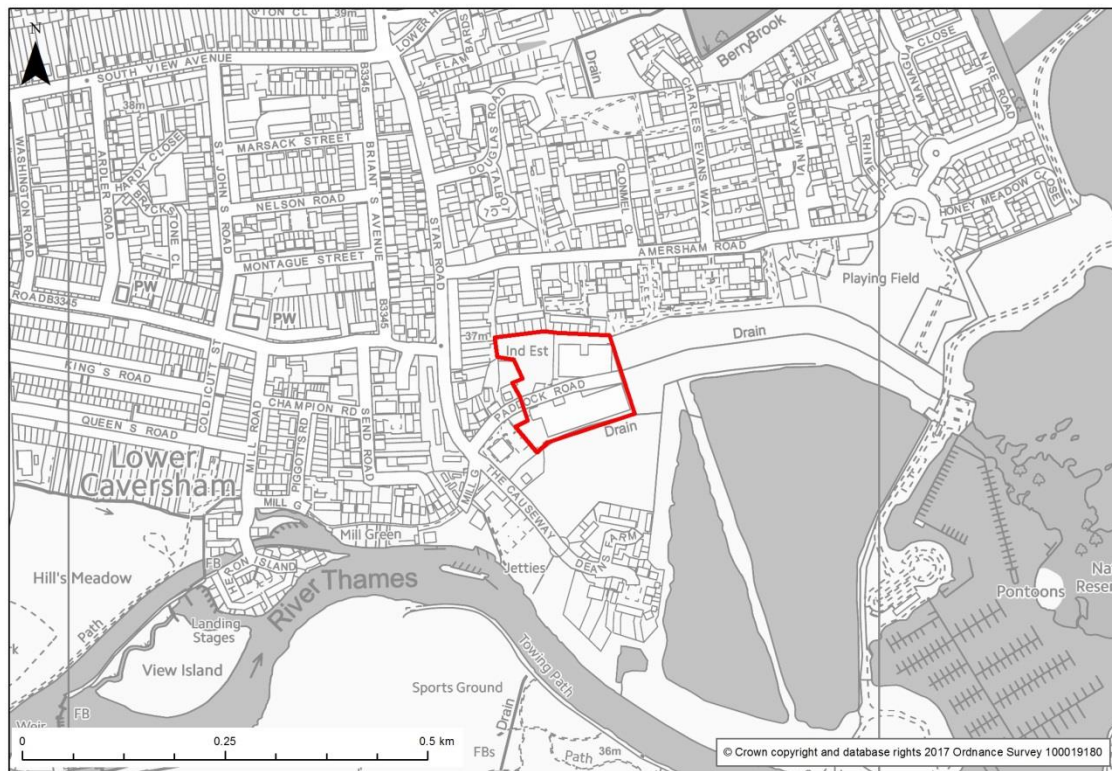
Site Name	Portman Road / Deacon Way Area
Location	Portman Road, Reading, RG30 1EA / Deacon Way, Reading, RG30 6AZ
Current use (specify class classification)	B1(C) & B2 & B8
<p>This industrial area is considered potentially suitable for the following waste categories:</p> <ul style="list-style-type: none"> • Category 2: Activities requiring a mix of enclosed buildings / plant and open ancillary open (possibly involving biological treatment); and • Category 3: Activities requiring enclosed industrial premises (small scale) 	



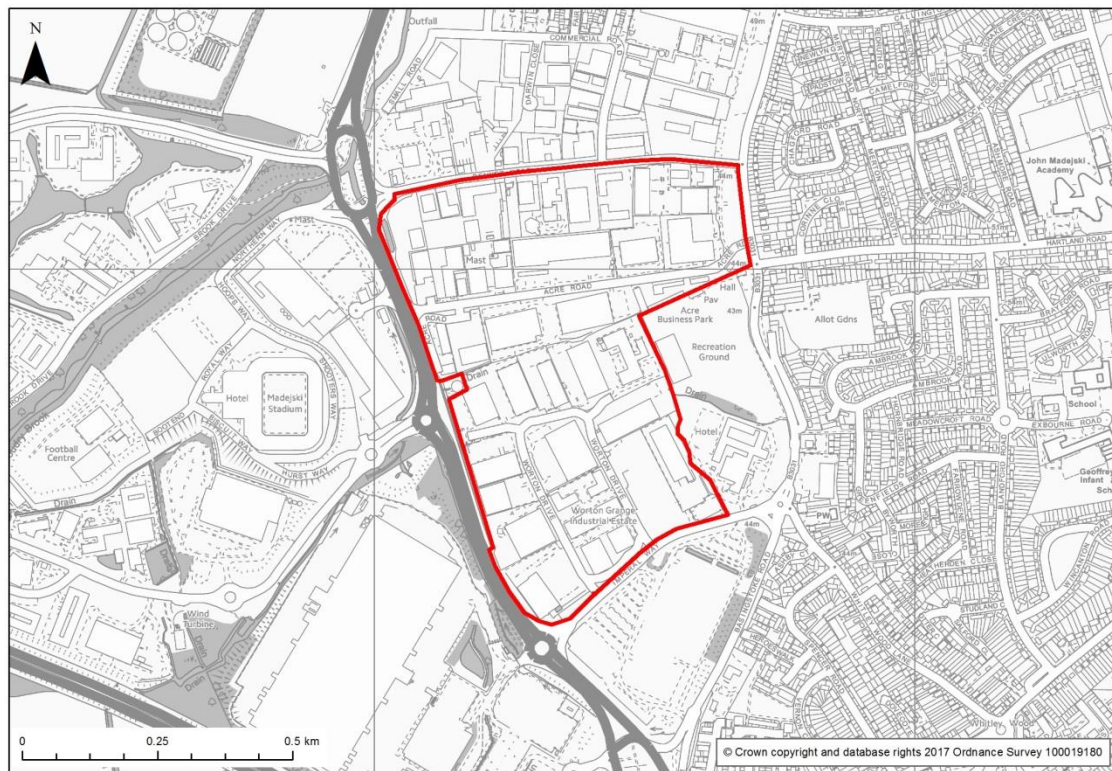
Site Name	Richfield Avenue / Tessa Road Area
Location	Richfield Ave, City Centre, Reading RG1 8EQ
Current use (specify class classification)	B1(C) / B2 / B8
<p>This industrial area is considered potentially suitable for the following waste categories:</p> <ul style="list-style-type: none"> • Category 2: Activities requiring a mix of enclosed buildings / plant and open ancillary open (possibly involving biological treatment); and • Category 3: Activities requiring enclosed industrial premises (small scale) 	



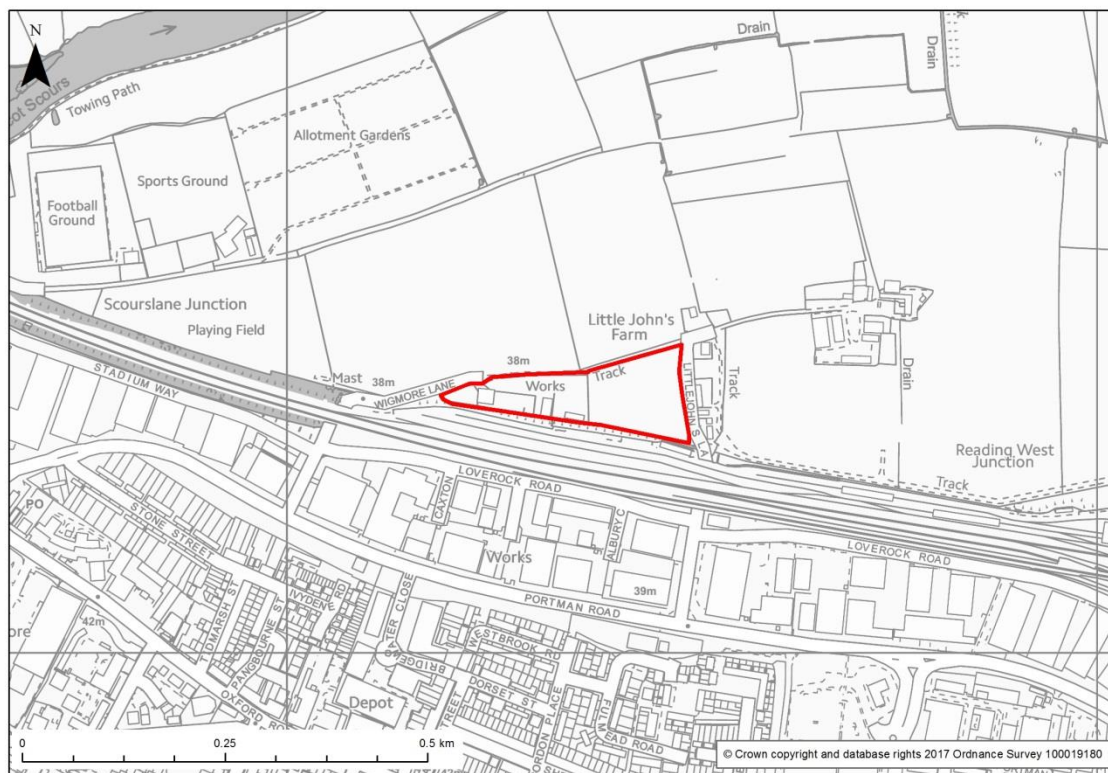
Site Name	Paddock Road Industrial Estate
Location	Paddock Road, Reading, RG4 5BY
Current use (specify class classification)	B1(C) & B2
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



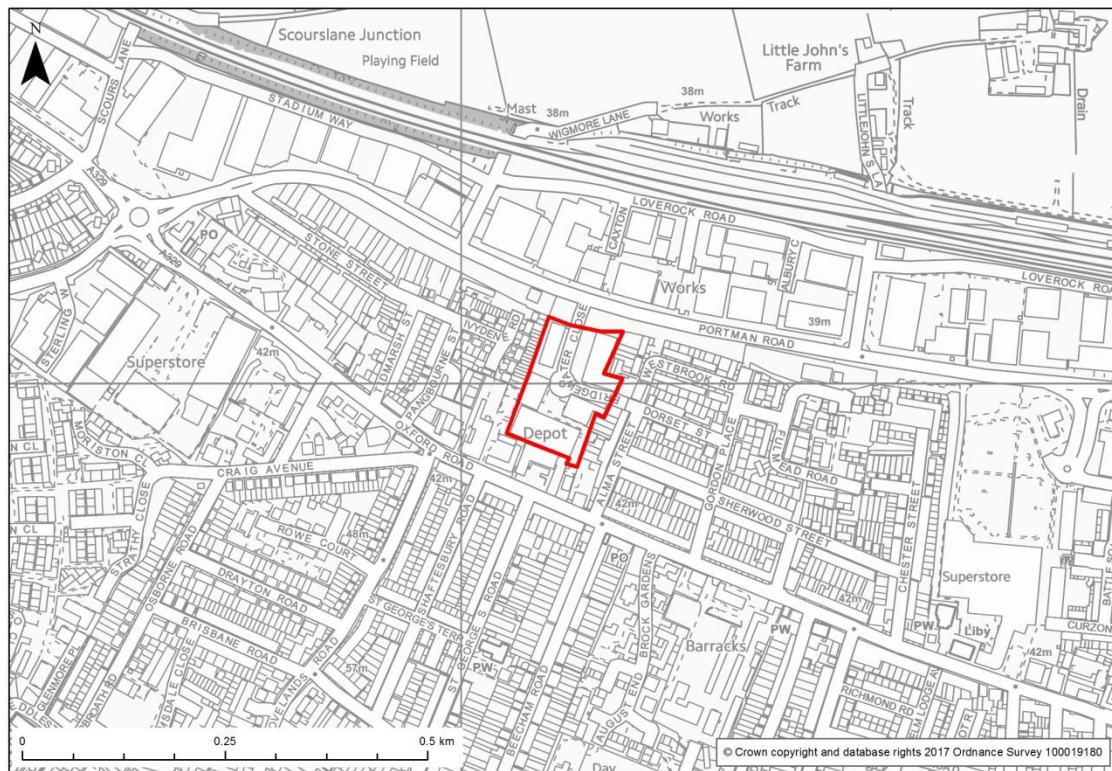
Site Name	South of Basingstoke Road
Location	Whitley
Current use (specify class classification)	B1(C) / B2 / B8
<p>This industrial area is considered potentially suitable for the following waste categories:</p> <ul style="list-style-type: none"> • Category 2: Activities requiring a mix of enclosed buildings / plant and open ancillary open (possibly involving biological treatment); and • Category 3: Activities requiring enclosed industrial premises (small scale) 	



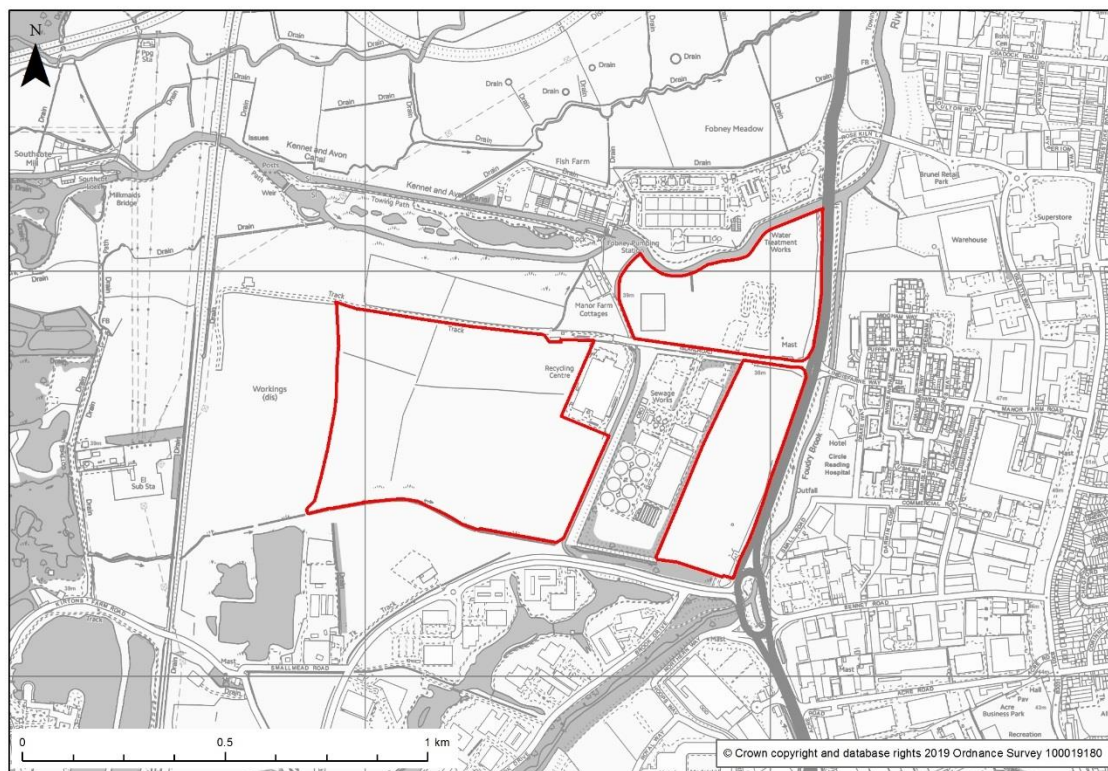
Site Name	Wigmore Lane
Current use (specify class classification)	B1(C) / B2 / B8
<p>This industrial area is considered potentially suitable for the following waste categories:</p> <ul style="list-style-type: none"> • Category 2: Activities requiring a mix of enclosed buildings / plant and open ancillary open (possibly involving biological treatment); and • Category 3: Activities requiring enclosed industrial premises (small scale) 	



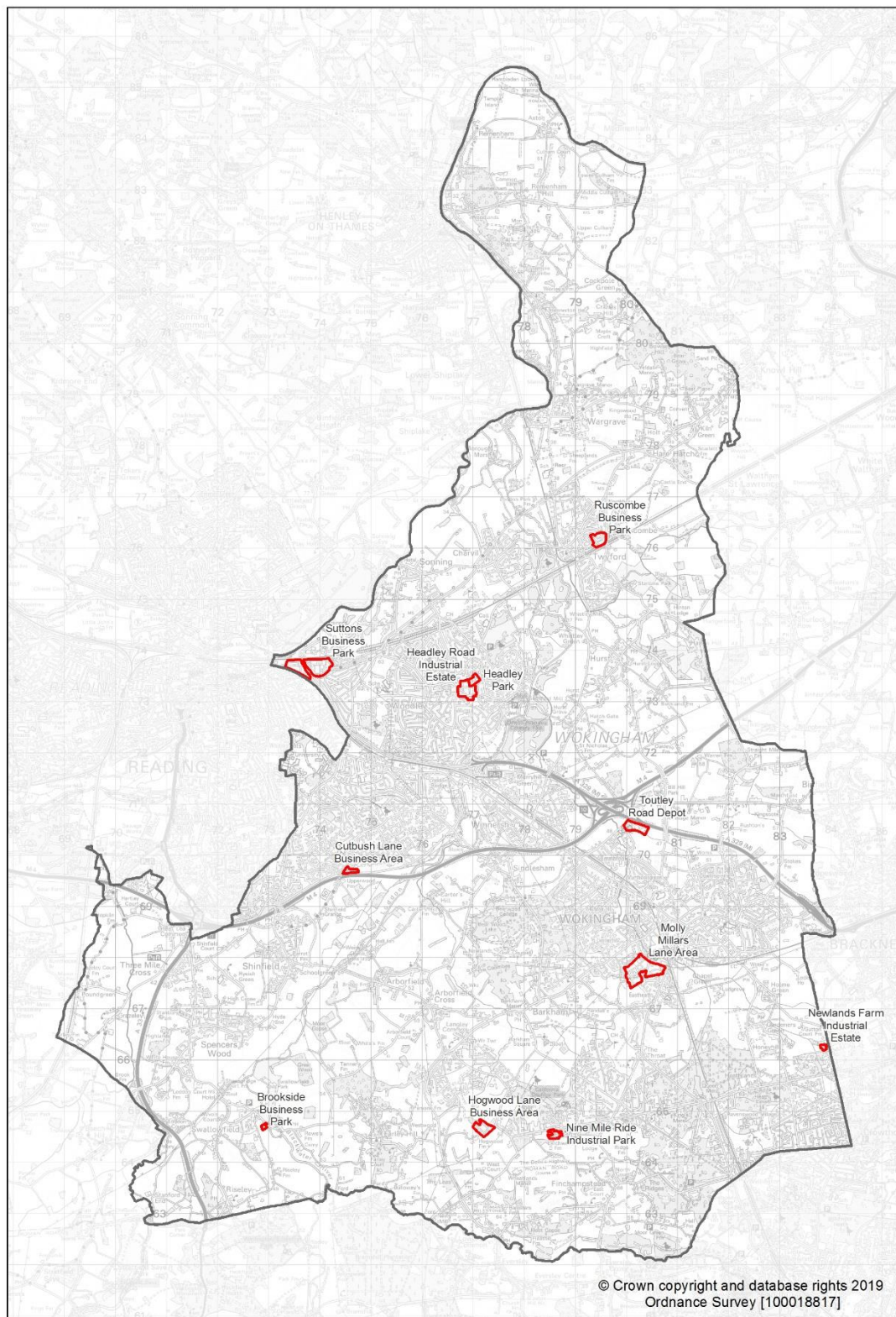
Site Name	Bridgewater Close
Current use (specify class classification)	B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



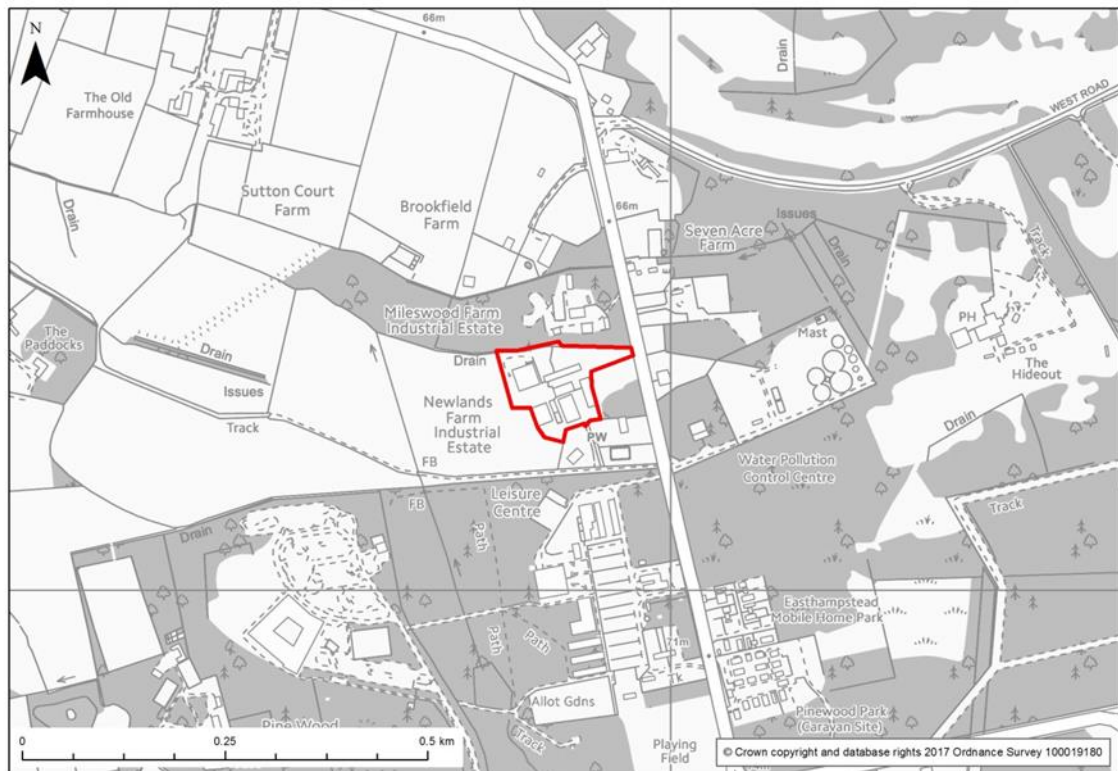
Site Name	Island Road Major Opportunity Area
Location	Reading
Current use (specify class classification)	B2 / B8 - The land is allocated in Reading Local Plan SR1: Island Road Major Opportunity Area.
<p>This industrial area is considered potentially suitable for the following waste categories:</p> <ul style="list-style-type: none"> • Category 3: Activities requiring enclosed industrial premises (small scale). 	



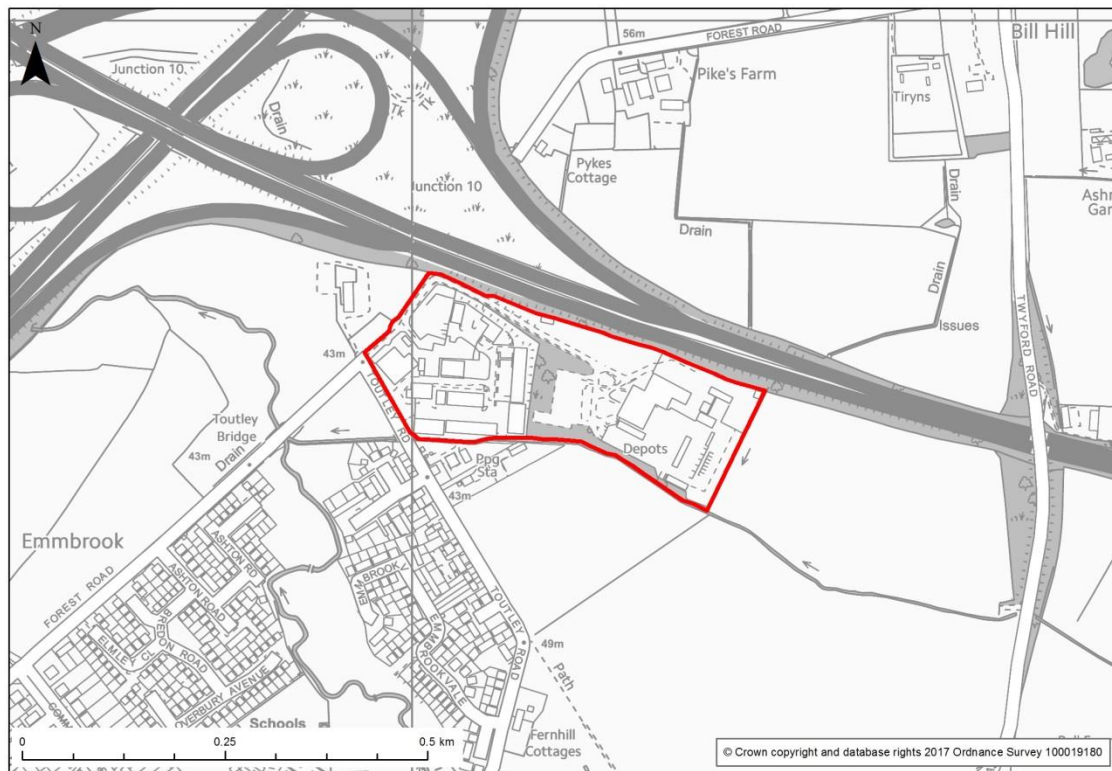
Wokingham



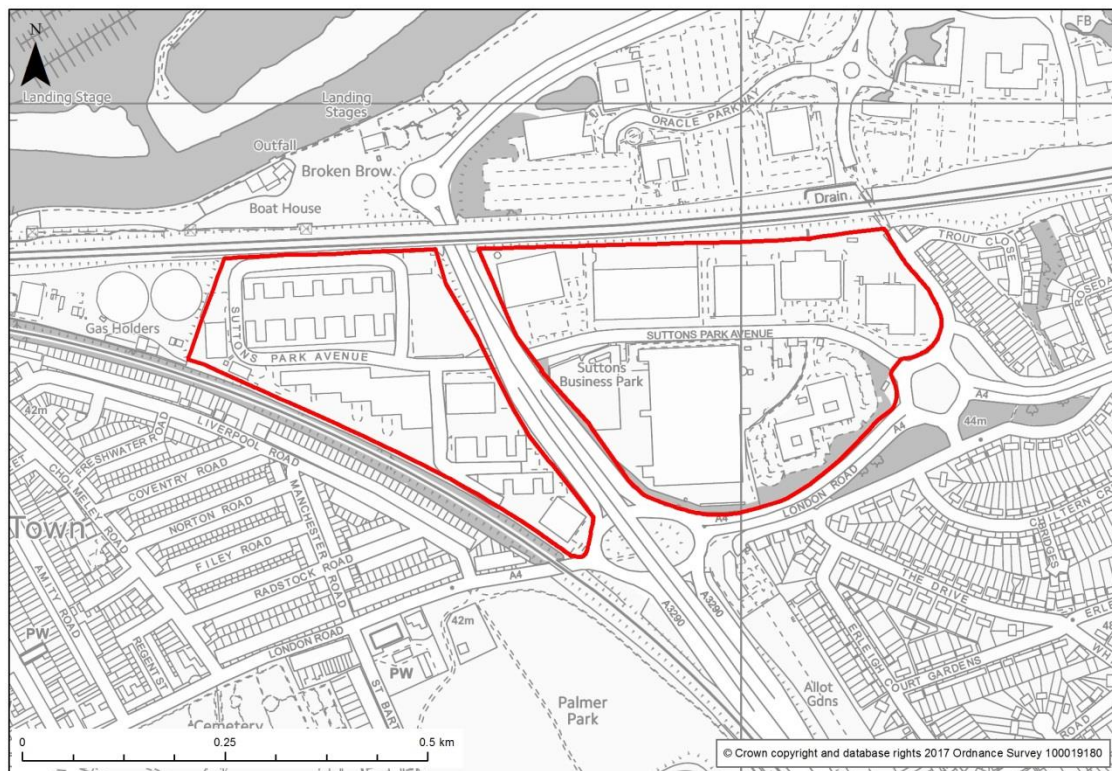
Site Name	Newlands Farm
Location	Crowthorne
Current use (specify class classification)	B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



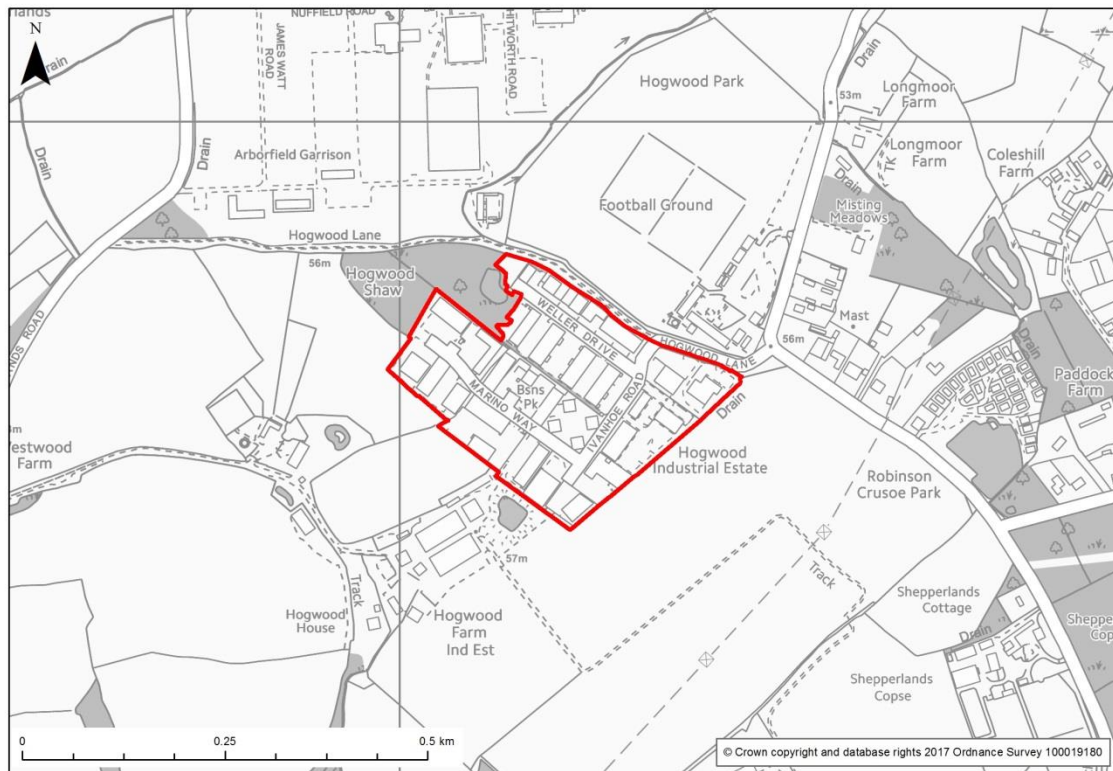
Site Name	Toutley Road Depot
Location	Emmbrook
Current use (specify class classification)	B2
<p>This industrial area is considered potentially suitable for the following waste categories:</p> <ul style="list-style-type: none"> • Category 2: Activities requiring a mix of enclosed buildings / plant and open ancillary open (possibly involving biological treatment); and • Category 3: Activities requiring enclosed industrial premises (small scale) 	



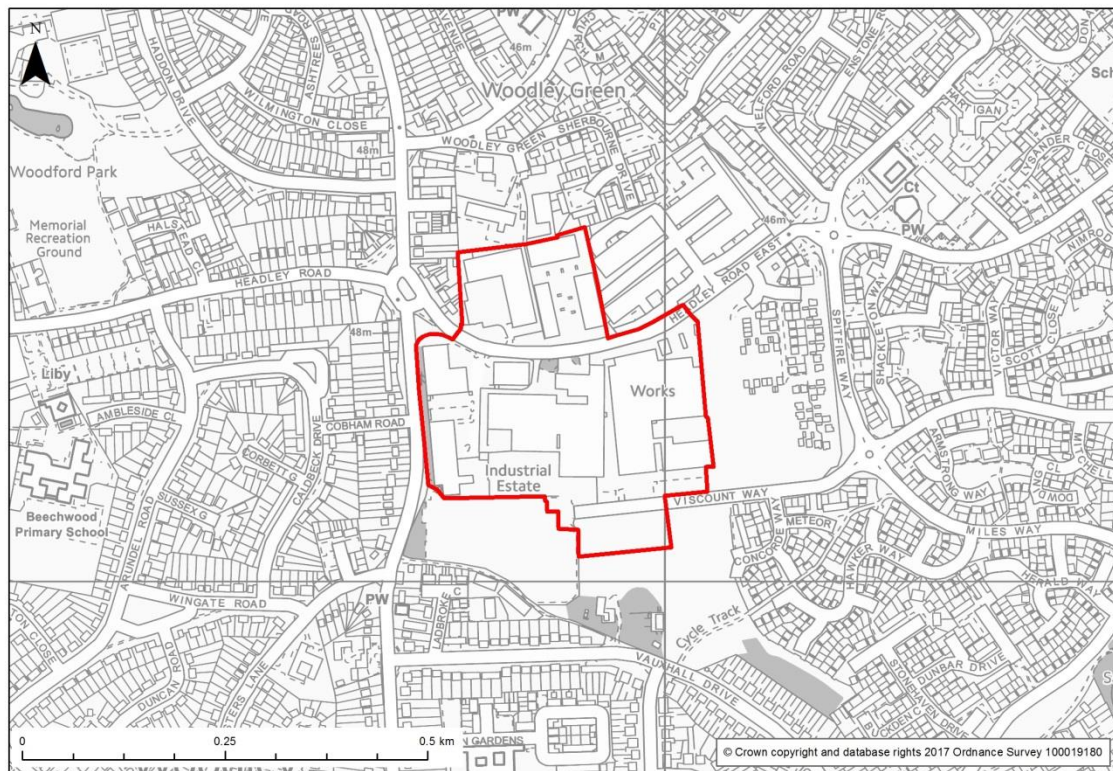
Site Name	Suttons Industrial Park
Location	Earley, Reading, RG6 1AZ
Current use (specify class classification)	B1 / B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> • Category 3: Activities requiring enclosed industrial premises (small scale); and • Category 4: Activities requiring enclosed industrial premises (large scale) 	



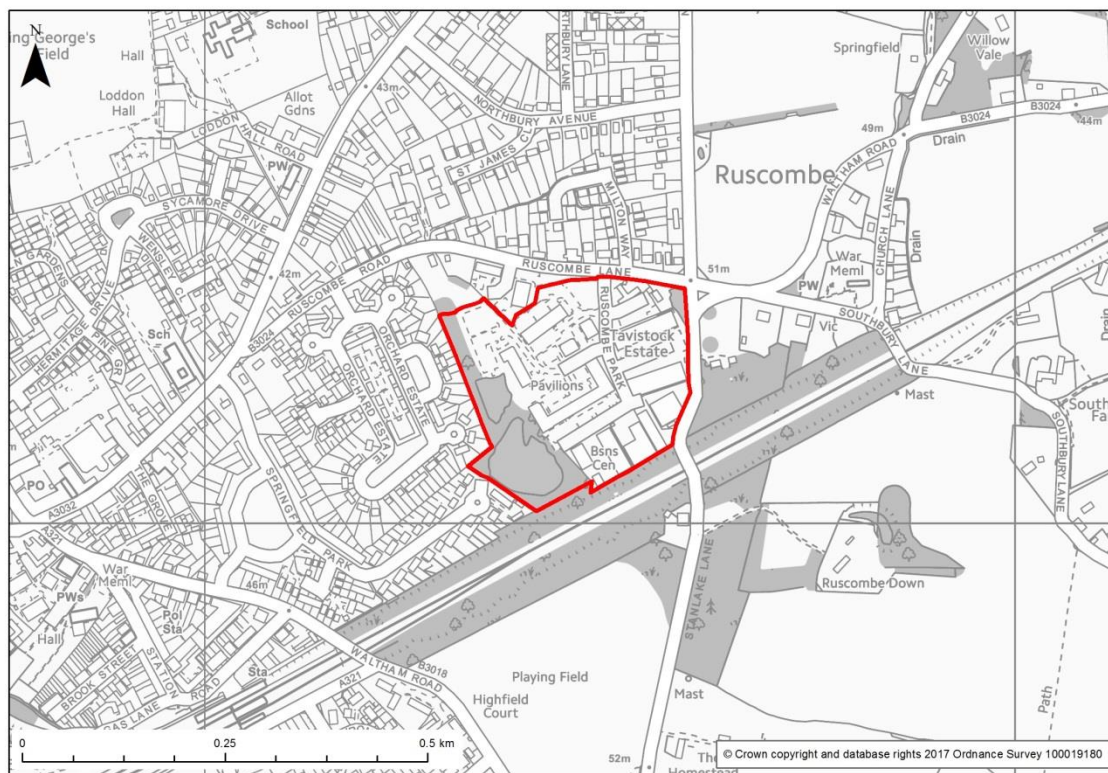
Site Name	Hogwood Lane Business Area (parts)
Location	Wokingham
Current use (specify class classification)	B1c / B2
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



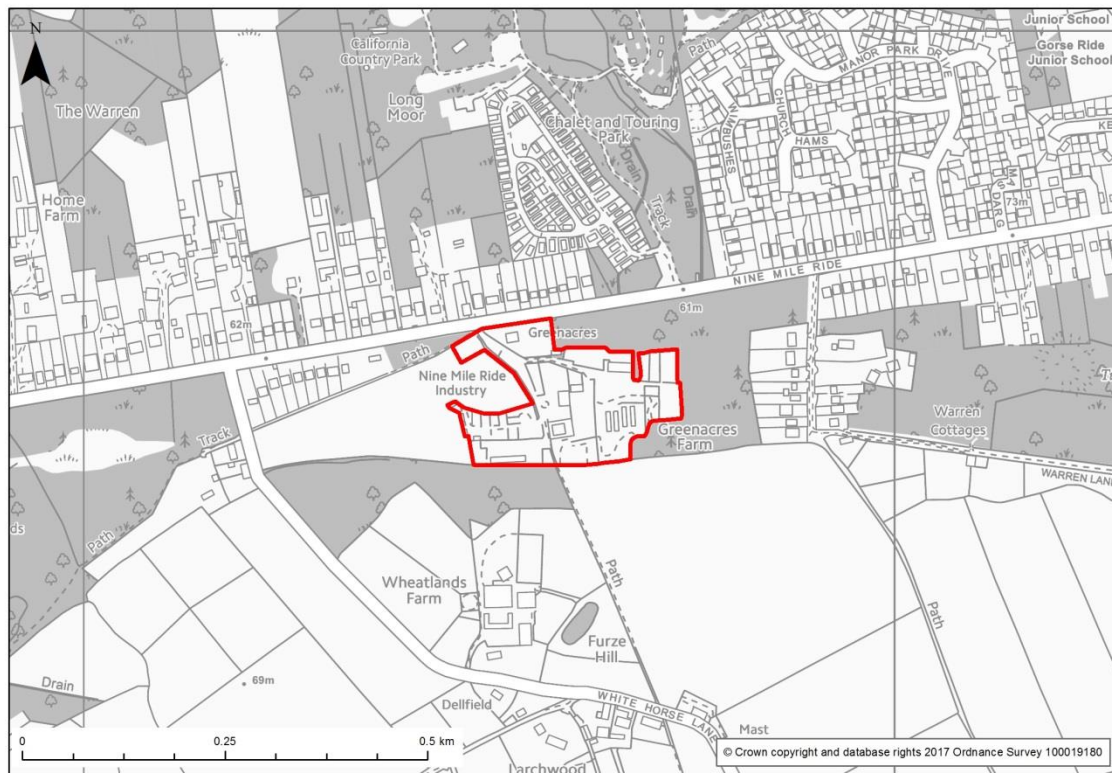
Site Name	Headley Road Industrial Estate
Current use (specify class classification)	B1 (C) / B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



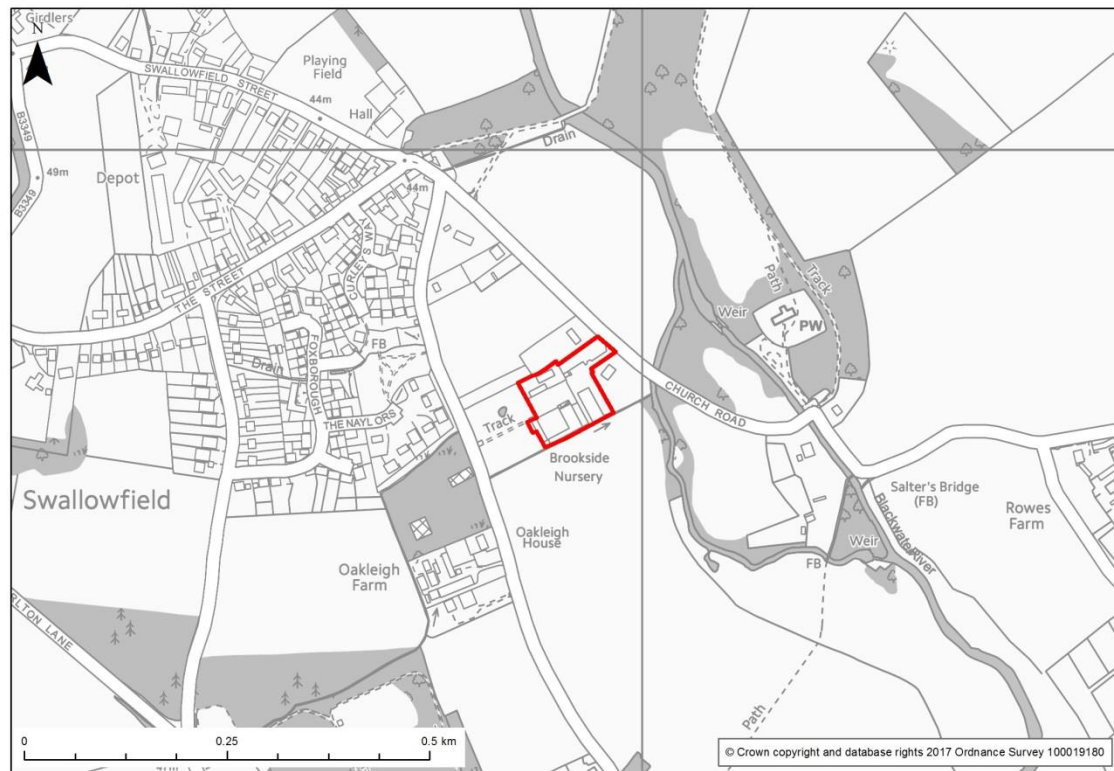
Site Name	Ruscombe Business Park (parts)
Current use (specify class classification)	B1c / B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



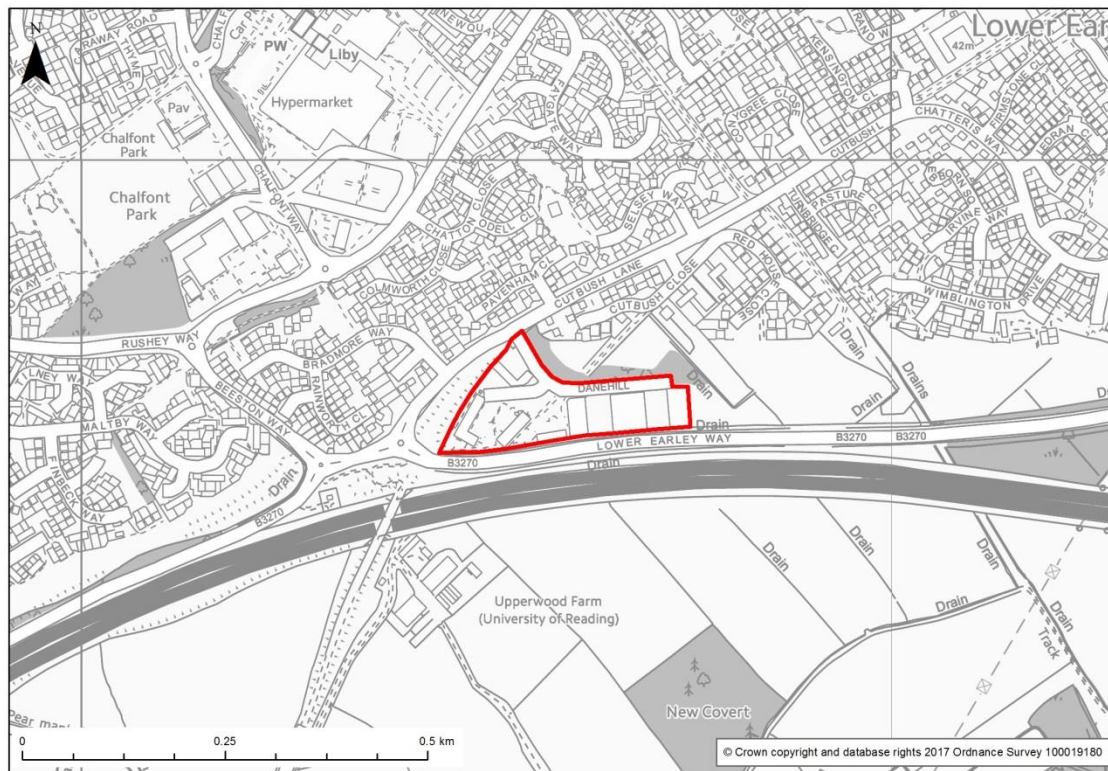
Site Name	Nine Mile Ride Industrial Park
Current use (specify class classification)	B1c / B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



Site Name	Brookside Business Park
Current use (specify class classification)	B2 / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



Site Name	Cutbush Lane Business Area
Current use (specify class classification)	B1a / B1c / B8
This industrial area is considered potentially suitable for the following waste categories:	
<ul style="list-style-type: none"> Category 3: Activities requiring enclosed industrial premises (small scale) 	



Appendix D - The Evidence Base

This Proposed Submission Plan consultation paper is supported by a number of reports which set out the evidence for the contents provided. These reports include:

- *Minerals: Background Study* – sets out the types, availability and movements of minerals in the Plan area and what issues may affect future demand.
- *Waste: Background Study* – sets out the amounts and types of waste that need to be managed, how it is currently managed and what the future waste management may be.
- *Sustainability Appraisal (incorporating Strategic Environmental Assessment) Environmental Report* – sets out the findings of assessing the policies and sites to ensure the Plan will not have any significant impacts on the Central and Eastern Berkshire environment, communities and economy.
- *Habitats Regulations Assessment: Screening & Appropriate Assessment* – sets out the assessment of potential impacts of the policies and sites on European designated habitats.
- *Strategic Flood Risk Assessment* – a review of existing Strategic Flood Risk Assessments, any updates to data and a review of sites.
- *Strategic Traffic & Transport Assessment* – an assessment of the traffic impacts of the sites.
- *Landscape & Visual Impact Assessment* – an assessment of the landscape impacts of the sites.
- *Heritage Statement* – an assessment of the sites using the Historic Environment Record.
- *Restoration Study* – a study of restoration issues and requirements within Central & Eastern Berkshire.
- *Minerals & Waste Safeguarding Study* – a study of the safeguarding requirements within Central & Eastern Berkshire.
- *Minerals: Proposal Study* – sets out the potential mineral sites and their suitability.
- *Waste: Proposal Study* – sets out potential waste sites and their suitability
- *Equalities Impact Assessment* – sets out whether the Plan will have an impact on particular sectors of Central & Eastern Berkshire's communities.
- *Duty to Cooperate Statement* – a report on cross boundary issues and how these have been addressed in cooperation with key stakeholders.
- *Climate Change Topic Paper* – sets out how minerals and waste development can contribute towards mitigating the causes of climate change and reducing the vulnerability of the effects of climate change.

Appendix E – Safeguarded sites

Site Name	Location	Primary Function/Use	Planning Permission / End Date	Site Operator
Quarries				
Horton Brook Quarry	Horton	Sharp Sand and Gravel Extraction	30/08/2022	Aggregate Industries/Jayflex Aggregates Ltd
Sheephouse Farm Quarry	Maidenhead	Sharp Sand and Gravel Extraction	App No: 98/32472/OBC M End Date: 21/02/2042	Summerleaze Ltd
Riding Court Farm	Datchett	Sharp Sand and Gravel Extraction	16/12/2027	CEMEX
Star Works	Knowl Hill	Soft Sand	Inactive	Grundons
Horton Brook and Poyle Quarry Extension (Allocation MA 1)	Horton	Sharp sand and Gravel Extraction		
Poyle Quarry	Horton	Sand and Gravel Extraction	Applications No: Application number 04/01716/FULL	Summerleaze Ltd
Poyle Quarry Extension (Allocation – MA 2)	Horton	Sand and Gravel Extraction		Summerleaze Ltd

CDE Recycling Sites				
Bray Recycling Facility	Monkey Island Lane, Bray	Aggregate recycling		Summerleaze Ltd
Fleetwood Grab Services Ltd	Wigmore Lane, Reading	Aggregate recycling		Fleetwood Grab Services Ltd
Hindhay Quarry	Pinkneys Green, Maidenhead	Aggregate recycling		Summerleaze Ltd
Simple Skips Ltd	Ascot	Aggregate recycling		Simple Skips Limited
Hythe End Quarry	Wraysbury	Aggregate recycling		Fowles Crushed Concrete Limited
R Collard Limited	Reading	Aggregate recycling		R Collard Limited
Hythe End Farm	Hythe End Road, Wraysbury	Aggregate recycling		Charles Morris
Riding Court Farm	Datchett	Aggregate recycling	App No: 18/00839/FULL	CEMEX
Horton Brook Quarry (Allocation – WA 2)	Horton	Aggregate recycling		Aggregate Industries/Jayflex Aggregates Ltd
Aggregate Wharves				
Monkey Island Lane Wharf (Allocation – TA 1)	Bray	Aggregate Wharf		N/A

Metal Recycling Sites (MRS) & End of Life Vehicles (ELV)				
A1 Car Spares	Highland Avenue, Wokingham	ELV		A1 Wokingham Car Spares
Wraysbury Car Spares	Wraysbury	ELV		Bansals Hydraulic Ltd
R Collard Limited	Old Forest Road, Wokingham	MRS		R Collard Limited
Composting Sites / Green Waste				
Planners Farm	Bracknell Road, Brockhill	Composting		Gary Short
Berkyn Manor Farm (Allocation – WA 1)	Horton, Slough	Green Waste/Kitchen Waste		N/A
Stubbings Compound (Allocation – WA 3)	Pinkney's Green, Maidenhead	Green Waste		Stubbings Group
Household Waste Recycling Centre (HWRC)				
Braywick Civic Amenity Site	Maidenhead	HWRC		Veolia E S Cleanaway (UK) Ltd
Longshot Lane Household Waste Recycling Centre	Bracknell	HWRC		F C C Environment (Berkshire) Limited
R3 Environmental - Swallowfield	Wyvols Court Farm, Swallowfield	WEEE		R3 Environmental Solutions Ltd
Waste Transfer Station				
John Horwood	Maidenhead	Waste Transfer Station		John Horwood

Allwaste (Berkshire) Limited	Foundry Lane, Horton,	Waste Transfer Station		Allwaste (Berkshire) Limited
Reynolds Skip Hire	Reading	Waste Transfer Station		1st Reynolds Skip Hire Ltd
Darwin Close Ts2	Reading	Waste Transfer Station		Reading Borough Council
Horwoods Yard	Maidenhead	Waste Transfer Station		Dennis David Horwood & John Frederick Horwood
Maidenhead Transfer Station	Maidenhead	Waste Transfer Station		Veolia E S Cleanaway (UK) Ltd
Mini - Skips (Southern) Ltd	Maidenhead	Waste Transfer Station		Mini - Skips (Southern) Ltd
Toutley Depot, Wokingham	Wokingham	Waste Transfer Station		O C S Group U K Limited
Darwin Close Transfer Station	Reading	Waste Transfer Station		Reading Borough Council
Select Environmental Services	Reading	Waste Transfer Station		Select Environmental Services Ltd
Smallmead Waste Management Centre	Reading	Waste Transfer Station		F C C Environment (Berkshire) Limited
St. George's Lane	Ascot	Waste Transfer Station		Shorts Group Limited ¹²²
Sharpsmart	Reading	Waste Transfer Station		Daniels Corporation International Ltd

¹²² This site is currently subject to a planning application (18/00945/OUT) and a proposed housing allocation. The site will be safeguarded until/if the planning application is approved or the housing allocation is adopted.

Transfer Station, Recycling Centre & Civic Amenity Site	Reading	Waste Transfer Station		F C C Environment (Berkshire) Limited
Waste Water Treatment Works (WWTW)				
Bracknell Sewerage Treatment Works (STW)	Binfield	WWTW		Thames Water
Ascot STW	Whitmoor Bog, Bracknell	WWTW		Thames Water
Sandhurst STW (Swan Lane)	Sandhurst	WWTW		Thames Water
Easthampstead Park STW (Old Wokingham Road)	Crowthorne, Wokingham	WWTW		Thames Water
Windsor STW	Old Windsor, Windsor	WWTW		Thames Water
Maidenhead STW	Maidenhead	WWTW		Thames Water
Hurley STW	Hurley, Maidenhead	WWTW		Thames Water
White Waltham STW	White Waltham	WWTW		Thames Water
Reading STW	Reading	WWTW		Thames Water
Ashridge Farm STW	Wokingham	WWTW		Thames Water
Aborfield STW	Aborfield	WWTW		Thames Water
Sheeplands STW	Wargrave	WWTW		Thames Water

Glossary & Acronyms

Active (site): site where development relating to a planning permission is being carried out to a substantial extent.

Adaptation: In relation to Policy DM2 (Climate change - mitigation and adaptation) adaptation relates to ensuring that minerals and waste developments minimise their effect on climate change through reducing greenhouse gas emission, sustainable use of resources, developing energy recovery facilities, utilising low carbon technologies or avoiding areas vulnerable to the effects of climate change.

Aftercare: Action necessary to bring restored land up to the required standard for an agreed after-use such as agriculture, forestry or amenity.

Aggregate recycling site: Facilities where hard, inert materials are crushed and screened (filtered) to produce recycled/secondary aggregate of various grades. Aggregates may be produced from construction, demolition and excavation (CD&E) waste, or incinerator bottom ash (IBA) from energy recovery facilities.

Amenity: Something considered necessary to live comfortably.

Anaerobic Digestion (AD): A biological process making it possible to degrade organic matter by producing biogas, which is a renewable energy source and sludge, used as fertiliser.

Ancient Woodland: A statutory designation for woodland that is believed to have existed from at least 1600 AD.

Ancillary development: A group term encapsulating a variety of types of minor development that are associated with the primary permitted minerals and/or waste development that generally have minimal environmental impact

Appraisal: An assessment of a proposal for the purposes of determining its value, viability and deliverability taking into account the positive and negative impacts the development would have.

Appropriate location: A location which meets the criteria set out in Policy W4, M4 and/or M7 and complies with all other policies within the JMWP.

Area of Outstanding Natural Beauty (AONB): Areas of countryside considered to have significant landscape value and protected to preserve that value. Originally identified and designated by the Countryside Commission under Sections 87 and 88 of the National Parks and Access to the Countryside Act 1949. Natural England is

now responsible for designating AONBs and advising Government and other organisations on their management and upkeep.

Beneficial after-use: In relation to Policy DM8 (Restoration of minerals and waste developments), beneficial afteruses are when following minerals or waste development, the land is returned land back to a beneficial condition following the end of development through restoration.

Biodiversity Opportunity Area (BOA): Specific geographical areas with the best opportunity to restore and create habitats of regional importance. They are defined entirely on the basis of identifying those areas where conservation action is likely to have the most benefit for biodiversity interest and opportunities for enhancement. The purpose of BOAs is to guide support for land management as they represent those areas where assistance for land management and habitat restoration would have particular benefit.

Biodiversity net gain: In relation to development this means leaving biodiversity is a better state post-development than it was pre-development. Biodiversity net gain is one component of wider 'environmental net gain'.

Bird strike: Risk of aircraft collision with birds, which are often attracted to landfill sites containing organic waste or waterbodies.

Borrow pit: Where minerals are required for a particular major construction project, temporary borrow pits can sometimes be developed to obtain very local sources of sand, gravel, chalk or clay. Production from borrow pits is normally limited to use for a specific project, and usually has direct access from the pit to the construction site.

British Geological Survey (BGS): The BGS is part of the Natural Environment Research Council (NERC) and is a supplier of capability in geoscience through survey, monitoring and research.

Brownfield: See previously developed land.

Capacity: Is the maximum amount of waste a site can realistically manage, or in relation to minerals it is the amount of material that can be extracted from a site per annum, bearing in mind any restrictions (such as permits, traffic, space, hours of working etc.).

Chalk: A soft white rock primarily formed from the mineral calcite. One of the uses of this mineral is in agriculture.

Civic amenity site: A facility provided by the Local Authority which is accessible to the general public to deposit waste which cannot be collected with the normal household waste, such as bulky items, garden waste and engine oil.

Clay: A fine-grained, firm earthy material that is plastic when wet and hardens when heated, consisting primarily of hydrated silicates of aluminium and widely used in making bricks, tiles, and pottery.

Climate change: The significant and lasting change in the distribution of weather patterns over periods ranging from decades to millions of years and the implications on the environment and community.

Coal measures: The layers of rock specifically from a time that geologists call the Upper Carboniferous period. The Coal Measures were deposited about 310 million years ago, and these layers of rock contain many coal seams. Coal seams are a bed of coal usually thick enough to be profitably mined.

Co-location: The placement of several activities in a single location.

Combined Heat & Power (CHP): Heating technology which generates heat and electricity simultaneously, from the same energy source.

Commercial & Industrial Waste (C&I): Waste generated by business and industry.

Composting: Aerobic decomposition of organic matter to produce compost for use as a fertiliser or soil conditioner.

Concrete batching plant: Devices used to mix various materials, such as sand and gravel, to form concrete.

Construction, Demolition & Excavation Waste (CD&E): Waste generated by the construction, repair, maintenance and demolition of buildings and structures. It mostly comprises brick, concrete, hardcore, subsoil and topsoil but can also include timber, metals and plastics.

Conventional hydrocarbons (oil and gas): Oil and gas where the reservoir is sandstone or limestone.

Corridor of disturbance: An area located on land surrounding a specific construction project where aggregate is extracted as part of the development. The corridor of disturbance relates to 'borrow pits' and indicates the area which aggregate can be extracted for specific projects.

Countryside: Areas that are not urbanised.

Cumulative impact: Impacts that accumulate over time, from one or more sources.

Defra biodiversity metric: The metric is a habitat-based approach to determining a proxy biodiversity value. It is an improved version of the metric piloted by Defra in 2012 in the context of the biodiversity offsetting pilots and incorporates many of the changes since, made or requested by industry experts.

Department for Communities and Local Government (DCLG): The UK Government department for communities and local government in England (now referred to as the Ministry for Housing, Communities and Local Government).

Design and Access Statement: A supporting document submitted with a planning application, in which developers state how their proposal is appropriate for the site and accessible to people who may use it.

Development considerations: These are identified in Appendix A (Allocated Sites) of the Plan and are identified for each of the site allocations in the Plan. Development considerations are issues which need to be met /addressed alongside the other policies in the Plan in the event that a planning application is submitted for development.

Development Management (DM): Development Management is the end-to-end management of the delivery chain for sustainable development. DM includes a wide number of planning activities such as designing, analysing, influencing, promoting, engaging, negotiating, decision-making, co-ordinating, implementation, compliance and enforcement.

Development Plan Document (DPD): Spatial planning documents which are subject to independent examination.

Disposal: Any operation which is not recovery. This includes operations which have a secondary consequence such as the reclamation of substances or energy.

Dry Mixed Recyclables (DMR): Dry recyclables is the modern description of waste that is free from contaminants such as construction, food or garden waste. Leaving clean materials such as paper, cardboard, plastic bottles, drinks cans and glass bottles to be sorted and recycled.

Emissions: In the context of the minerals and waste, emissions are gases released into the atmosphere as a result of human activity. A prominent greenhouse gas is

carbon dioxide which arises from the combustion of fossil fuel and consequently contributes to climate change.

End of life vehicle (ELV): Vehicles which are no longer in use and are classified as waste.

Energy Recovery Facility (ERF): A facility at which waste material is burned to generate heat and/or electricity.

Environment Agency (EA): A public organisation with the responsibility for protecting and improving the environment in England. Its functions include the regulation of industrial processes, the maintenance of flood defences and water resources, water quality and the improvement of wildlife habitats.

Environmental Impact Assessment (EIA): Systematic investigation and assessment of the likely effects of a proposed development, to be taken into account in the decision-making process under the Town and Country Planning (Environment Impact Assessment) (England and Wales) Regulations 1999. The process is undertaken for a proposed development that would significantly affect the environment because of its siting, design, size or scale.

Environmental net gain: Improving all aspects of environmental quality through a scheme or project. Achieving environmental net gain means achieving biodiversity net gain first and going further to achieve increases in the capacity of affected natural capital to deliver ecosystem services and make a scheme's wider impacts on natural capital positive.

Environmental Permit: Anyone who proposes to deposit, recover or dispose of waste is required to have a permit. The permitting system is administered by the Environment Agency and is separate from, but complementary to, the land-use planning system. The purpose of a permit and the conditions attached to it are to ensure that the waste operation which it authorises is carried out in a way that protects the environment and human health.

Exception test: If, following a sequential test, it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. For the exception test to be passed it should be demonstrated that: a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

Extension (minerals site): This involves either the lateral expansion or deepening of the quarry to extract additional resources.

Extension (waste site): To provide additional waste capacity in relation to increased throughput and/or footprint of the site. Landfills may be expanded to cover a larger area or may be surcharged – that is, extended vertically upwards.

Flood protection: Protection of land and/or infrastructure from the impacts of flooding through mitigation measures such as coastal and flood water defences.

Flood resilience: The management of land and the development of flood defences to ensure that the risk of flooding is managed in a sustainable way.

Flood risk: Areas which have a flood risk have the potential to flood under certain weather conditions. Flood risk zones are determined by the Environment Agency. Areas at risk of flooding are categorised as follows:

- Flood Risk Zone 1: Low Probability;
- Flood Risk Zone 2: Medium Probability;
- Flood Risk Zone 3a: High Probability; and
- Flood Risk Zone 3b: Functional Floodplain.

Flood Risk Assessment (FRA): An assessment of the risk of flooding from all flooding mechanisms, the identification of flood mitigation measures and should provide advice on actions to be taken before and during a flood. The FRA should also demonstrate that the development will be safe for its lifetime and will not increase flood risk elsewhere.

Flood Risk Zones (FRZ): Defined geographical areas with different levels of flood risk. Flood risk zones are defined by the Environment Agency.

Gas: Is a hydrocarbon (see 'Hydrocarbons'). Gas is a non-renewable resource.

Gasification: A waste-treatment process in which waste is heated to produce a gas that is burned to generate heat energy.

Green Belt: An area designated in planning documents, providing an area of permanent separation between urban areas. The main aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the most important quality of Green Belts is their openness.

Green infrastructure: A network of high-quality green and blue spaces and other environmental features. It includes parks, open spaces, playing fields, woodlands, wetlands, grasslands, river and canal corridors allotments and private gardens. It can

provide many social, economic and environmental benefits close to where people live and work including:

- space and habitat for wildlife with access to nature for people;
- places for outdoor relaxation and play;
- climate change adaptation (for example flood alleviation and cooling urban heat islands);
- environmental education;
- local food production (in allotments, gardens and through agriculture); and
- improved health and well-being (lowering stress levels and providing opportunities for exercise).

Green waste: Compostable garden waste.

Groundwater Source Protection Zones (GPZ): Geographical areas, defined by the Environment Agency, used to protect sources of groundwater abstraction.

Habitats Regulation Assessment (HRA): Statutory requirement for Planning Authorities to assess the potential effects of land-use plans on designated European Sites in Great Britain. The Habitats Regulations Assessment is intended to assess the potential effects of a development plan on one or more European Sites (collectively termed 'Natura 2000' sites). The Natura 2000 sites comprise Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). SPAs are classified under the European Council Directive on the conservation of wild birds (79/409/EEC; Birds Directive) for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species).

Hazardous waste: Waste that contains hazardous properties that may render it harmful to human health or the environment. Hazardous wastes are listed in the European Waste Catalogue (EWC).

Health and Safety Executive (HSE): The national independent watchdog for work-related health, safety and illness.

Heavy goods vehicles (HGV): A vehicle that is over 3,500kg unladen weight and used for carrying goods.

Hectare (Ha): 10,000 square metres

Highways Authority: The organisation responsible for the administration of public roads.

Household waste: Waste arising from domestic property which has been produced solely from the purposes of living, plus waste collected as litter from roads and other public places.

Hydrocarbons: Hydrocarbon comprising petroleum (oil and gas natural liquids) and gas are fossil fuels that occur concentrated in nature as economic accumulations trapped in structures and reservoir rocks beneath the earth surface. They are principally valued as a source of energy.

Incinerator Bottom Ash (IBA): The coarse residue left on the grate of waste incinerators.

Inert waste: Waste that does not undergo any significant physical, chemical or biological changes.

Landbank: A measure of the stock of planning permissions in an area, showing the amount of un-exploited mineral, with planning permissions, and how long those supplies will last at the locally apportioned rate of supply.

Landscape character: A combination of factors such as topography, vegetation pattern, land use and cultural associations that combine to create a distinct, recognisable character.

Land-won aggregates / minerals: Mineral/aggregate excavated from the land.

Landfill: The deposit of waste into voids in the ground.

Leachate: Water which seeps through a landfill site, extracting substances from the deposited waste to form a pollutant.

Listed Buildings and Sites: Buildings and sites protected under the Planning (Listed Buildings and Conservation Areas) Act 1990.

Local Aggregate Assessment (LAA): The National Planning Policy Framework requires all Mineral Planning Authorities to prepare an annual LAA. LAAs are to be based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options. The LAA establishes the provision to be made for aggregate supply in Mineral Local Plans.

Local Enterprise Partnership (LEP): In England, local enterprise partnerships (LEPs) are voluntary partnerships between local authorities and businesses set up in 2011 by the Department for Business, Innovation and Skills to help determine local economic priorities and lead economic growth and job creation within the local area. Central and Eastern Berkshire is located within the Thames Valley Berkshire Local Enterprise Partnership (LEP) area.

Local requirement: A requirement (for mineral) within the Plan area or within a neighbouring authority area.

Local Wildlife Site (LWS): LWSs are wildlife-rich sites selected for their local nature conservation value. They vary in shape and size and can contain important, distinctive and threatened habitats and species.

Low carbon technologies: These are a range of technologies developed to specifically reduce the amount of carbon dioxide (CO₂) released into the atmosphere.

Managed Aggregate Supply System (MASS): A system to ensure a steady and adequate supply of aggregate mineral, to handle the significant geographical imbalances in the occurrence of suitable natural aggregate resources, and the areas where they are most needed. It requires mineral planning authorities which have adequate resources of aggregates to make an appropriate contribution to national as well as local supply, while giving due allowance for the need to control any environmental damage to an acceptable level. It also ensures that areas with smaller amounts of aggregate make some contribution towards meeting local and national need where that can be done sustainably.

Material considerations: A matter that should be taken into account in deciding a planning application or on an appeal against a planning decision. Material considerations can include (but are not limited to); overlooking/loss of privacy, loss of light or overshadowing, parking, highway safety, etc. Issues such as loss of view, or negative effect on the value of properties are not material considerations.

Materials recovery facility (MRF): A facility where elements of the waste stream are mechanically or manually separated before recycling and/or are bulked, crushed, baled and stored for reprocessing, either on the same site or at a material reprocessing plant.

Methane: The main constituent of natural gas (a fossil fuel). It is found in naturally occurring gas field deposits within the ground but can also be harvested as a by-product of anaerobic decomposition of organic materials by bacteria. Methane is

used as fuel to generate heat and power, and when released into the atmosphere acts as a powerful greenhouse gas and is much more potent than carbon dioxide.

Ministry for Housing, Communities and Local Government (MHCLG): The Ministry of Housing, Communities and Local Government's (formerly the Department for Communities and Local Government) job is to create great places to live and work, and to give more power to local people to shape what happens in their area.

Million tonnes (mt): Acronym.

Million tonnes per annum (mtpa): Acronym.

Mineral: Limited and finite natural resources which can only be extracted where they are found geologically.

Minerals and Waste Consultation Area (MWCA): An area identified to ensure consultation between the planning authorities before certain non-mineral or waste planning applications made within the area are determined.

Minerals and Waste Safeguarding Area (MWSA): A Minerals Safeguarding Area (see MSA) which also includes minerals and waste safeguarded sites.

Mineral resources: Mineral aggregates and hydrocarbons, which naturally occur in geological deposits in the earth.

Mineral Planning Authority: The local planning authorities responsible for minerals planning. In the Plan area, The Royal Borough of Windsor and Maidenhead, Bracknell Forest Council, Reading Borough Council, and Wokingham Borough Council are minerals planning authorities.

Mineral Safeguarding Area (MSA): The MSA is defined by minerals planning authorities. They include viable resources of aggregates and are defined so that proven resources of aggregates are not sterilised by non-mineral development. The MSA does not provide a presumption for these resources to be worked.

Migration: This is the process by which negative or harmful effects caused by a development are prevented or lessened by incorporating countermeasures into the design or operation.

Mitigation hierarchy: The principle that environmental harm resulting from a development should be avoided (through locating development where there will be less harmful impacts), adequately mitigated, or, as a last resort, compensated for.

Mitigation measures: Measures that reduce or minimise impacts.

Monitoring: Minerals and waste developments are monitored to ensure that they comply with the policies of the Plan and planning conditions attached to their permissions. The Plan will also be subject to monitoring.

Monitoring Indicator: This is the aspect of the development that will be monitored in order to detect any deviation from what is either expected of the development or acceptable.

Monitoring Trigger: The threshold that, once passed, signifies there is an issue with the relevant policy in its current form and may require review.

Municipal Solid Waste (MSW): Solid waste collected by waste collection authorities, predominantly household waste.

National Planning Policy Framework (NPPF): Published in March 2012 and subsequently updated in 2018 and 2019, the NPPF sets out the Government's planning policies for England and how these are expected to be applied.

Natural Capital: The world's stock of natural resources, which includes geology, soils, air, water and all living organisms. Some natural capital assets provide people with free goods and services, often referred to as ecosystem services.

Natural England: Public body tasked with the conservation and improvement of the natural environment. Natural England designates Areas of Outstanding Natural Beauty and National Parks, manages National Nature Reserves and notifies Sites of Special Scientific Interest.

Non-hazardous waste landfill: One of the three classifications of landfills made by the Landfill Directive, taking non-hazardous waste.

Non-hazardous waste: Waste permitted for disposal at a non-hazardous landfill. It is not inert or hazardous and includes the majority of household and commercial wastes.

Oil: A hydrocarbon (see 'Hydrocarbons'). Oil is a non-renewable resource.

Oil and gas: A hydrocarbon (see 'Hydrocarbons'). Oil and gas are non-renewable resources.

Open windrow composting: Involves the raw material (usually green and/or garden waste and cardboard) being arranged outdoors in long narrow piles on a hard and preferably impermeable surface. The windrows are mixed and turned regularly for aeration, by hand or mechanically.

Other locally recognised assets: In relation to Policy DM7 (Conserving the Historic Environment) other locally recognised assets are non-designated assets which, although do not have any statutory protection, are recognised locally as making a significant and positive contribution to local historic knowledge, character and features.

Petroleum Exploration and Development Licence (PEDL): A PEDL allows a company to pursue a range of oil and gas exploration activities, subject to necessary drilling/development consents and planning permission.

Planning application: Operators proposing a new minerals or waste development need to apply for permission from the relevant planning authority in order to be allowed carry out their operations.

Planning permission: Once planning applications have been reviewed by the relevant planning authority, permission may be granted (i.e. consent for the proposed development is given). Permissions may have certain conditions or legal agreements attached which allow development as long as the operator adheres to these.

Policies Map: A map on an Ordnance Survey base showing spatial application of appropriate policies from the Development Plan.

Preparing for re-use: Checking, cleaning or repairing recovery operations, by which products or components of products that would have become waste are prepared so that they can be re-used without any other pre-processing. While re-use is a part of the waste hierarchy, re-use operations are not generally considered waste management and may not require a location appropriate for waste management facilities.

Previously developed land: Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or was last occupied by agricultural or forestry buildings; land that has been developed for mineral extraction or waste disposal by landfill, where provision for restoration has been made through development management procedures; land in built-up areas such as residential

gardens, parks, recreation grounds and allotments; and land that was previously developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape.

Pre-application discussions: Engagement / discussions between applicants (and their agents) with the relevant minerals and waste planning authority prior to the submission of a formal application.

Production: Obtaining useful end products from minerals or waste material which may include the extraction of sand and gravel, producing recycled and secondary aggregate, extraction of oil and gas and the generation of energy from waste.

Prior Extraction: The removal of a mineral before a development begins construction on the same site.

Pyrolysis: Thermal decomposition at high temperatures taking place in an inert atmosphere.

Quarry: These are open voids in the ground from which minerals resources are extracted.

Rail depot: A railway facility where trains regularly stop to load or unload passengers or freight (goods). It generally consists of a platform and building next to the tracks providing related services.

Ramsar Sites (Wetlands of International Importance): Sites of international importance for waterfowl protected under the Ramsar Convention of the Conservation of Wetlands of International Importance, ratified by the UK Government in 1976.

Recyclate: A raw material that is sent to and processed in a waste recycling plant or materials recovery facility which will be used to form new products.

Re-use: Any operation by which products or components that are not waste are used again for either the same purpose for which they were conceived or other uses. While re-use is a part of the waste hierarchy, re-use operations are not generally considered waste management and may not require a location appropriate for waste management facilities.

Recovery: Any operation, the principal result of which, is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil

a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.

Recycled aggregates: Products manufactured from recyclables or the by-products of recovery and treatment processes, e.g. recycled concrete aggregates from CD&E waste.

Recycling: The series of activities by which discarded materials are collected, sorted, processed and converted into raw materials and used in the production of new products. Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

Regeneration: Investment in capital in the review of urban area by improving what is there or clearing it away and restoring.

Renewable energy: Energy which comes from natural resources such as sunlight, wind, rain, tides and geothermal heat, which are naturally replenished.

Residues: Material remaining after a process has been undertaken e.g. waste processing can involve incineration which leaves residues of bottom ash and fly ash. See 'Incinerator Bottom Ash'.

Restoration: The process of returning a site to its former use or restoring it to a condition that will support an agreed after-use, such as agriculture or forestry.

Reverse logistics: Involves reducing vehicle movements by load bulking when transferring minerals and waste, for example, ensuring a HGV always enters and exits a site with a full load.

Rights of Way (RoW): Paths which the public have a legally protected right to use.

Routeing agreement: An agreement to require that vehicles be routed so as to avoid certain roads, possibly at all times or possibly at certain times of day e.g. to avoid conflict with peak hour traffic and/or arrivals and departures at school opening and closing times.

Safeguarding: The method of protecting needed facilities or mineral resources and of preventing inappropriate development from affecting it. Usually, where sites are

threatened, the course of action would be to object to the proposal or negotiate an acceptable resolution.

Safeguarded site: Safeguarding protects minerals and waste sites from development pressures and inappropriate encroachment from nearby developments, preventing the unnecessary sterilisation of their associated resources and infrastructure.

Sand and gravel sales: Sales of sand and gravel from sites (for the purposes of monitoring these are sales from sites within the Plan area).

Scheduled Ancient Monument: Nationally important archaeological sites included in the Schedule of Ancient Monuments maintained by the Secretary of State under the Ancient Monuments and Archaeological Areas Act 1979.

Secondary aggregate: Materials that do not meet primary aggregate (e.g. sand/gravel and crushed rock) specifications but which can be used instead of them. Secondary aggregates are by-products of other processes, including the production of primary aggregates.

South East England Aggregate Working Party (SEEAWP): Aggregate working parties provide technical advice about the supply and demand for aggregates (including sand, gravel and crushed rock) to the mineral planning authorities for the area and to inform the Secretary of State for Communities and Local Government. The SEEAWP is formed of the mineral planning authorities in the south east and relevant industry representatives.

Sensitive Human Receptors: Locations where people live, sleep, work or visit that may be sensitive to the impact of minerals and waste activity on health, well-being and quality of life. Examples include houses, hospitals and schools.

Sewage sludge: Once the liquid component of sewage has been treated, a residual semi-solid 'sludge' is left which requires further treatment. The sludge can be digested by anaerobic bacteria to produce fertiliser which can then be used in agriculture.

Sequential test: This is a test employed by the Planning Authority to ensure new development takes place in the areas with the lowest risk of flooding. This approach means that development will not be allowed or allocated in any areas where there is another area at a lower flood risk (and is appropriate for that development). As statutory consultees, the Environment Agency will inform any decisions on planning applications in relation to flooding.

Sharp sand and gravel: A coarse sand and gravel suitable for use in making concrete.

Site allocations: Specific sites identified for minerals and waste activities in the Plan where there are viable opportunities, have the support of landowners and are likely to be acceptable in planning terms.

Site of Special Scientific Interest (SSSI): A national designation for an area of special interest because of its flora, fauna, or geological or physiographical features, selected by Natural England and notified under Section 28 of the Wildlife and Countryside Act 1981.

Sludge: Sludge originates from the process of treatment of waste water.

Soft sand: Fine sand suitable for use in such products as mortar, asphalt and plaster.

Source Protection Zone (SPZ): Geographical areas defined by the Environment Agency and used to protect sources of groundwater abstraction.

South East Waste Planning Advisory Group (SEWPAG): SEWPAG is the grouping of waste planning officers and advisors which exists to help waste planning authorities in the area to effectively fulfil the Duty to Cooperate on strategic issues enshrined in the Localism Act, and specifically to give effect to the Government's stated intention to replace the responsibilities of the former Regional Technical Advisory Bodies.

Spatial Strategy: Outlines the approach that will be taken through the Central and Eastern Berkshire – Joint Minerals & Waste Plan to critical minerals and waste issues. It sets the context for the Plan's policies.

Special Area of Conservation (SAC): Areas which have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.

Special Protection Area (SPA): An area of importance for the habitats of certain rare or vulnerable categories of birds or for regularly occurring migratory bird species, required to be designated for protection by member states under the European Community Directive on the Conservation of Wild Birds.

Specific local requirement: In relation to Policy M4 (Locations for sand and gravel extraction) a specific local requirement relates to a minerals development which will be dedicated to serving a specific need, as opposed to contributing to strategic capacity. This may include for use in local projects which will involve mineral extraction and then its direct use in the construction phase of the project.

Statement of Community Involvement (SCI): A document which sets out the standards the Planning Authority intends to achieve when involving the community in preparing Local Development Documents, or when making a significant development control decision. It also sets out how the Authority intends to achieve these standards.

Statutory consultee: These are organisations and public bodies who are required to be consulted concerning specific issues relating to planning applications and help inform any decision made by the planning authority.

‘Stepping Stones’: Pockets of habitat that, while not necessarily connected, facilitate the movement of species across otherwise inhospitable landscapes.

Sterilisation: When a change of use, or the development, of land prevents possible mineral exploitation in the foreseeable future.

Strategic Environmental Assessment (SEA): A system of incorporating environmental considerations into policies, plans, programmes and part of European Union Policy. It is intended to highlight environmental issues during decision-making about strategic documents such as plans, programmes and strategies. The SEA identifies the significant environmental effects that are likely to result from implementing the plan or alternative approaches to the plan.

Strategic Flood Risk Assessment (SFRA): An assessment of the potential flood risk such as from groundwater and fluvial floods.

Strategic Road Network: The SRN is made up of motorways and trunk roads, the most significant ‘A’ roads. The SRN is managed by Highways England. All other roads in England are managed by local and regional authorities.

Subsidence: Subsidence is the motion of a surface as it shifts downward (in relation to Policy DM9 Protecting Health, Safety and Amenity). This may cause uneven settlement leading to subsidence at the surface.

Sustainability Appraisal (SA): In United Kingdom planning law, an appraisal of the economic, environmental, and social effects of a plan from the outset of the

preparation process, to allow decisions that are compatible with sustainable development.

Sustainable development: Sustainable development refers to a mode of human development in which resource use aims to meet human needs while ensuring the sustainability of natural systems and the environment, so that these needs can be met not only in the present, but also for generations to come.

Sustainable Drainage Systems (SuDS): These are urban design concepts which are adopted to deal with increased surface water in urban areas by mimicking the normal water cycle in natural landscapes. This is opposed to more traditional methods which just involved re-routing surface water to watercourses. Techniques utilised in SuDS include facilitating increased water infiltration into the earth as well as increased evaporation of surface water and transpiration from vegetation (collectively called evapotranspiration) to decrease the amount of surface water run-off.

Thermal treatment: Incineration and other high-temperature waste-treatment systems.

Tonnes per annum (tpa): Acronym.

Townscape: The appearance of a town or city; an urban scene.

Treatment: This is a broad term which refers to recovery or disposal operations, including preparation prior to recovery or disposal. This includes the physical, thermal, chemical or biological processes, including sorting (e.g. waste transfer), that change the characteristics of the waste in order to reduce its volumes or hazardous nature, facilitate its handling or enhance recovery.

Urban areas: An area characterised by higher population density and vast human features in comparison to areas surrounding it. Urban areas may be cities, towns or conurbations.

Use Classes: The Town and Country Planning (Use Classes) Order 1987 (as amended) puts uses of land and buildings into various categories known as Use Classes. This includes B1 (Business), B2 (General Industrial) and B8 (Storage or Distribution).

Visual impact: The perceived negative effect that the appearance of minerals and waste developments can have on nearby communities.

Void capacity: Available capacity for waste at a landfill/ land raising site.

Waste arisings: Waste generated within a specified area.

Waste Hierarchy: The aim of the waste hierarchy is to extract the maximum practical benefits from products and to generate the minimum amount of waste. The revised Waste Framework Directive introduces a changed hierarchy of options for managing waste. It gives top priority to preventing waste. When waste is created, it gives priority to preparing it for re-use, followed by recycling, then other recovery such as energy recovery, and finally disposal (for example landfill).

Waste Planning Authority (WPA): The local planning authorities responsible for waste planning. In the Plan area, The Royal Borough of Windsor and Maidenhead, Bracknell Forest Council, Reading Borough Council, and Wokingham Borough Council are waste planning authorities.

Waste Transfer Station (WTS): A location where waste can be temporarily stored, separated and bulked after being dropped off by domestic waste-collection lorries and before being carried off by larger vehicles for subsequent treatment or ultimate disposal.

Waste Water Treatment Works (WWTW): A facility where sewage volumes are reduced by de-watering and aerobic and anaerobic biological treatment.

Wharf: A landing place or pier where ships or barges may tie up and load or unload.

Zero waste: A term adopted to describe a culture in which all waste is seen as a resource having a value.

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