15th Annual Minerals and Waste Monitoring Report

1st April 2020 to
31st March 2022

Kent Minerals and
Waste Local Plan

Kent County Council
kent.gov.uk

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Contents

Abbreviations

AA	Appropriate Assessment
AMR	Annual Monitoring Report
APCr	Air Pollution Control residues
AONB	Area of Outstanding Natural Beauty
BEIS	Department for Business, Energy and Industrial Strategy
C, D&E	Construction, Demolition and Excavation (waste materials arising from this sector)
C&D (Recycling)	Construction & Demolition (Recycling)
C&I	Commercial and Industrial (waste materials arising from this sector)
DEFRA	Department for Environment, Food and Rural Affairs
DLUHC	Department for Levelling Up, Housing and Communities
DTA	Detailed Technical Assessment
EA	Environment Agency
EfW	Energy from Waste (combustion of waste to produce electricity (and heat) by driving a steam turbine, or use of a fuel (syngas) created in gasification or pyrolysis)
EIA	Environmental Impact Assessment
EPR	Early Partial Review
EU	European Union
HRA	Habitat Regulations Assessment
HWRC	Household Waste Recycling Centre
KCC	Kent County Council
KMWLP	Kent Minerals and Waste Local Plan
KJMWMS	Kent Joint Municipal Waste Management Strategy
KWP	Kent Waste Partnership
LAA	Local Aggregate Assessment
LACW	Local Authority Collected Waste (mainly that collected from households)
LEP	Local Enterprise Partnership
LNP	Local Nature Partnership

LNR	Local Nature Reserve
LPA	Local Planning Authority
LLW	Low Level Radioactive Waste
MMO	Marine Management Organisation
mt	Million Tonnes
mtpa	Million Tonnes Per Annum i.e., Million Tonnes Per Year
MLP	Minerals Local Plan
MPA	Minerals Planning Authority
MRF	Material Recycling Facility
MSW	Municipal Solid Waste
MWDF	Minerals and Waste Development Framework
MWDS	Minerals and Waste Development Scheme
NDA	Nuclear Decommissioning Authority
NPPF	National Planning Policy Framework
NPPW	National Planning Policy for Waste
NNR	National Nature Reserve
NPPG	National Planning Practice Guidance
ONS	Office of National Statistics
PROW	Public Rights of Way
RSPB	Royal Society for the Protection of Birds
SA	Sustainability Appraisal
SEEAWP	South East England Aggregate Working Party
SEWPAG	South East Waste Planning Advisory Group
SPA	Special Protection Area
Tpa	Tonnes Per Annum i.e., tonnes per year
UK	United Kingdom
VLLW	Very Low Level Radioactive Waste
WNA	Waste Needs Assessment
WCA	Waste Collection Authority

WDA	Waste Disposal Authority
WPA	Waste Planning Authority

Executive Summary

This Kent Annual Monitoring Report (AMR) covers the two financial periods 2020/2021 and 2021/22. These periods include the adoption of the Kent Minerals Sites Plan and the Early Partial Review of the Kent Minerals and Waste Local Plan 2013-2030 (KMWLP) carried out to address matters of safeguarding policy clarity and waste recovery requirements that had significantly changed due to implementation of an extant planning consent. This AMR reports on the 5th year statutory review of the KMWLP, as well as the results of public consultation on draft changes to the KMWLP proposed in light of the review.

The AMR report also addresses the following using the best available data:

- The progress of adoption of minerals and waste planning policy in Kent, against the latest Minerals and Waste Development Scheme (MWDS) timetable, up to the end of March 2022;
- Progress against targets related to minerals supply and waste management as set out in the KMWLP using indicator data for Kent; and;
- A summary of the co-operation on plan making activities with other local authorities and prescribed bodies, up to the end of March 2022.

The Key Mineral Findings

Aggregates

Aggregates supply and demand is monitored in detail in the annual Local Aggregates Assessment (LAA). Key messages from the LAA that monitored the period 2021 are as follows:

The total aggregate mineral sales in Kent during 2021 from all sources (primary and secondary) amounted to some 6.47mt a significant increase from 3.61mt in 2019 and 5.32mt recorded in 2020.

Soft sand reserves have been re-evaluated downwards (the 2020 data was found to be an over estimation) and the latest landbank is 13.65 years. The 'Aggregate Provision Rate' (APR)[1] for soft sand has slightly increased and this will require further reserves (as anticipated by the allocation of 3.2 mt at Chapel Farm, Lenham in the adopted Kent Mineral Sites Plan (MSP)) in order to maintain supply over the remaining adopted Plan period (to 2030).

Landwon sharp sand and gravels remain a depleting resource in Kent. A reduction in the APR rate has had the effect of apparently increasing the landbank to 12.71 years. However, as existing sites 'go offline', supply to meet demand will be increasingly met by importation, including by road, that is not captured by annual surveys and so the landbank does not truly represent consumption in Kent. Productive capacity in 2021 is now less than 0.75 million tonnes per annum (mtpa), lower than the recorded 0.85mtpa in 2020, and 1.150mtpa in 2018 (unrecorded in 2019). This reflects the declining importance of this sector in maintaining supply. Site allocations in the MSP amount 2.50mt which will, if permitted, make a significant contribution to meeting demand, though ultimately this is unlikely to change the growing reliance on importation of such aggregate into Kent.

[1] 'Aggregate Provision Rate' (APR) is determined by a Minerals Planning Authority as the suitable value for estimating the landbank for land-won aggregates. The default APR is the ten year average sales, but this must be informed by the three average sales, adopted Minerals Local Plan requirements and other factors related to demand and supply.

Landwon crushed rock was previously a matter that remained confidential in terms of sales and available reserves; however, the operator has waived confidentiality to ensure that the matter of hard rock supply over the remainder of the adopted Plan period can be fully considered during the update of the KMWLP. The operator has undertaken a re-evaluation of available reserves and the resulting landbank of 16.10mt is estimated to be just sufficient over the current adopted Plan period to 2030.

Importation of marine won sand and gravels remain an essential part of overall supply; the 2019 fall off in sales was reversed in 2020 and in 2021 sales increased back towards historic levels of between 2.0-1.5mt. Overall productive capacity remains essentially the same at 6.34 mtpa.

Sales of aggregates imported to **rail depots** continue to remain relatively insignificant in overall supply terms. The hard rock rail imports fell in 2021 to below 0.5mpta.

Overall r**ecycled and secondary aggregate** productive capacity remains the same; sales that fell off in 2019 and recovered in 2020 increased in 2021 to almost 1.0mtpa. Due to poor survey returns, this sector of supply is considered to have a greater productive capacity than that reported and so the value for 2020 of 1.9mtpa has been assumed, though this is less than a theoretical maximum value of 4.0mtpa.

Brickearth

Discussions with the operator in 2020-21 have led to a more ‘fine-tuned’ understanding of the extraction rate that can be reasonably anticipated over the remaining adopted Plan period. This suggests that available permitted reserves of Brickearth will last somewhere between 22 and 29 years, essentially meeting the KMWLP requirements of ensuring at least 25 years of permitted reserves are available.

Silica Sand

Kent has two operational silica sand sites, if taken together they meet the KMWLP (and NPPF) requirement of maintaining a stock of at least 10 years of permitted reserves. In 2020-21 the stock was confirmed to be over 25 years.

Tile clay

Tile clay reserves are in excess of 25 years and meet the NPPF requirements.

Chalk for cement

Reserves for cement manufacture in Kent are entirely contained at the permitted, though undeveloped, safeguarded strategic site at Holborough Cement Works. This meets the NPPF requirement for reserves equal to 25 years of supply to be maintained where substantial new investment in a kiln is required.

Other Chalk

Kent's chalk reserves for agriculture and engineering purposes are not required to meet any prescribed landbank. As previously reported, based on data for chalk reserves and sales in the period 2011- 2014 it was estimated that the permitted reserves dropped to 1.16mt. This gave an indicative permitted landbank of 16.57 years of chalk reserves. In 2021 the estimated reserves were 0.502mt, with an annual extraction rate of only 6,167 tonnes, giving a landbank of over 81 years. This illustrates the highly variable nature of chalk extraction meeting the markets in Kent over recent years. Future monitoring will demonstrate if there is a need to identify further chalk reserves over the remainder of the adopted Plan period, but at present this seems unlikely.

The Key Waste Findings

Arisings of **LACW** in 2020/21 fell by 2.4% to just under 679,000 tonnes. This is consistent with 2018/19 which showed a negative rate of growth of minus 3.5%. While Kent's population is growing, there is an expectation that arisings will increasingly decouple from population growth, and hence while arisings of **LACW** are predicted to continue to grow over the Plan period, it will be at a reduced rate. Hence it was forecast that arisings will grow at a rate of 0.2% per annum to stand at around 740,000 tonnes in 2030/31 in the most recent WNA (waste needs assessments). The fall of 2.4% in 2020/21 and 3.5% in 2019/20 suggest the rate of growth applied ought to be less than that indicated. However, it should be noted that the varying distribution of arisings across the county brings increased pressure on existing infrastructure in particular parts, and it is these which the Waste Disposal Authority (WDA) is seeking to address.

The **LACW** management profile data for 2020/21 shows that the waste recycling targets included in the Early Partial Review for the first milestone year of 2020/21 were not met, having been met in previous years. Moreover, the landfilling target of no more than 2% in 2020/21 was also missed by a small margin although it had been surpassed in previous years. The remainder managed through incineration with EfW being 54% was somewhat higher than predicted. Future monitoring will demonstrate if this is a continuing trend that requires policy intervention,

Some 7 million tonnes of waste were reported as being managed at Kent waste management facilities in 2020. This compares with around 1.84 million tonnes of Kent waste managed outside the county. However, this export is more than offset by imports, so taking a simple balance, Kent remains net self-sufficient. Of the imports, just over 360,000 tonnes came from London, of which c126,000 tonnes went to EfW, and around 500 tonnes to non-inert landfill[2] with c224,000 tonnes to inert landfill/permanent deposit to land.

Over the monitoring period there were 8 major planning applications that increased available capacity to manage waste. These included a new household waste recycling centre for the Maidstone and Tonbridge and Malling Borough Council areas, additional waste transfer stations, material recovery facilities, a green waste composting facilities, inert materials processing and anaerobic digestion facilities. These developments contribute towards a continued shift towards a more sustainable waste management profile.

Kent Minerals and Waste Local Plans

Changes to the KMWLP resulting from the **Early Partial Review** (EPR) were adopted in September 2020. The updates focused on:

- The waste recovery capacity requirements specified in Policies CSW 7 and CSW 8 and deletion of the need for the allocation of specific sites for the disposal of dredgings and for asbestos. These updates mean that production of a separate Waste Sites Plan is no longer justified; and,

- changes to the waste and mineral safeguarding policies made to remove ambiguity in some exemption criteria relating to allocations, and proposals on sites allocated, in Borough and District Local Plans in Kent.

The **Kent Mineral Sites Plan** (MSP) was also progressed to adoption in September 2020 resulting in the allocation of one soft sand site (Chapel Farm, Lenham) and two sharp sand and gravel sites (Moat Farm and Stonecastle Farm in the Tonbridge area).

[2] It should be noted that the non hazardous waste capacity assessment underpinning the Early Partial Review of the KMWLP projected c55,000 tpa of residual non hazardous waste from London which is close to the c50,000 tonnes reported for 2019.

An **updated Safeguarding Supplementary Planning Document** setting out details of the KMWLP's approach to safeguarding mineral resources and minerals and waste infrastructure was adopted on 18 March 2021.

An **updated Statement of Community Involvement**, that sets out how the Council will consult on planning policy and planning applications concerning waste management and minerals supply, was adopted on 18 March 2021.

In the summer of 2021, the Plan reached its fifth year as Kent's adopted strategic and development management policy plan for waste and minerals in the county and so a formal review was completed. The review recommended that 37 of the Plan's 52 policies, and/or their supporting text, be updated to reflect changes in national and local policy that had arisen since 2016. Updates to the Vision and Strategic Objectives were also recommended. In light of the review, draft updates to the Vision, Strategic Objectives and Policies (and supporting text) were prepared and consulted on between December 2021 and February 2022. The timetable for updating the Kent Minerals and Waste Local Plan was updated in September 2022 and can be found in the Kent Minerals and Waste Development Scheme.

1.0 Introduction

1.1 The Kent Minerals and Waste Annual Monitoring Report

The Monitoring of Local Plans is a statutory requirement of all Local Planning Authorities (LPA) (including Minerals and Waste Planning Authorities). The National Planning Policy Framework (NPPF[3]) requires each LPA to ensure that its Local Plan is based on adequate, up-to-date and relevant evidence regarding the economic, social and environmental characteristics and prospects of the area, while taking into account the relevant market signals.

The Kent Annual Monitoring Reports (AMR) document the progress made in preparing, reviewing and updating Kent's Minerals and Waste Local Plans against the timetable set out in the Kent Minerals and Waste Development Scheme (MWDS) and monitors their adoption and implementation. The AMR is also used to help identify where changes to policies may be needed.

This Kent AMR covers the financial years 2020/2021 and 2021/2022 (i.e., 1 April 2020 to 31 March 2022) and reports on various matters using best available data including the following:

- The progress made with updates to minerals and waste planning policy in Kent and associated documentation and
- Progress against targets related to minerals supply and waste management as set out in the KMWLP using indicator data for Kent; and
- A summary of co-operation on plan making activities with other local authorities and prescribed bodies.

This AMR covers a 2-year period to support the Review of the Kent Minerals and Waste Local Plan work in 2021 and 2022 and to assist those responding to the Regulation 18 consultations in 2022.

In accordance with the Regulation 35 (1.) of the Town and Country Planning (Local Planning) (England) Regulations 2012[4], this and previous AMRs are available to view online[5], and in hard copies, which are available for inspection during normal office hours by appointment with the Minerals and Waste Planning Policy Team.

1.2 Kent Contextual Overview

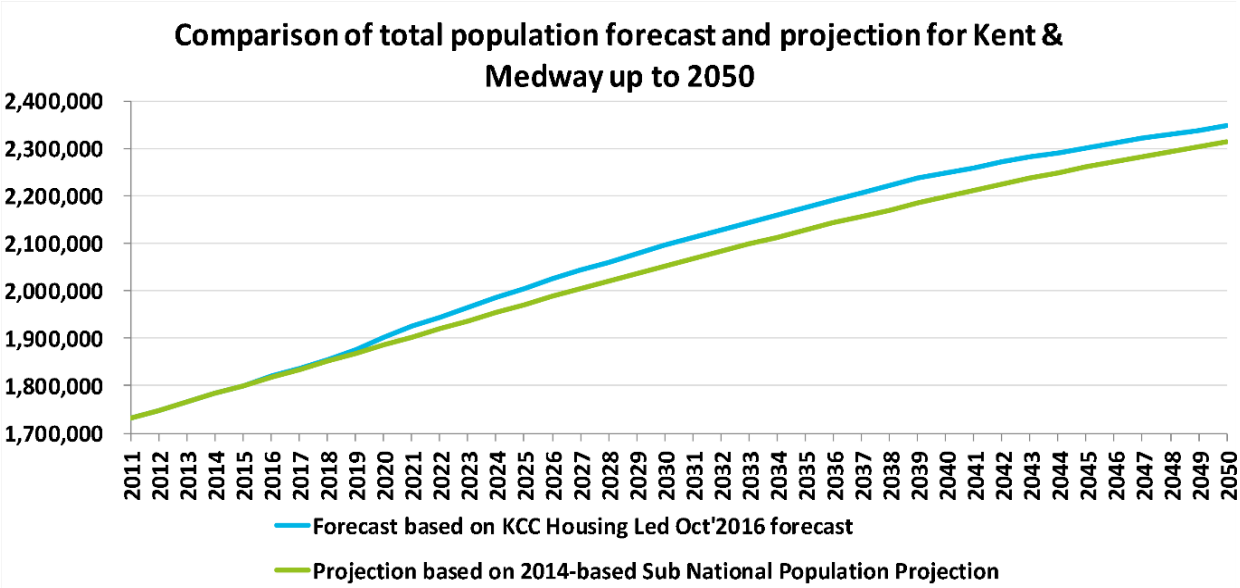
1.2 Population

The Kent Growth Infrastructure Framework (GIF)[6] included population and housing projections between 2011 and 2031 for Kent and Medway. In 2011 the population of Kent and Medway was 1,731,400 people, and it is anticipated that the area will experience 23% growth by 2031, resulting in a population of 2,127,600. Figure 1 below shows the degree of variance between a projection based on the County Council's housing lead projection (2016 forecast) and that of the slightly lower Sub-National Population Projection based on 2014 data. The GIF has not been updated as of 2019.

[3] NPPF (2021) Section 3. Plan-making, para. 33 Preparing and reviewing plans, page 11
[4] https://www.legislation.gov.uk/uksi/2012/767/regulation/35
[5] https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/planning-policies/minerals-and-waste-planning-policy#tab-4
[6] https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/growth-and-infrastructure-framework-gif

More recent work by the Office of National Statistics (ONS) in 2021[7] projects Kent's population (excluding Medway) to be 1,688,100 by 2028 which appears to be in alignment with the GIF projection for 2031. Figure 1 below is taken from the GIF and projects population to 2050.

Figure 1: Kent and Medway Population Forecast up to 2050

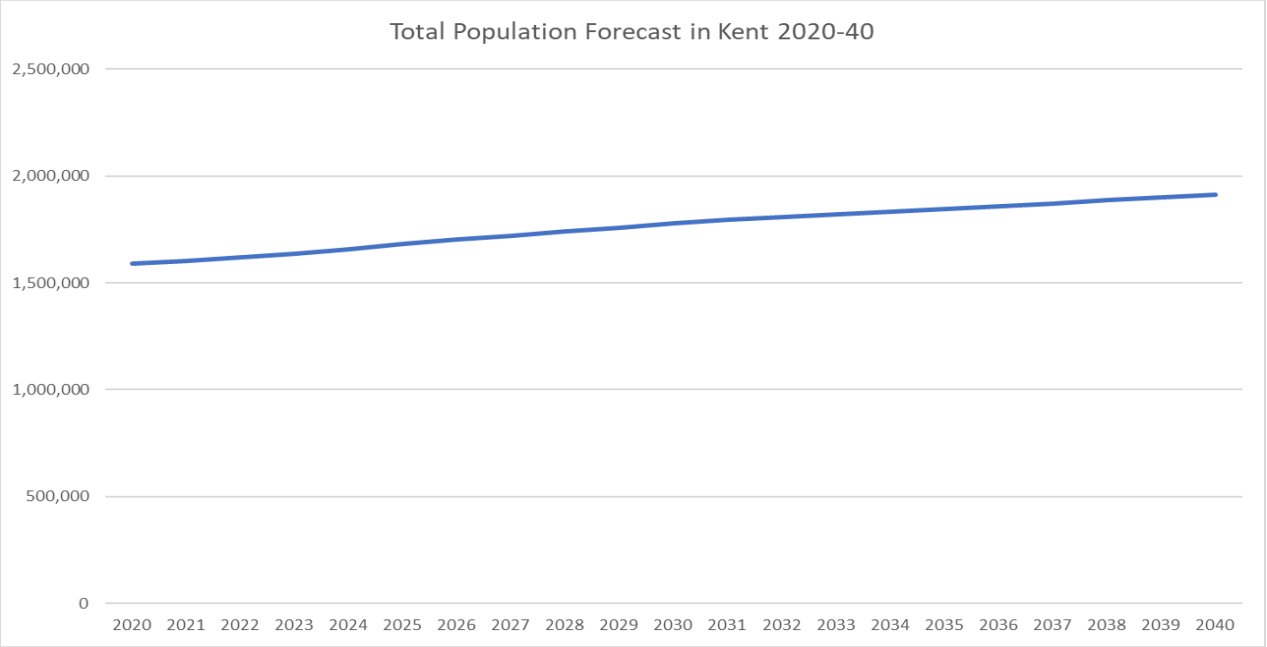


Forecast based on KCC Housing Led Oct'2016 forecast; Projection based on 2014-based Sub National Population Projection.
Produced by Strategic Business Development & Intelligence, Kent County Council

The more recent Kent County Council (KCC) housing led forecasts of 2021, was based on data that was available up to March 2021, as provided by ONS data (up to mid-year 2020). Therefore, it does not take into account the impact of Covid 19 on population numbers. The population forecast of this work from 2020 to 2040, essentially covering the span of the anticipated Full Review of the KMWLP, was for the Kent population (excluding Medway) to be 1,913,100 by 2040. Figure 2 below demonstrates the projected Kent population over the period to 2040. The projections are based on the most recently available mid-year population estimates and a set of underlying demographic assumptions regarding future fertility, mortality and migration.

[7] 2018-Based Subnational Population Projections Strategic Commissioning Statistical Bulletin July 2020; The bulletin presents the 2018-based Subnational Population Projections for Kent as published by the ONS 24 March 2020

Figure 2: Kent and Medway Population Forecast up to 2040

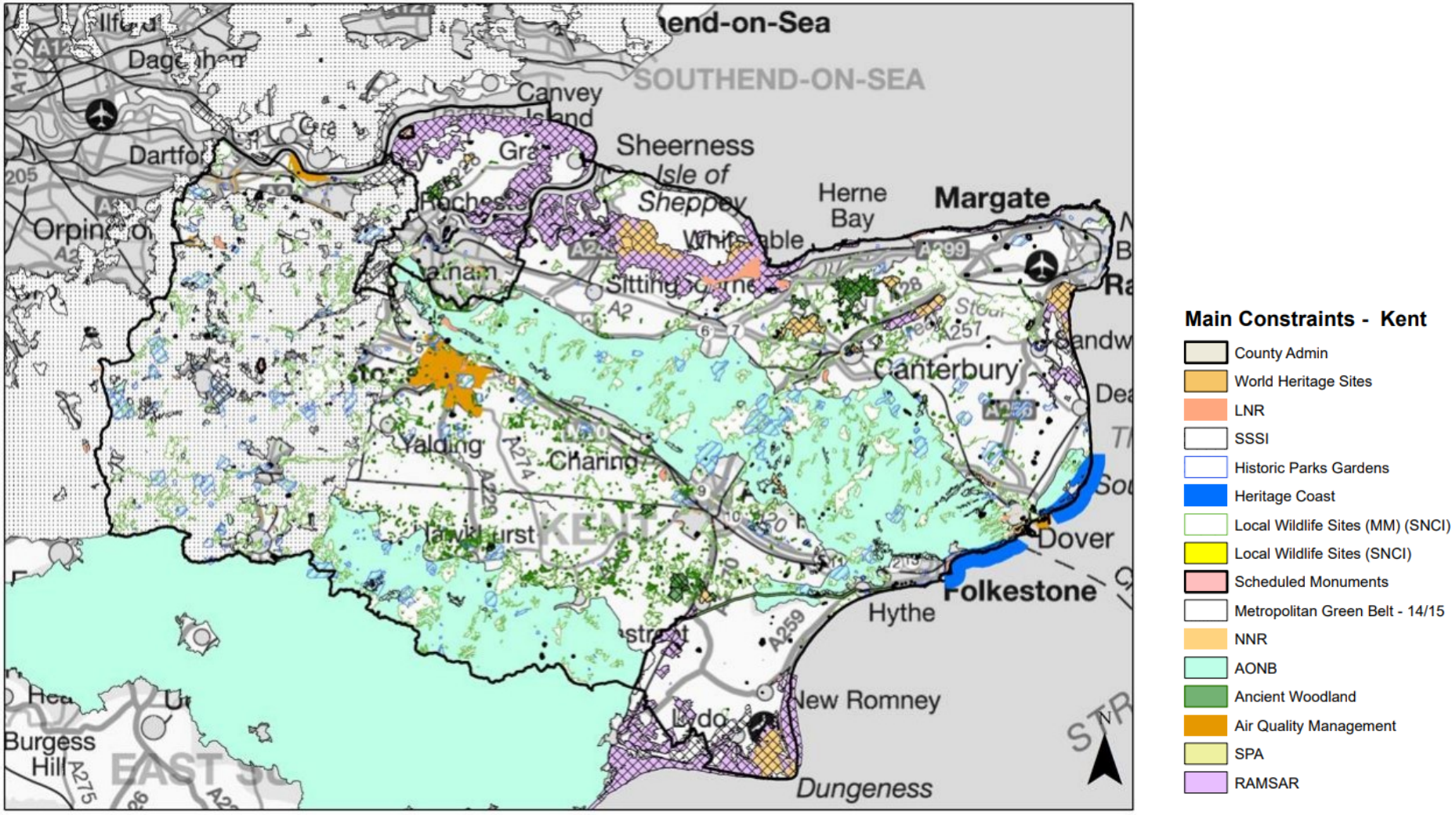


1.2.2 Environment

The County of Kent is subject to a number of planning and environmental constraints, with 20% of its area covered by sites that are internationally or nationally important for their nature conservation value, and one third of its area is covered by the Kent Downs or High Weald Areas of Outstanding Natural Beauty (AONB). There are significant areas within coastal or fluvial flood plains and land of high (best and most versatile) agricultural quality.

Figure 3 below shows the key planning and environmental constraints within Kent, including the Medway Unitary Authority and the Ebbsfleet Development Corporation areas, the list is not fully exhaustive, and the fully detailed constraint maps are to be found in the KMWLP.

Figure 3: Planning and Environmental Constraints in Kent (including the Medway Council and the Urban Development Corporation areas)



1.2.3 Economic Minerals in Kent

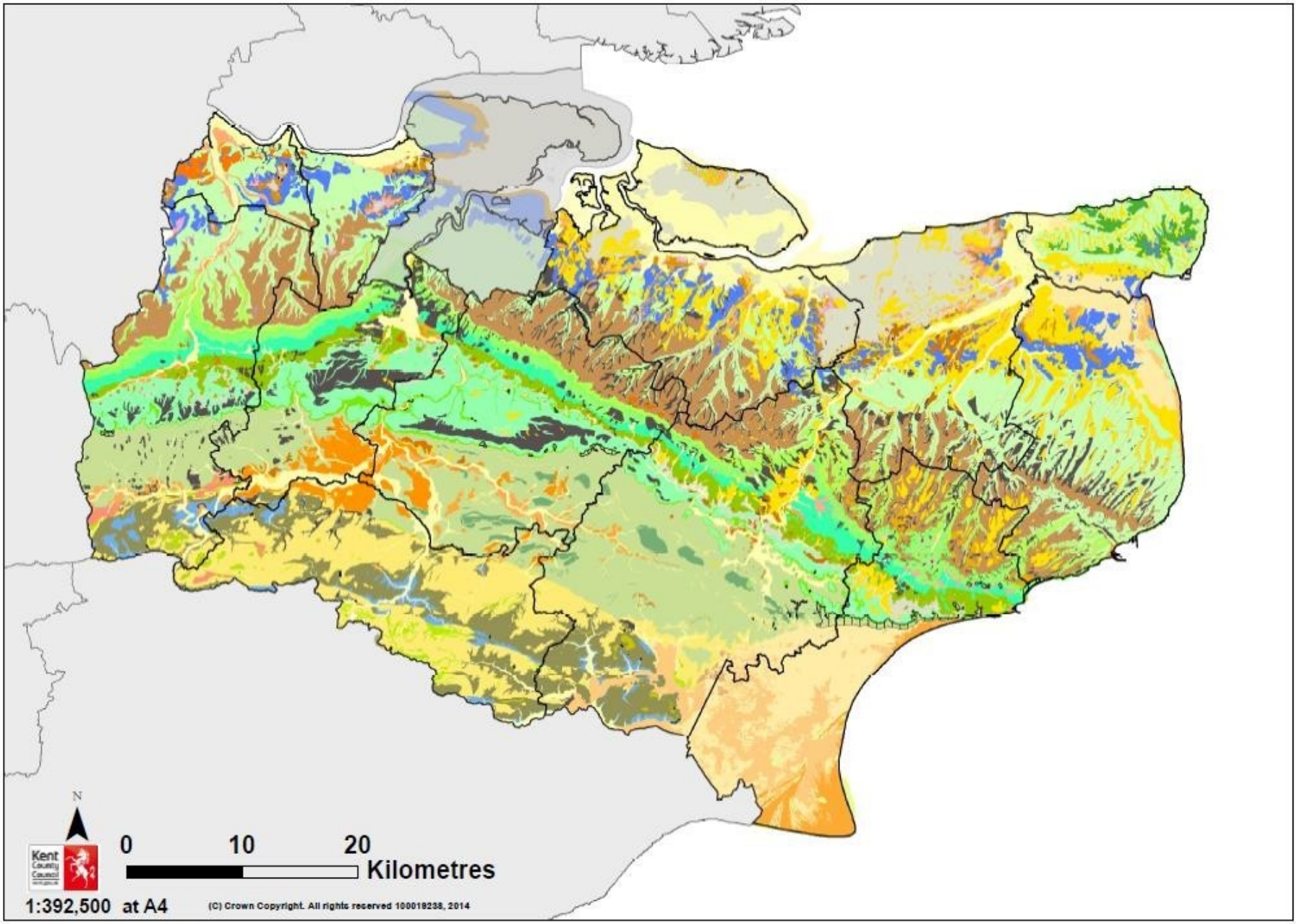
Kent is underlain by several naturally occurring minerals of economic importance including chalk (that is also referred to as 'the Chalk', given that this is its geological nomenclature as it occurs in Kent's stratigraphy), clays (of various types, but essentially similar type deposits), brickearth (a superficial windblown deposit of mainly clay minerals), 'Ragstone' (a massive geological unit of hard limestone rock), and a variety of superficial sand and gravels deposits. There are also a large scale stratigraphically defined unit of sand that gives rise to both construction aggregates (soft sand) and industrial minerals, including high purity or silica sand (the Folkestone Formation).

The construction aggregates (sand, gravel and the Ragstone) are the main types of economically important minerals extracted in Kent at this time. Although brickearth (for stock, or London Stocks, brick manufacture), clay (for tile manufacture and engineering clay) and chalk (for engineering and agricultural lime applications) are also extracted. There are also a number of Wealden sandstones that have, historically, been important in construction, though this is not extensively used today. See Figure 4 for Kent's geology, and geological key overleaf.

Another crushed rock resource exists in East Kent, in the form of a Carboniferous Limestone deposit. This potential hard crushed rock resource is found at considerable depth below the ground surface (300m) and has not been exploited for aggregate use. The associated energy mineral, coal, ceased being mined in 1989.

To compliment the indigenous landwon aggregate supplies, significant proportions of the aggregate minerals used in Kent are imported via rail and wharf facilities, with these minerals also serving the market in London and the wider south east. Moreover, the recycling or re-use of wastes, particularly from construction, demolition and excavation waste (CD&E) arisings, makes a significant contribution to Kent's construction aggregate need. Ensuring that appropriate provision is made for landwon, imported and secondary and recycled minerals is a key objective for the County Council as the Mineral Planning Authority (MPA) to meet Kent's current and future objectively assessed needs.

Figure 4: Geology of Kent both Solid and Superficial

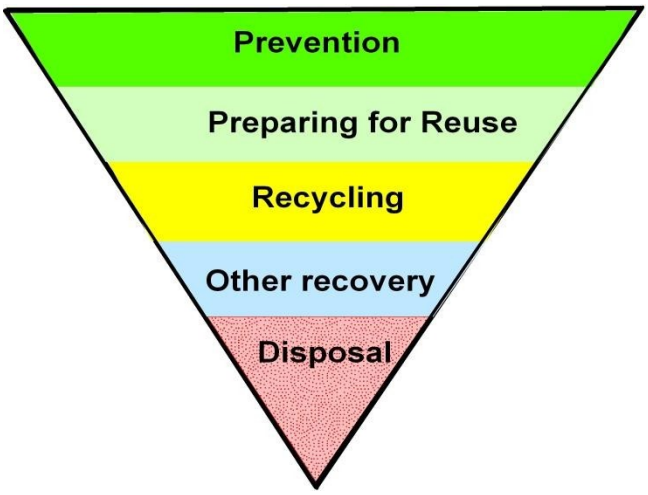


Legend: Geology of Kent

1.2.4 Waste

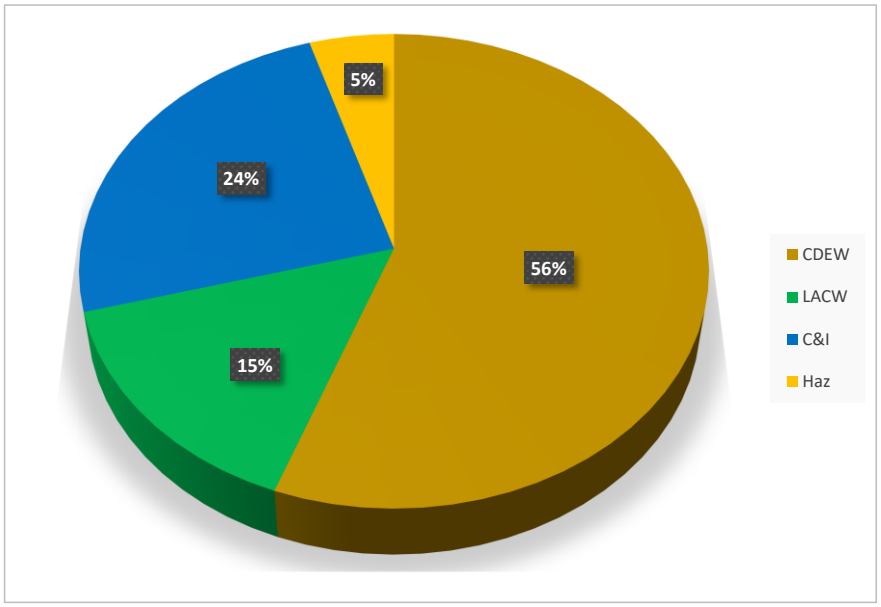
Waste requires careful management and treatment in an environmentally sustainable manner, following national policy requirements including the defined waste hierarchy (see Figure 5 below) and the objective of maintaining net self-sufficiency in waste management within Kent. Maintaining net self-sufficiency whilst moving waste up the waste hierarchy are key objectives for the County Council as the Waste Planning Authority (WPA) for Kent.

Figure 5: The Waste Hierarchy



It is estimated that around 4.5million tonnes of waste requiring management was produced in Kent in 2020. The majority of this waste is generated within the Construction, Demolition and Excavation (CD&E) waste stream (in 2020, arisings of C,D&E waste in Kent were estimated to be just over 2.5Mt). Local Authority Collected Waste (LACW), which is mainly composed of household waste, represents around 15.1% of the overall waste produced with Commercial & Industrial waste and hazardous waste making up the difference, at some 29.2% (1.31mt). The principal waste streams are shown in Figure 6 below.

Figure 6: Kent Waste Arisings



Kent has a range of operational waste management facilities, from non-inert and inert waste landfills to recycling and composting facilities, and energy from waste (EfW) plants providing over a million tonnes of processing capacity. Import and export of waste occurs from, and to, other parts of the country, the south east and London in particular. Wastewater is treated via a network of wastewater and sewage sludge treatment facilities operated by Southern Water.

1.3 The Kent Minerals and Waste Local Plan 2013-30

Kent County Council (KCC) is responsible for waste and minerals planning in the county of Kent. As part of its responsibilities, the County Council is required to prepare planning policy for the production of minerals and management of waste. Such planning policy appears in the Kent Minerals and Waste Local Plan 2013-30 (as amended by the Early Partial Review) and Kent Mineral Sites Plan.

The KMWLP 2013-30 was adopted in 2016 and set out the County Council's core strategy and policy framework for minerals and waste development in Kent. As amended by the Early Partial Review, it is a key policy document for the determination of planning applications and appeals in Kent. The KMWLP includes forecasts of future waste capacity and mineral supply requirements.

1.4 Early Partial Review of the Adopted KMWLP 2013-30

In summary, the modifications of the KMWLP resulting from the Early Partial Review addressed the following two main policy areas:

1. Waste Management Capacity Provision

    - The provision of future waste management capacity in particular 'Other Recovery' for the management of non-hazardous residual waste; and

    - The need to identify site allocations in a Waste Sites Plan for waste management facilities to deliver the waste strategy of the adopted Plan.

The Partial Review was necessary as coincident with the time of adoption the Plan in 2016, the implementation of significant (between 500,000 to 550,000tpa[8]) permitted 'other recovery' capacity for waste meant the recovery requirements set out in policy (Policy CSW: 7, now Policy CSW: 4) had already been largely met. This initiated an immediate early review of the waste capacity requirements detailed in the Plan.

2. Minerals and Waste Safeguarding – The approach to safeguarding mineral resources and waste management and minerals supply infrastructure.

As first reported in AMR 2018/19, in addition to there being no requirement for a Waste Sites Plan, the experience of implementing the adopted Plan policies regarding mineral and waste safeguarding had revealed ambiguity in the wording of certain of their exempting criteria which hindered their effectiveness. As has been reported in the previous AMR, amongst other aims, the intention of these safeguarding policies is to ensure that development on sites for non-mineral or non-waste development (i.e. housing and commercial development) allocated in a Borough or District Local Plan would be exempt from the KMWLP's safeguarding policy provisions *if* the need to safeguard any mineral resource underlying the site, and/or proximate minerals and waste infrastructure, had been assessed and factored into the decision to allocate the site(s).

In practice between 2017 and 2019 there were occasions where the policies had been interpreted as to exclude *any* site allocations in adopted development plans from the safeguarding process, *regardless* of whether minerals and waste safeguarding matters were considered during the site's

[8] Kent Waste Needs Assessment 2018, Capacity Required for the Management of Residual Non Hazardous Waste BPP Consulting; Section 3.6, page 15

local plan allocation process. This was not the intention of the policies, nor national policy guidance. This interpretation had the potential to undermine the effectiveness of these policies, unless reviewed and modified. The Early Partial Review provided the opportunity to address both the revised waste capacity requirements and the waste and minerals safeguarding policies. Thus, ensuring that the presumption to safeguard is properly applied equally at local plan preparation as it is when dealing with planning applications.

The final modified KMWLP was adopted by full Council in September 2020.

1.5 The Kent Mineral and Waste Local Plan 2023-38

An updated Kent Minerals and Waste Local Plan 2023-38 following the statutory 5 year review of the 2016 adopted Plan is reported in section 1.8 below.

1.6 Adopted Mineral Sites Plan 2020

Independent Examination Hearings into the Kent Minerals Sites Plan were held in October 2019 and the Inspector published his report in May 2020 confirming that, subject to modifications, the Kent Mineral Sites Plan was sound.

The Council subsequently adopted the Mineral Sites Plan in September 2020. The Minerals Sites Plan allocates the following three sites:

- M3: Chapel Farm (West), Lenham – Soft Sand (3.2mt)
- M13: Stonecastle Farm, Hadlow/Whetsted – Sharp Sand and Gravel (1.0mt)
- M10: Moat Farm, Five Oak Green, Capel – Sharp Sand and Gravel (1.5mt)

1.7 Progress Against the Development Scheme

The Local Development Scheme (LDS) sets out the County Council's programme for preparing minerals and waste planning documents. The February 2019 LDS timetable was updated in January 2021. The timetable was updated again in November 2021 and most recently in September 2022. The updated LDS now reflects progress required for the full review and update of the KMWLP 2013-30 and the Kent Mineral Sites Plan and is set out in Tables 1 and 2 overleaf.

Table 1: Review and Update of Kent Minerals and Waste Local Plan 2013-30 - Timetable for Key Stages

Stages	Dates
Evidence gathering to inform review	*June 2020 – March 2021 (completed)*
Consultation with key stakeholders on need for review of policies	*January 2021 – May 2021 (completed)*
Report outcome of review to Members including recommendations on the need toupdate policies	*September - November 2021 (completed)*
Consultation on draft updated policy (Regulation18)	*December 2021 – February 2022 (completed)*
Consultation on draft Kent Minerals and Waste Local Plan 2023-38 (Regulation 18)	October 2022 – November 2022

Publication of draft updated policy (Regulation 19)for representations on soundness	Jan – Feb 2024
Submission to Secretary of State	May 2024
Independent Examination Hearings	July 2024
Inspector's Report	November 2024
Adoption	December 2024

Table 2: Update of the Kent Mineral Sites Plan - Timetable for Key Stages

Stages	Dates
Call for Sites	October 2022 – November 2022
Consultation on Site Options (Regulation 18)	April – June 2023
Publication of draft updated Minerals Sites Plan (Regulation 19) for representations on soundness	December 2023 – February 2024
Submission to Secretary of State	May 2024
Independent Examination Hearings	July 2024
Inspector's Report	November 2024
Adoption	December 2024

1.8 Kent Minerals and Waste Local Plan 2013-30 – Statutory Review

The Kent Minerals and Waste Local Plan was adopted in 2016 and therefore a five-year review of this Plan was required to be conducted in 2021. As stated above, a focused 'Early Partial Review' of the Plan has already taken place and so the limited number of policies updated by the Early Partial Review Plan do not require review until 2025.

The five-year review process included a review of the Plan's Vision and Strategic Objectives, the strategic policies for minerals supply and waste management and the development management policies. The review included consideration of changes in national and local policy. Findings of the review were set out in a report entitled 'Kent Minerals & Waste Local Plan 2013-30 5 Year Review of 2016 adopted Plan' and were reported to the County Council's Environment & Transport Cabinet Committee on the 8th of September 2021 (see link: https://democracy.kent.gov.uk/ieListDocuments.aspx?CId=831&MId=8792&Ver=4).

A red, amber, green system was used to identify which of the policies required modification. This is explained in the committee report in detail. Table 3 below shows a summary of the outcome of the review work.

Table 3: Summary of Outcome of the statutory review of the adopted KMWLP policies (undertaken 2021)

Policy Number & Title	Update Required
Policy CSM 1: Sustainable development	Yes
Policy CSM 2: Supply of Land- won Minerals in Kent	Yes
Policy CSM 3: Strategic Site for Minerals	No
Policy CSM 4: Non-identified Land-won Mineral Sites	No
Policy CSM 5: Land-won Mineral Safeguarding	No
Policy CSM 6: Safeguarded Wharves and Rail Depots	No
Policy CSM 7: Safeguarded Other Mineral Plant Infrastructure	No
Policy CSM 8: Secondary and Recycled Aggregates	Yes
Policy CSM 9: Building Stone in Kent	Yes
Policy CSM 10: Oil, Gas and Unconventional Hydrocarbons	Yes
Policy CSM 11: Prospecting for Carboniferous Limestone	Yes
Policy CSM 12: Sustainable Transport of Minerals	Yes
Policy CSW 1: Sustainable Development	Yes
Policy CSW 2: Waste Hierarchy and Policy	Yes
Policy CSW 3: Waste Reduction	Yes
Policy CSW 4: Strategy for Waste Management Capacity	Yes
Policy CSW 5: Strategic Site for Waste	No
Policy CSW 6: Location of Built Waste Management Facilities	Yes
Policy CSW 7: Waste Management for Non-hazardous Waste	Yes
Policy CSW 8: Recovery Facilities for Non-Hazardous Waste	Yes
Policy CSW 9: Non inert Waste Landfill in Kent	Yes
Policy CSW 10: Development at Closed Landfill Sites	Yes
Policy CSW 11: Permanent Deposit of Inert Waste	Yes
Policy CSW 12: Identifying Sites for Hazardous Waste	Yes
Policy CSW 13: Remediation of Brownfield Land	No
Policy CSW 14: Disposal of Dredgings	Yes
Policy CSW 15: Wastewater Development	Yes
Policy CSW 16: Safeguarding of Existing Waste Management Facilities	Yes
Policy CSW 17: Nuclear Waste Treatment and Storage Dungeness	Yes
Policy CSW 18: Non-nuclear Radioactive Low-Level Waste (LLW) Management Facilities	Yes
Policy DM 1: Sustainable Design	Yes
Policy DM 2: Environmental and Landscape sites of International National and Local Importance	Yes
Policy DM 3: Ecological Impact Assessment	Yes
Policy DM 4: Green Belt	No
Policy DM 5: Heritage Assets	Yes
Policy DM 6: Historic Environment Assessment	Yes
Policy DM 7: Safeguarding Mineral Resources	No
Policy DM 8: Safeguarding Minerals Management, transportation Production & Waste Management Facilities	No
Policy DM 9: Prior Extraction of Minerals in Advance of Surface Development	Yes
Policy DM 10: Water Environment Policy DM 11: Health and Amenity Policy DM 12: Cumulative Impact	Yes
Policy DM 11: Health and Amenity	Yes
Policy DM 12: Cumulative Impact	Yes
Policy DM 13: Transportation of Minerals and Waste	Yes
Policy DM 14: Public Rights of Way	No

Policy DM 15: Safeguarding of Transportation Infrastructure	No
Policy DM 16: Information Required in Support of an application	Yes
Policy DM 17: Planning Obligations	Yes
Policy DM 18: Land Stability	Yes
Policy DM 19: Restoration, Aftercare and After-use	Yes
Policy DM 20: Ancillary Development	Yes
Policy DM 21: Incidental Mineral Extraction	No
Policy DM 22: Enforcement	Yes

Following the conclusion of this review of policies, the County Council conducted a Regulation 18[9] public consultation on proposed updates to the Kent Minerals and Waste Local Plan. This ran for 8 weeks from 16 December 2021 to the 9 February 2022.

A total of 183 comments were received on the proposed updates to the Kent Minerals and Waste Local Plan 2013-30 from a wide range of stakeholders including:

- Individuals; - district and borough councils;
- parish councils; - statutory environment bodies;
- the waste and minerals industry; and,
- other stakeholder groups and organisations.

The responses received were generally supportive of the proposed approach, particularly in relation to the proposed changes to the Objectives and Vision, the measures to mitigate and adapt to climate change and greater measures to support biodiversity net gain. The main areas of comment were as follows:

General

- The draft refreshed Kent Minerals and Waste Local Plan did not plan for a fifteen-year period as required by the National Planning Policy Framework;

Minerals

- The existing policy allocating a strategic minerals site in the form of a cement works and associated chalk reserve at Holborough should be deleted as this is not justified, due to a lack of need for the facility, and is inconsistent with national policy including on Green Belt;
- planning permission for the allocated strategic minerals site (see above) has been implemented and so the site should be safeguarded;
- calculation of future requirements for soft sand is flawed resulting in under provision because:
  - planned housing growth not taken into account;
  - abnormal low sales years due to Brexit and Covid and demand from areas beyond Kent were not taken into account; and,
  - the site allocated in the Minerals Sites Plan for soft sand will not be developed during the Plan period.
- additional provision for crushed rock should be made as future requirements for crushed rock are higher than forecast and cannot be met from existing sites. The plan should consider that the extracted crushed rock is of differing quality and cannot all be used for 'high specification' uses
- extraction of hydrocarbons should not be allowed as it is inconsistent with the climate change agenda;

[9] Town and Country Planning (Local Planning) (England) Regulations 2012

Waste

- Changes to policy encouraging development to be consistent with achieving a 'circular economy'[10] place onerous burdens on developers which will make new development unviable;
- changes should be consistent with emerging revised Kent Waste Disposal Strategy;
  - new sites to manage household waste should be allocated in a Waste Local Plan
  - there is uncertainty over new regulations affecting recycling;
- clarity required regarding management of waste at Dungeness;
- management of radioactive waste at Dungeness risks impacts on human health and the environment. This policy change requires a Habitats Regulations Assessment;

Development Management

- Updated policy concerning Biodiversity Net Gain should be more ambitious (require at least 20% instead of 10%) and guidance should be provided setting out how requirements will be met;

  In light of comments about how the draft refreshed KMWLP is not consistent with national policy because it currently does not cover a 15-year period, legal advice was obtained that confirmed the need to extend the period of the Local Plan. It is now proposed that the updated Kent Minerals and Waste Local Plan will in effect be a replacement plan, rather than a refreshed plan, with a period covering 2023 to 2038. As this is a significant change to the Local Plan, it is not considered possible to make robust recommendations regarding the final text of the Kent Minerals and Waste Local Plan before undertaking further public consultation in accordance with Regulation 18. This additional consultation step will allow comments on whether updates to other parts of the KMWLP are needed to ensure it remains relevant over the period to 2038. The timetable set out above reflects this change.

[10]A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which resources are kept in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

Stages	*Current KMWLP 2013-30 Update, Local Development Scheme, November 2021*	Proposed Dates for KMWLP 2023-38	Proposed Mineral Sites Plan Update
Consultation on draft updated policy (Reg 18)	*November 2021-January 2022 (completed)*	-	-
Consultation on draft (Regulation 18) KMWLP 2023-38 / Call for Sites	-	October 2022 – November 2022	October 2022 – November 2022
Initial assessment of nominated sites	*N/A*	N/A	December 2022 – February 2023
Consultation on Site Options (Reg 18)	*N/A*	N/A	April – June 2023
Detailed technical assessment of options and identification of suitable sites for publication (see below)	*N/A*	N/A	June – November 2023
Publication of draft KMWLP 2023-38 / Mineral Sites Plan (Reg 19) for representations on soundness	*June-July 2022*	December 2023 – February 2024	December 2023 – February 2024
Submission to Secretary of State for examination	*September 2022*	May 2024	May 2024
Independent Examination Hearings	*December 2022*	July 2024	July 2024
Inspector's Report	*February 2023*	November 2024	November 2024
Adoption by Council	*May 2023*	December 2024	December 2024

To ensure the Kent Minerals and Waste Local Plan makes adequate provision for the management of waste and supply of minerals between 2023 and 2038, assessment of the need for new facilities has been completed which concludes:

- Although new waste management targets are proposed for 2035/36 and 2040/41, these targets could be met by existing facilities including extensions to such facilities; and,
- for minerals other than crushed rock (hard rock), there is no need to allocate an additional site(s) to ensure supply at this time. These minerals will be subject to ongoing monitoring as part of the plan making process.

With regard to crushed (hard) rock, the Kent Minerals and Waste Local Plan expects a 'landbank' of ten years to be maintained throughout the plan period. This means a ten years supply to be provided in 2038 at the end of the plan period to be consistent with national policy requirements. Current reserves are only forecast to last until 2030 and so new reserves of approximately 6.182mt (million tonnes) now need to be identified in the form of an allocation(s) in the Minerals Sites Plan. An updated Mineral Sites Plan is required to include this allocation(s) and the timetable above sets out the related process.

With regard to the proposal in the draft refreshed Kent Minerals and Waste Local Plan to require a minimum 10% biodiversity net gain (BNG) from new development (Policy DM3), the Kent Nature Partnership commented that it is seeking inclusion of a minimum 20% target in all Local Plans in Kent. In response, a change to Policy DM3 is proposed that instead seeks the achievement of maximum biodiversity net gain on the basis that restoration of quarries can often easily result in much greater biodiversity net gain than 20% and including such a target of 20% may mean the full potential is not realised. Guidance, in the form of a Supplementary Planning Document, on how the requirement for biodiversity net gain will be implemented is also proposed in response to comments.

Changes to Policy CSW17 relating to management of waste at the Dungeness Nuclear Estate have been proposed to ensure that the policy is consistent with relevant national policy and guidance for the management of waste and the protection of the environment. As the Dungeness Nuclear Estate is located in an area of statutorily protected internationally and nationally important habitats, in accordance with the Habitats Regulations 2017 (as amended), it has been necessary to assess how the proposed change to Policy CSW17 (concerning management and deposition of waste at the estate) might impact on these habitats due to development allowed for by the updated policy. The related 'Habitats Regulations Assessment' (HRA) concluded that there would be a risk of an adverse effect on the integrity of the Dungeness SAC, SPA (and Ramsar site) and their qualifying features, if as a result of the additional opportunities for the importation of wastes for treatment and disposal, allowed under Policy CSW17, either alone or in combination with other de-commissioning operations taking place at the same time, was to result in an increase of 1% or more of the critical loads or critical levels for air pollutants. In addition, the HRA concluded that the emerging policy was unlikely to have an adverse effect on the integrity of the Special Protection Area (SPA) and the populations of its qualifying bird species as a result of noise or visual disturbance. However, it noted that birds are mobile species and also that habitats can change over time and the current distribution cannot be relied upon throughout the whole plan period. It was therefore recommended that to satisfy the Council's legal duties under the Habitats Regulations, that further evidence is provided at planning application stage. This requires that up-to-date data should be provided on the number and distribution of qualifying bird species and that a current baseline at the start of the period covered by the Kent Mineral and Waste Local Plan be established and updated with regular monitoring programmes of both vehicle movements to and from the Dungeness nuclear sites and of air quality (including monitoring for ammonia NH3, nitrous oxide NOx and sulphur dioxide SO2). The emerging proposed Policy CSW17 changes and its explanatory text was therefore further revised to address these risks.

Legislation requires that an independent 'Sustainability Appraisal' of draft planning policy is undertaken that determines the likely social, economic, and environmental effects of the polices and makes recommendations for changes. A draft 'appraisal framework' that takes account of baseline conditions as well as other relevant plans, programmes, and policies which development should take account of, in the form of a 'Scoping Report', was also published for consultation. In light of comments received changes to the framework were made and a draft Sustainability Appraisal of the draft Kent Minerals and Waste Local Plan 2023-38 was prepared so that the matter can be further demonstrated in the next Regulation 18 Public Consultation anticipated in late 2022.

1.9 Update to the Kent Mineral Sites Plan

Preparation of the update to the Kent Mineral Sites Plan is proposed to take place in accordance with the timetable set out in the proposed update to the Kent Minerals and Waste Local Development Scheme (see above). The key stages involved in identifying suitable new site(s) are follows:

- Call for Sites
- Initial assessment of nominated sites
- Consultation on Site Options (Regulation 18) which allows a short list of potential sites to be identified
- Detailed technical assessment of site options on the short list, including Sustainability Appraisal. This assessment process identifies suitable sites for potential allocation in the updated Minerals Sites Plan.

This process follows that used to identify sites in the adopted Kent Mineral Sites Plan 2020. A Scoping Report for the Mineral Site Plan's Sustainability Appraisal will form part of the documents for public consultation. The 'Call for Sites' will involve inviting landowners, operators, and other interested parties to nominate sites which they consider suitable for

mineral (in this case hard rock) extraction. Nominated sites would then be assessed for their suitability against criteria relating to the likely impacts that would arise from development in that location.

1.10 Supplementary Planning Document Safeguarding

In March 2021 the County Council adopted a revised Supplementary Planning Document on Safeguarding. The revision fully explains how the updated policies (DM 7: Safeguarding Mineral Resources and DM 8: Safeguarding Minerals Management, Transportation, Production & Waste Management Facilities) should be interpreted. It included guidance on how the process should be applied at the planning application stage and when land is proposed for allocation in a borough or district local plan where there are minerals and/or waste management safeguarding issues.

A number of safeguarding assessments have been submitted to support planning applications and local plan allocations. A representative sample of this assessments can be found at the following link https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/planning-policies/minerals-and-waste-planning-policy#tab-2 .

1.11 Statement of Community Involvement

National planning policy and legislation recognises the importance of engaging with local communities to shape the places where they want to live, work and play. Under the Planning and Compulsory Purchase Act 2004, the Council is required to produce a Statement of Community Involvement (SCI) which sets out how it will involve communities in its planning activities. The Council is expected to tailor its SCI to the specific needs and characteristics of the County and allow the involvement of all interested parties.

The Council adopted its first SCI in 2006 and, following changes to the planning process, two separate Addendum documents were published in April 2013 and January 2014. The Town and Country Planning (Local Planning) Regulations were amended to require that the SCI is reviewed at least every five years and as a result the SCI was again reviewed, and text of a revised document was adopted in 2020.

The revised SCI sets out principles and approaches for involving the community (including local people – those who live in, work in or visit Kent, for borough, district, parish and town councils and for other organisations which represent key community interests) in:

- The plan making process such as Development Plan Documents (local plans), Supplementary Planning Documents and Neighbourhood Plans, and;
- the consideration of planning applications by the County Council.

2. Plan Monitoring

2.1 Introduction

In accordance with the Localism Act 2011, it is the responsibility of each Local Planning Authority (LPA) to decide what to include in their AMRs, whilst ensuring that they are prepared in accordance with the relevant UK legislation. Note that EU legislation was retained as UK legislation when the UK formally left the European Union on the 31st January 2020.

2.2 Plan Monitoring Indicators

The County Council continues to attach importance to the former national indicators[11] used as the basis for minerals and waste monitoring in previous years. In addition, KCC has developed its own 'local' indicators and continues to monitor and report on these sources of information. Table 2 below sets out the main indicators used in previous AMR documents.

Table 1: Minerals and Waste Annual Monitoring 'Indicators'

Data Indicator	Source	Former National Indicator Number
Production of Primary Land-won Aggregates	Annual Aggregates[12] Monitoring Survey	**Core Output Indicator 5A**
Production of Secondary/Recycled Aggregates	Annual Aggregates Monitoring Survey	**Core Output Indicator 5B**
New Mineral Reserves	KCC Planning Permissions	**Local Output Indicator 1**
Construction Aggregate Landbank	Annual Aggregates Monitoring Survey	**Local Output Indicator 1**
Other Mineral Landbanks	Annual Aggregates Monitoring Survey	**Local Output Indicator 3**
Mineral extraction other than aggregates	Mineral extraction in Great Britain 2013[13]	**Not directly applicable**
Wharves and Rail Depots Safeguarding	Annual Aggregates Monitoring Survey	**Local Output Indicator 4**
Sales of Construction Aggregates at Wharves and Rail Depots	Annual Aggregates Monitoring Survey	**Local Output Indicator 5**
Additional Capacity at Waste Management Facilities by Type	KCC Planning Permissions/ Environment Agency	**Core Output Indicator 6A**

[11] DCLG (July 2008) National Indicators for Local Authorities and Local Authority Partnerships

[12] Co-ordinated and published by South East England Aggregates Working Party (SEEAWP), takes account of the Kent Local Aggregates Assessment prepared by Kent County Council

[13] Published in February 2015, the data is for 2013 and has not been updated, is indicative and is supplemented with local enquiry sourced data where possible

Municipal Waste (aka LACW) Management Profile	Defra Waste Datasets	**Core Output Indicator 6B**
LACW Growth Rate	Defra Waste Datasets	**Local Output Indicator 6**
Exports and Imports of Waste	Environment Agency Datasets	**Local Output Indicator 7**
Capacity for Managing Waste in Kent	**Environment Agency Datasets/ KCC planning permission and monitoring data**	**Local Output Indicator 8**

3 Mineral Indicators

3.1 Production of Aggregates

The principle aggregate monitoring process is the annual Local Aggregate Assessment (LAA). This is produced annually on the gathered previous calendar year sales and permitted reserve data supplied by the mineral operators to the County Council, as the Mineral Planning Authority for the area. The various LAA documents can be found on the County Council's web page[14]. The County Council's tenth LAA addresses the aggregate data from 2021. The executive summary is reproduced below to give the main findings of this monitoring process. It should be noted that at the time of writing the LAA was in draft form subject to comments from the South East England Aggregate Working Party.

This is the tenth Local Aggregate Assessment (LAA) Kent County Council has produced based on monitoring data for the year 2021, although in 2020 (2019 data) the Council reported some monitored data and extrapolated using 2018 data as the complete data set was not, (and is still not) at that time available being part of a national survey conducted by the British Geological Survey (BGS).

In the case of both landwon soft sands and the sharp sands and gravel it is considered that the appropriate 'LAA Rate or Annual Provisional Rate (APR)' for Kent remains that of the recorded 10-year sales average. Any estimated increases above this figure are not easily derived due to the inherent limitations in forecast modelling at the county council scale. Moreover, the use of the 10-year average as a main determinate for calculating landbanks and future aggregate requirements is in accordance with the National Planning Policy Framework (NPPF).

As in previous LAA reports it demonstrates that aggregate supply in Kent is provided by both imports and indigenous landwon materials. However, unlike the sharp sands and gravels, the soft sands (Folkestone formation crustal geological unit) that are predominantly a landwon resource, this material cannot easily be substituted by recycled or secondary materials. It also appears that little can be expected in the short to medium term from marine resources, in terms of supply, as this has again demonstrated itself as only a small element of the overall imported from marine resources supply. Therefore, Kent will likely remain a significant supplier of landwon soft sands to markets within and to an extent beyond Kent. Reserves have decreased though the productive capacity is not significantly altered. There are sufficient reserves exist to meet the anticipated reviewed and extended Kent Minerals and Waste Local Plan's (KMWLP) requirements. With a technical shortfall only at the end of this period (end of 2037). Given a reduced housing per annum predicted trajectory to 2040 and the current economic slowdown, seeking to identify additional soft sand local plan allocations for a shortfall that does not become apparent until after the mid 2030's is considered

[14] https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/planning-policies/minerals-and-waste-planning-policy#tab-4

premature at this time.

With regard to the landwon sharp sands and gravel resource the evidence continues to demonstrate that these superficial deposits are depleting, the reserves are not being replenished and productive capacity has fallen. Therefore, there is a correspondingly limited potential for Kent to meet the demand from landwon resources of this aggregate type. The life of the landbank (less than the remaining Plan period) is more a consequence of reduced sales depressing the LAA Rate than that of a landbank meeting needs into the future. The replenishment of 2.50 mt from the Minerals Sites Plan allocations (subject to gaining planning permission) would make a contribution to the need although it is not anticipated that this will reverse the trend towards a greater reliance on importation of this land-won aggregate mineral.

Hard rock supply from the landwon resource in Kent is significant. The current reserves and their depletion rate were subject to confidentiality; however, this has been waived by the operator for the matter of the supply of this aggregate discussed in the public domain. The lowering of the estimated and accurately monitored reserves and high recent rates of extraction has led to the County Council concluding that additional resources, as potential allocations in a review of the Mineral Sites Plan's it justified. The Kent Minerals and Waste Local Plan 2013-30 (KMWLP) is currently undergoing its formal fifth year review and this is reflected in its amended content.

Importation of sands and gravels from marine resources showed a marked decline in 2019, then a recovery in 2020 that has continued into 2021, this was also a pattern displayed by marine hard rock supply. However, this pattern was not shown by rail depot importation, that showed some reduction of primary aggregates importation. The rail importation, despite significant capacity being unused, rail depots remain relatively insignificant in overall supply terms, though hard rock is or more prominence than other aggregate types. Available wharf capacity is significant and has not materially altered, however it remains vulnerable to losses as their locations often coincide with competing regeneration initiatives.

Recycled and secondary aggregates showed a marked reduction is 2019, falling to under 0.5 mt of sales, then recovering again in 2020 to 0.90mt and in 2021 to almost 1.0 mt. This pattern of sales, a marked fall in 2019 and a recovery in 2020/21, is consistent with the pattern displayed by marine imported primary aggregates. Hard crushed rock wharf importation is at a record high (over the last 10 years 2012-21) of 1.77mt, almost matched by 1.64mt of marine dredged sand and gravel imports over wharves. The marine importation sector is increasing in importance.

It remains the County Council's view that growth predictions in housing and infrastructure delivery and maintenance are only indicative at best in terms of aggregate demand. The inherent modelling limitations necessitates that only a likely upward trend in demand can be identified from the data available. Housing growth in Kent, based on the Kent local authorities objectively assessed needs are showing now showing an overall decline to 2040 that previously predicted. Irrespective of what level of growth occurs in Kent and within its neighbouring areas that are also supplied by Kent, it will necessitate a robust safeguarding regime of importation facilities if a steady and adequate supply of aggregates to meet the objectively assessed needs is to be maintained.

The LAA includes a 'dashboard' to tabulate the main trends in aggregate supply and reserve levels (Appendix 3 lists all the land-won mineral sites used for landbank calculations in Kent) that can be observed, a simplified version of which is included below in Table 4.

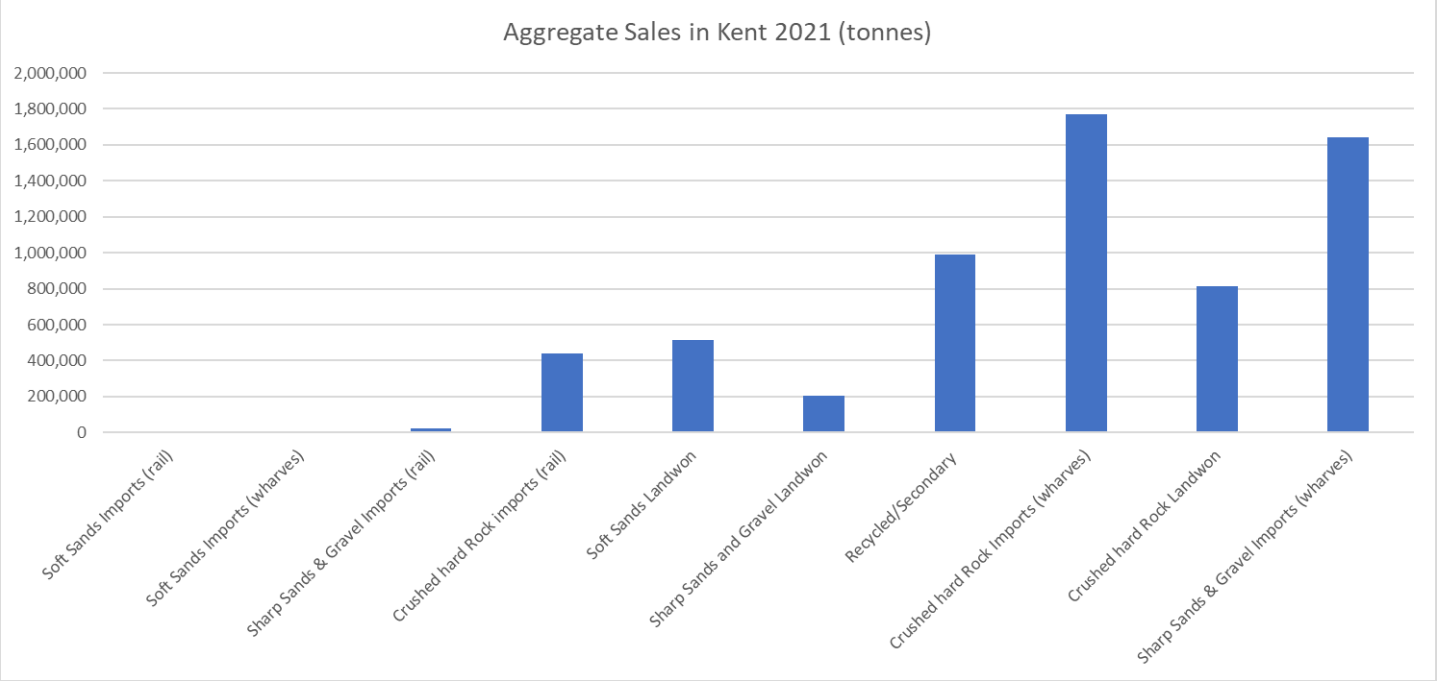
Table 4: Aggregate Minerals Supply and Reserve Monitoring

Aggregate type	2021 Sales	10-year Average	Reserves	Commentary
Soft Sand (landwon)	0.594mt ⇧	0.456mtpa ⇧	6.2mt ⬇	Reserves have decreased from 9.341mt to 6.22mt, this and the slightly increased 10-year average requires the 3.2mt of allocated Mineral Site Plan resources over the Plan period to maintain supply, further allocations may be required towards the end of the anticipated extended Plan period at 2036/37. Therefore, statutory reviews of this Plan will inform if this is necessary in the future.
Sharp Sand and Gravel (landwon)	0.202mt ⇧	0.228mtpa ⇧	2.564mt ⬇	Landwon reserves are depleting and not being replenished. The NPPF landbank requirements are no longer being met given the Importation is steady supplanting the landwon element of sand and gravel supply
Crushed Rock (landwon)	0.815mt ⬇	0.857mtpa ⬇	16.10mt ⬇	The significant increase in sales in 2020 has not been repeated in 2021; the reserve base has been clarified and has shown contraction. There are insufficient reserves remaining over the anticipated extended Plan period. Further allocations to secure an appropriate level of supply is now required. A further 'Call for Sites' exercise and revision of the Mineral Sites Plan is justified.
Recycled /Secondary Aggregates	0.99mt ⇧	0.81mtpa ⇧	N/A	Productive capacity remains significant (considered to be in the order of 4.0mtpa). Sales increased markedly again in 2021. The 10-year average is increasing the sector is gaining in importance in overall supply.
Imports marine dredged sand and gravel (wharfs)	1.642mt ⇧	1.66mtpa ⬇	6.34mtpa is the reported productive capacity.	The predominantly marine originated imports via wharfage increased in 2021, as it did in 2020. There is significant underused importation capacity.
Imports marine crushed rock (wharfs)	1.770mt ⇧	0.940mtpa ⇧	6.340mtpa is the reported productive capacity	Sales fell in 2019 (reducing the 10-year sales average to 0.71mt) they rebounded to 1.12mt in 2020, in 2021 a significant increase to 1.77mt was recorded.

Rail Imports (Sand and Gravel)	24,747 tonnes ⇧	35,120 tonnes ⇧	N/A	Rail importation remains relatively insignificant in overall supply terms for sand and gravel in Kent.
Rail Imports (Soft Sand)	10,222 tonnes ⇧	6,801 tonnes ⇧		Soft sand importation remains insignificant in overall supply, however increased markedly in 2019 and 2020, though only limited increases in 2021 recorded sales.
Rail Imports (Crushed Rock)	0.441mt ⇩	0.437 mtpa ⇧		Crushed hard rock importation 10-year average has slightly increased in 2021, though remains at the 0.5mtpa range that has been the case since 2018.

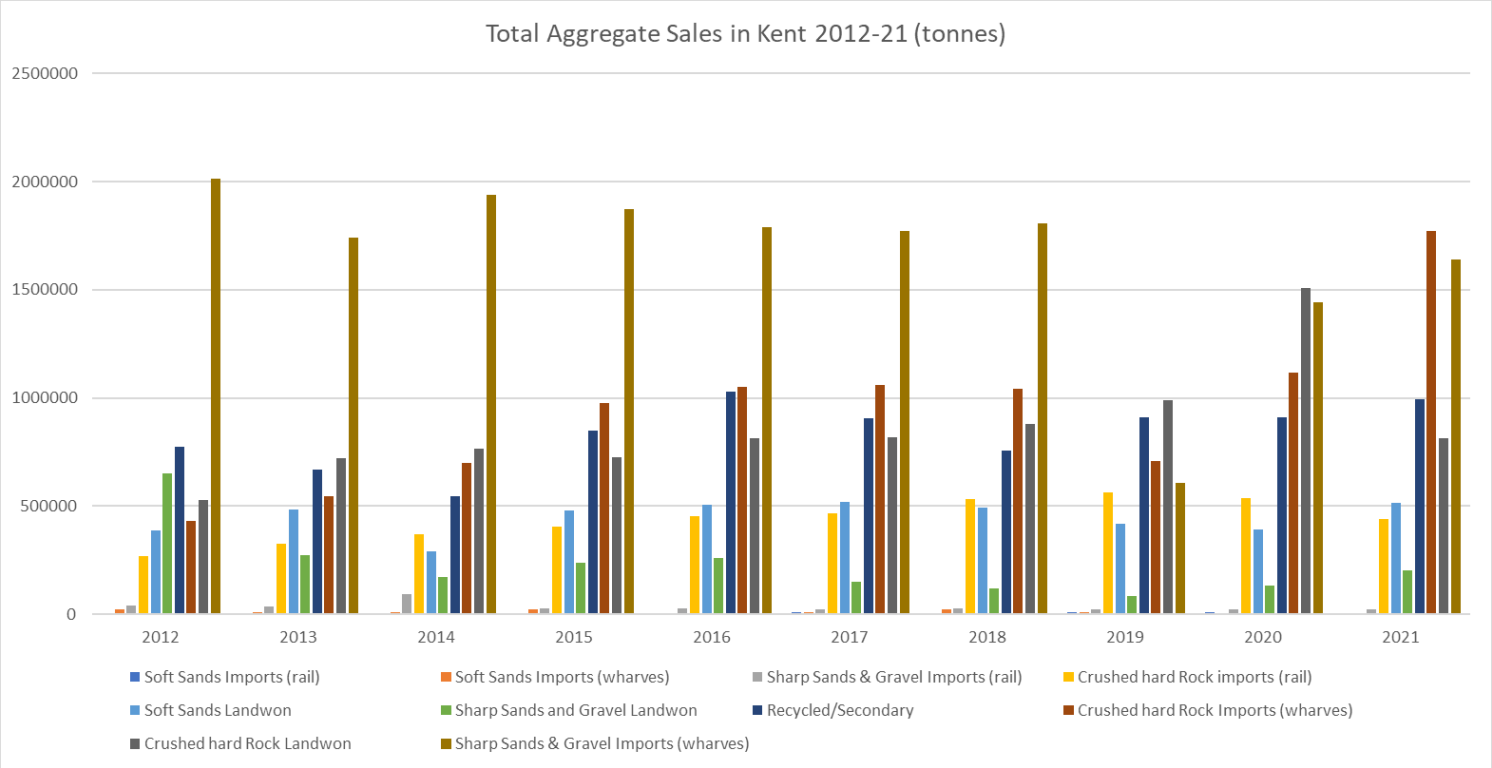
The graphical representation of the sales data is demonstrated below in Figure 7 below.

Figure 7: Total Aggregate Production (Sales) in Kent during 2021 (Million tonnes)



The 2021 sales data clearly shows that importation via wharves of both hard rock and marine dredged sand and gravel are dominant elements of supply, with the landwon hard (crushed) rock and recycled/secondary aggregates important, but of a lower magnitude. Landwon sand and gravel and imports via rail depos are insignificant. Soft sand importation is almost absent, the landwon component is the only realistic supply available to meet needs. When the sales of 2021 are compared to those that have occurred since 2012 the ten-year trends can be observed. Figure 8 shows this graphically.

Figure 8: Total Aggregate Production (Sales) in Kent during 2012-2021 (Million tonnes)



The uncertainty caused by the UK exiting the European Union (EU) clearly shows up in aggregate imports, particularly in the sand and gravel (predominantly marine origin) and hard crushed rock in 2019. This was reversed in 2020 and increased again in 2021. What is significant is that, except for landwon soft sands, primary aggregate importation is becoming the dominant mode of supply for sand and gravel and crushed rock aggregates, though the landwon component of the latter remains significant it is not dominant in overall supply. The recycled/secondary aggregate supply is also gaining in prominence, this may be related to the increasing loss of landwon sands and gravel aggregates supply.

The LAA is based on an understanding of sales and permitted reserves, to establish how a local plan needs to respond to the need to maintain landbanks through the respective plan period. It is recognised that an understanding of consumption that occurs in a mineral planning authority area is less well understood and in order to address this, national periodic aggregate monitoring is undertaken. The most recent was undertaken by the British Geological Survey (BGS) in 2019. This was reported in AMR 2019-20. Data on consumption since is not available, although it is not anticipated that this would have markedly of changed since the 2019 BGS data compilation.

The key findings of the 2019 BGS survey demonstrate that Kent largely meets its own aggregate needs in consumption and plays an important role in supplying crushed rock to Surrey and East Sussex, Brighton and Hove.

4 Landwon Other (Non-Aggregate) Mineral Landbanks

Permitted reserves and production rates for other (non-aggregate) minerals are not required to be monitored in the same way as construction aggregates. The County Council conducted its own extensive Non-Aggregates Mineral Surveys in 2008 and 2011 as part of the evidence gathering for the KMWLP 2013-30. Updates using the latest figures (where provided) are included in this AMR for the 2020/21 period.

Moreover, unlike the Annual Monitoring surveys conducted by SEEAWP, the County Council's own surveys do not benefit from the support of trade associations and as such they do not necessarily achieve a full response rate. The information obtained for this AMR (and previous AMR reports) has therefore been combined with estimates of reserves and production rates drawn from previous survey returns, planning applications and other publicly available documents.

4.1 Brick and Tile making from Clay or Brickearth

The NPPF requires MPAs to maintain landbanks of brickclay (therefore it is reasonable to include brickearth) of at least 25 years and to take account of the need for provision of brick clay from a number of different sources to enable appropriate blends to be made. This requirement is reflected in Policy CSM 2 of the adopted KMWLP (as Partially Reviewed).

As has been reported in previous AMR reports, brickwork closures in previous years have had a substantial impact on the brick manufacturing capacity in Kent and on the distance that material extracted from currently consented sites travels within the county. Whilst there is a brickworks utilising brickearth (Smeed Dean Works, Sittingbourne) there are currently no operational brickworks in Kent which use clay as a raw material.

However, there is a tile manufacturer (Babylon Tile Works) in the Weald of Kent south of Maidstone, which makes Kent peg tiles from clay reserves adjacent to the works. The permitted reserves at this site more than meet the KMWLP requirements for supplies of brick clay (at least 25 years). The previous planning permission required extraction to cease by April 2022 and for Kent peg tile manufacture to cease a year later. A new planning permission was granted in October 2019 to extend the life of the site for at least a further 25 years.

Brickearth has historically been an important mineral in Kent for stock brick manufacture (also called London Stock Bricks or London Stocks), that significantly characterises Victorian structures in Kent and in many parts of London. At present, only one operator, Wienerberger (UK) Ltd, has an active brickwork that uses brickearth to produce stock brick products at the Smeed Deen Works in Sittingbourne. Current reserves come from one site at Paradise Farm (that has significant reserves) in the Sittingbourne area. The life of the permitted reserves has been reconsidered against anticipated extraction rates. This has revised the position reported in AMR2018/19, that stated the available reserves were potentially 21-22 years which was below the 25-year KMWLP requirement.

However, the annual production is highly variable and can significantly reduce in any one year that would commensurately increase the life of the reserves significantly. It is now considered that available reserves allow a 22–29-year range productive life of the facility. Table 5 overleaf illustrates the anticipated remaining lifespans of the permitted reserves left in Kent at this time.

Table 5: Clay and Brickearth Landbanks at Active Brick and Tile Works

Works	Operator	Source	Estimated Length of Supply
Babylon Tile Works, Maidstone (Kent peg tile manufacturer)	V&M Gash	Weald Clay	Over 25 years of reserves remaining
Orchard Farm, Sittingbourne	Wienerberger Ltd	Brickearth	Extraction ceased in 2020 and restoration required to be completed by mid-2023
Paradise Farm, Sittingbourne	Weinerberger Ltd	Brickearth	Between 25 -30 years
Pluckley Quarry, Ashford[15]	Pluckley Brick Company	Weald Clay	Over 25 years supply

4.2 Silica Sand

Both soft and silica sands are extracted from the Folkestone Formation. The latter is in its particularly pure form, free of iron rich minerals (Hematite) that give it the characteristic 'buff' colouration when used in mortar production. Being free of 'contaminants' it can be used in a range of industrial applications where a pure source of silicon dioxide (quartz) is required.

National planning policy on silica sand requires Mineral Planning Authorities to plan for a steady and adequate supply (of industrial minerals) by the provision of a stock of permitted reserves of silica sand. This should be of at least 10 years for individual existing sites and for at least 15 years for sites where significant new capital is required for the establishment of a new facility. This requirement is reflected in Policy CSM 2 of the adopted KMWLP (as Partially Reviewed in 2020).

Previously Aylesford Quarry Sand Pit, near Maidstone was identified as a site with substantial reserves of silica sand. Production ceased in 2012 and remaining reserves are substantially below the water table and no longer considered viable to extract. Nepicar Sand Pit and Addington Quarry (Wrotham) are now regarded as sites that produce silica sand in Kent. Nepicar Sand Pit was considered as nearing the end of its productive life for silica sand, although further evaluation of reserves in 2021 demonstrates that there are reserves present. The estimated timespan of supply at these sites, as indicated in Table 6 calculated from 2021 sales rates (where they occurred) and reserves. Both sites meet the KMWLP requirement of a 10-year minimum permitted reserves for existing sites.

Table 6: Landbanks at Silica Sand Quarries in Kent

Site	Operator	Estimated Length of Supply
Addington (Wrotham) Quarry, Addington, West Malling	Fern Aggregates	Over 25 years
Nepicar Sand Quarry, Wrotham Heath, Nr Sevenoaks	Nepicar Sand Ltd	Potentially over 25 years

[15] Pluckley Brickworks ceased to operate in 2016, and the plant site is subject to a planning allocation for residential development (Ref. 18/01402/AS), however clay extraction for production outside the County continues

4.3 Chalk and Clay

4.3.1 Chalk for Cement Production

The requirement for Chalk and Clay for cement manufacture is reflected in Policy CSM 3 of the adopted KMWLP with the identification of the strategic Site for Minerals, this being the Medway Cement Works at Holborough in the River Medway Valley (that is partially within the area of the unitary authority of Medway). The mineral resources at this site are sufficient for at least 25 years of cement manufacture. As this site has been granted planning permission, as part of the update to the KMWLP, it is proposed that the allocation be deleted as the reserve is in any event safeguarded by the Plan's safeguarding policies.

There are currently no active cement quarries in Kent, the consented reserves of chalk and clay for cement manufacture at the permitted, but not yet built, Holborough Cement Works will address this requirement when it becomes an operational site, as detailed in Table 7.

Table 7: Chalk and Clay Landbanks at Cement Works in Kent

Site	Operator	Estimated Length of Supply
Holborough Cement Works	Lafarge Cement UK	Not yet constructed though planning consent legally implemented, supply sufficient at planned consumption rate for over 25 years

4.3.2 Chalk for Agricultural and Engineering Uses

Chalk is used in agriculture and civil engineering in Kent, as well as being used as a constituent in the production of bricks, tiles and cement and some other processes such as pharmaceutical production and pigmentation (paper, paints etc.). Chalk for civil engineering and agricultural use is not covered specifically in current national minerals policy guidance. However, the general advice on maintaining a sufficient supply of minerals, as set out in part 17, paragraph 209 of the NPPF (2021), remains pertinent to the planning of all mineral types. This requirement is reflected in Policy CSM 2 of the KMWLP: Supply of Land-won Minerals in Kent. The permitted reserves, that are required to enable an adequate supply to be maintained through the plan period, are monitored for AMR reporting purposes. However, this has not always resulted in comprehensive participation, as experienced again in 2020/21 reporting period. In the absence of more reliable data, the current position in Kent for chalk used in agricultural and engineering applications can be extrapolated using past data on reserves and extraction rates as set out in Table 8 below.

Table 8: Agricultural and Engineering Chalk Landbank in Kent in 2020

Average sales (2021) per annum rate	Total Estimated Reserves at end of 2021	Landbank Life
6,167 tpa	0.502 million tonnes	81+ years

The averaged indicative data above shows that Kent has a potential agricultural and engineering chalk landbank equal to over 81 years. Whilst this was reported as over 100 years as of 2020, this is no longer thought to represent an accurate picture of extraction average and landbank life. In 2020 the effects on demand due to Covid-19 mitigation measures (lockdowns), had a significant impact on the overall extraction rate average, however it has not materially increased in 2021. In the AMR 2018/19 report, the average measured between 2011 and 2014 was 70,000tpa. This would give an overall landbank of chalk of only 7.17 years. Further

monitoring will be required to establish if the past extraction rates in the order of 70,000tpa returns.

The current Plan will last another 9 years (2021-30). Therefore, there is the possibility that there is an insufficient permitted landbank to maintain a supply of chalk for these purposes over the remainder of the Plan period if extraction rates again rose to the high historic levels of 70,000tpa. However, as has been demonstrated in past AMR reports, sales can be highly variable from year to year. It is considered that the risk of running out of permitted chalk landbank before the end of the adopted Plan period is not considered high. In terms of the anticipated Full Review of the KMWLP, the period would be up to end of 2037 beginning of 2038. This Plan would also have statutory reviews every fifth year. Therefore, further monitoring will continue and if extraction does again reach the levels seen between 201-2014, there will be an opportunity to then review the Minerals Sites Plan if further provision is required.

4.4 Engineering Clay

Kent has freestanding clay working permissions with significant deposits of consented clay. However, only one of these sites remains active at this time. The reserves in other sites have not been worked for many years or are dormant 'Interim Development Order'[16] sites and therefore cannot be realistically included in the current landbank.

Whilst this AMR cannot report on sales from individual sites due to commercial confidentiality, it can be reported that an average of 27,400tpa of clay from land-won sources was sold in the years between 2000-2009, for which data was available. In 2014 there was activity to supply 25,000 tonnes of sea defence engineering clay (via a temporary permission now expired), and some 64,000 tonnes of materials for construction material manufacture. In 2020 sales activity data demonstrated a hiatus in extraction. In 2021 it was reported that the engineering clay reserves were sufficient for the capping purposes of the associated hazardous waste facility site where the clay (London Clay) is extracted from (Isle of Sheppey).

It is the County Council's view that, given the NPPF does not require specific landbanks to be maintained and the likely reserves in existence in 2020/21 and the lack of any meaningful sales to a general market need for engineering clay, there is likely sufficient capacity to meet future needs, that appear to be wholly confined to the hazardous waste facility where the clay originates from.

5. Waste Indicators

5.1 Local Authority Collected Waste Arisings by Management Type

The Local Authority Collected Waste (LACW) arising in Kent in 2020/21 was reported by Defra as being 678,893 tonnes. This represents a decrease of 2.4% on the 2019/20 value, which itself represented a fall of 3.5% on the previous year. The 2020/19 tonnages, proportions by management type and the percentage change from the previous monitoring year (based on actual tonnage) are set out in Table 9 below. The data shows that LACW sent to landfill is just above 2% of collected waste. Recycling and composting has fallen to 44.5%, with Energy from Waste standing at 54%.

[16] Interim Development Order sites are those with permissions granted between 1943-48 that were successfully registered by Kent County Council as the responsible Mineral Planning Authority in accordance with the Planning and Compensation Act 1991

Table 9: Fate of collected LACW Arising in Kent by Management Type, 2019/20

Management Type	Tonnes	Percentage of Total Collected LACW	Change from 2019/20
Recycling / Composting	298,702	44.4%	336,977 (a decrease of 38,275 tonnes which equates to a fall of 11.4% on 2019/20 value)
Energy Recover y (EfW)	365,640	54.3%	348,593 (an increase of 17,047 tonnes which equates to an increase of 4.9% on 2019/20 value)
Landfill	14,551	2.2%	10,066 (an increase of 4,485 tonnes which equates to a rise of 4436%% on 2019/20 value)
Total	678,893	100%	**695,636 tonnes** A decrease of 16,743 tonnes (2.4%) on 2019/20 value()

The Government's Resources and Waste Strategy for England (2018) set out how material resources will be preserved by minimising waste, promoting resource efficiency and moving towards a circular economy. It combines actions to be taken now with firm commitments for the coming years and gives a clear longer-term policy direction in line with the 25 Year Environment Plan. The objectives include a target to recycle 65% of municipal waste by 2035 with no more than 10% ending up in landfill, for zero avoidable waste by 2050 and a requirement for all food waste to be collected separately and eliminate food waste to landfill by 2030.

The Government's Net Zero Strategy: Build Back Greener published in October 2021 gave a commitment to funding the separate collection of food waste from all households by 2025 and stated a target date of 2028 for the diversion of virtually all biodegradable waste from landfill.

The Kent Joint Municipal Waste Management Strategy (KJMWMS) was adopted by the collection and disposal authorities of Kent (working together through the Kent Waste Partnership) in 2007. The Strategy was refreshed in 2018/19 and is due to be reviewed again in 2022. The work of the Partnership has been taken on by the Kent Resource Partnership (KRP) and the following targets for household waste adopted:

- Recycling/composting rates at least 50% by 2020/21; and
- landfilling no more than 2% by 2020/21.

Table 9 demonstrates that Kent fell short of the 2020/21 recycling/composting target in 2020/21. While the landfill diversion target had been surpassed some two years earlier than planned this achievement was also just missed in 2020/21.

Figures 11 and 12 illustrate the trends in the management of the LACW between 2010-11 and 2020-21, both in tonnes (Figure 11) below and percentages (Figure 12) overleaf.

Figure 21: Collected LACW by Management Method 20010-11 to 2020-21

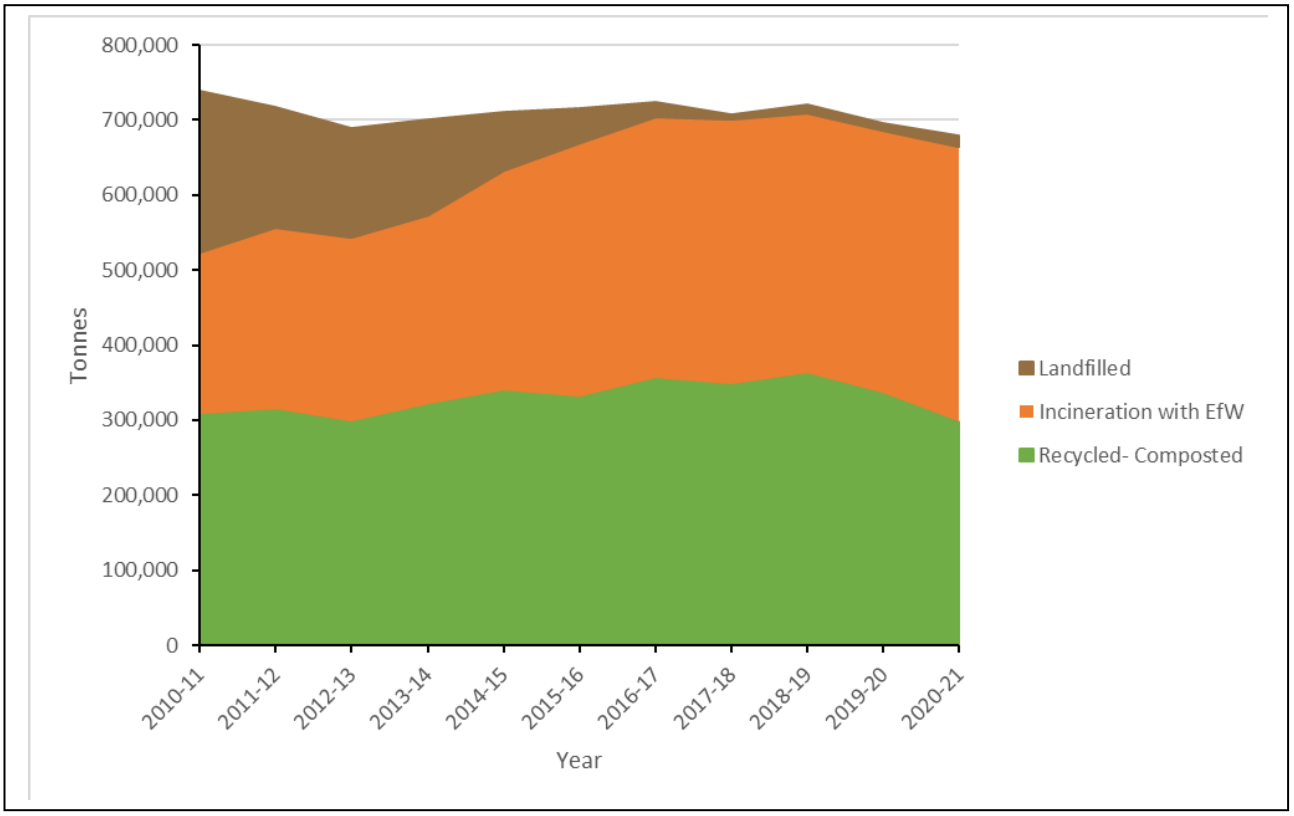
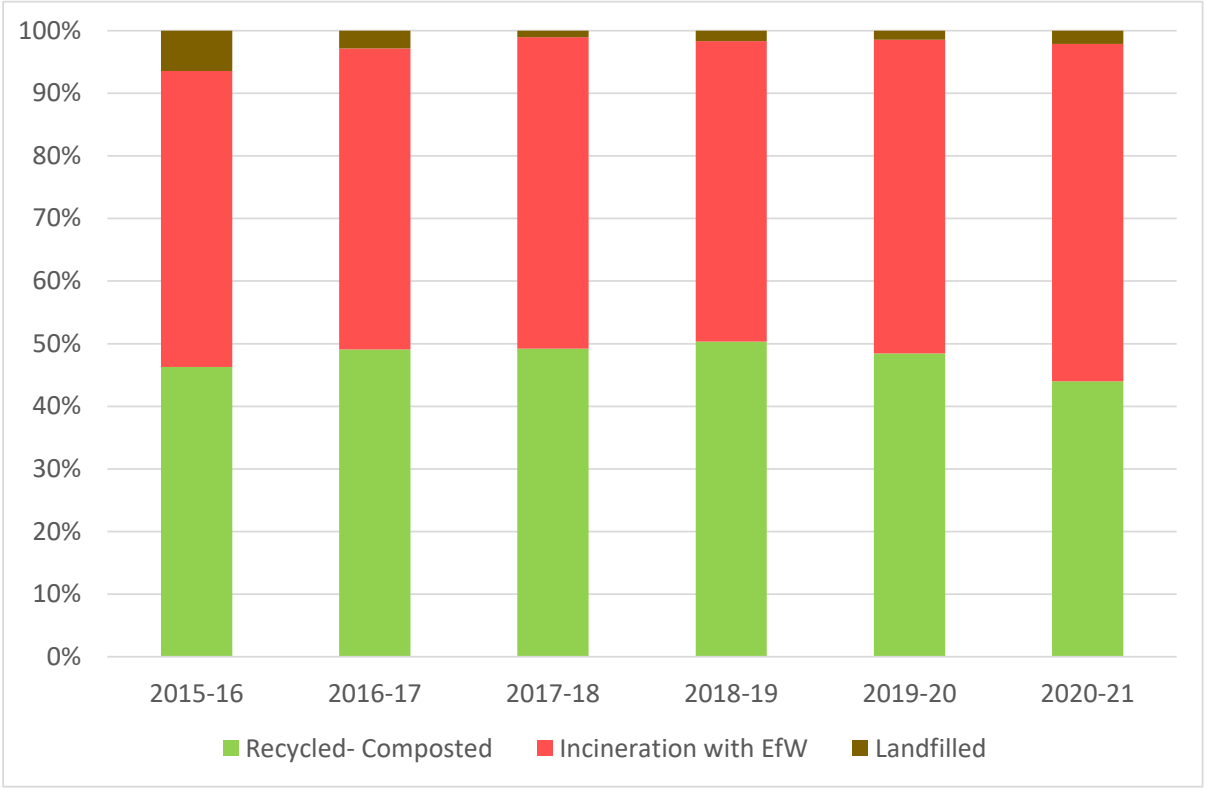


Figure 32: Collected LACW by Management Method 2015-16 to 2020-21 in Percentages



During the period between 2015-16 and 2020-21 overall LACW arisings have fallen. There has been a continuing decline in the proportion sent to landfill (6.5% in 2015-16 to 2.1% in 2020-21). Recycling and composting being taken in combination increased from 46.3% in 2015-16 to a peak at 50.32% in 2018/19 and attaining 44% in 2020-21 . It should be noted that the combined recycling/composting rate can fluctuate annually due to variations in green waste production which in turn is heavily influenced by annual changes in climatic conditions.

5.2 Waste Generation Growth Rates

5.2.1 Local Authority Collected Waste (LACW)

As shown in Table 14 (page 39), the amount of collected LACW in 2020-21 decreased from 695,636 tonnes in 2019-20 to 678,893 tonnes, a decrease of 2.4%.

Housing growth in Kent is projected to continue to increase over the next 10 years and with that LACW tonnage is expected to rise even in the face of per household reductions that may be achieved due to minimisation measures. and anticipated decoupling of rising household expenditure and waste production.

Kent County Council as the Waste Disposal Authority (WDA)has undertaken an infrastructure review to determine where additional management capacity will be required. This covered both Waste Transfer Station (WTS) facilities as well as Household Waste Recycling Centers (HWRCs). The need for at least 5 new or improved WTS facilities across the County up to 2030 has been identified as shown in Table 10 below.

Table 10: WTS Projects

WTS Sites	Project Type	Serves (District)
Folkestone WTS	New (additional)	Folkestone
Ebbsfleet WTS	New (additional)	Gravesham, Dartford
Sevenoaks WTS	Replacement	Sevenoaks
Sittingbourne WTS	Extension	Swale
Tunbridge Wells WTS	Replacement	Tunbridge Wells, Tonbridge and Malling

In addition to WTS facilities, a number of existing HWRC sites have been identified for replacement or extension, as well as the need for one additional facility. These facilities are summarised in Table 11 below.

Table 11 - HWRC Projects

HWRC Projects	Type of project	Serves
Dover HWRC	Extension	Dover HWRC catchment
Ebbsfleet HWRC	New (additional)	Dartford and Pepperhill HWRC catchment
Sittingbourne HWRC	Replacement	Sittingbourne HWRC catchment
Faversham HWRC	Extension	Faversham HWRC catchment
Maidstone HWRC	Improvement (short term) Replacement (long term)	Maidstone HWRC catchment
Margate HWRC	Extension	Margate HWRC catchment
Sheerness HWRC	Extension	Sheerness HWRC catchment
Swanley HWRC	Extension	Swanley HWRC catchment
Tunbridge Wells HWRC	Extension	Tunbridge Wells HWRC catchment
Folkestone HWRC	Extension	Folkestone HWRC catchment

KCC will seek Developer Contributions to help support these identified projects, as there is a direct link between demand on management facilities and housing growth.

Regular capacity assessments are undertaken to update the findings of the infrastructure review, with further projects identified as required.

5.2.2 Commercial and Industrial Waste (C&I)

Commercial waste is defined in the KMWLP as waste from premises used mainly for trade, business, sport, recreation or entertainment, as defined under Section 5.75(7) of the Environmental Protection Act 1990[17]. For example, it is likely to include timber, metal, paints, textiles, chemicals, oils and food waste, as well as paper, card, plastic and glass. While industrial waste is waste from any of the following activities/premises: factory, provision of transport services (land, water and air), purpose of connection of the supply of gas, water, electricity, provision of sewerage services, provision of postal or telecommunication services.

Annual data on the amount of C&I wastes produced in Kent is not routinely available. Work undertaken by BPP Consulting[18] to support the Early Partial Review estimated that arisings in 2015 were just under 1.2mt which by 2031 could rise to some 1.4mt. In line with national Planning Practice Guidance (Paragraph: 032 Reference ID: 28-032-20141016 Revision date: 16 10 2014) it was assumed that there will be positive growth.

Table 12 below sets out the growth rates applied over the period 2016-2031 to generate the updated C&I waste forecasts used to inform the Early Partial Review of the Plan. This has been applied to the revised baseline value obtained for 2020 and extended to the proposed extended Plan period in Table 12.

Table 22: Forecast arisings of C&I Waste in Kent (tonnes per annum)

	2021	2026	2031	2036	2041
Growth Factor Applied	0.07	0.05	0.05	0.05	0.05
WNA Forecast using 2015 Baseline underpinning adopted plan	1,274,082	1,338,702	1,407,630	n/a	n/a
Forecast C&I arisings with Updated 2020 Baseline	1,107,943	1,164,136	1,224,076	1,287,102	1,353,372

5.2.3 Construction Demolition & Excavation Waste (CD&E)

The adopted Kent Minerals and Waste Local Plan (KMWLP) defines CD&E waste as follows:

> *"This is a waste arising from any development, redevelopment, or demolition of existing schemes. It includes vegetation and soils from land clearance, demolition waste, discarded materials and off-cuts from building sites, road schemes and landscaping projects. It is mostly made up of stone, concrete, rubble and soils but may include timber, metal and*

[17] http://www.legislation.gov.uk/ukpga/1990/43/contents

[18] See Kent Waste Needs Assessment (WNA) 2017, Commercial & Industrial Waste Generated in Kent Management Requirements, November 2017, Version 1.2

glass."

It remains the case that most recent comprehensive national study on inert CD&E waste arisings was conducted in 2005 for the former DCLG, now Department for Levelling Up, Housing and Communities. This data was disaggregated to estimate the waste arisings in Kent alone, based upon the relative populations of Kent and Medway. This method generated an estimate of 2.6mt of inert CD&E waste that arose in Kent in 2005.

An updated estimate of the arisings of the CD&E wastes in Kent has been produced applying a revised national methodology and this has generated an estimate for 2020 of 2.5Mt. Projecting forward arisings, a zero-growth rate was adopted in line with national Planning Practice Guidance (Paragraph: 033 Reference ID: 28-032-20141016 Revision date: 16 10 2014).

This work found that, when considering the consented capacity to manage the predicted arisings following a preferred management profile, there was sufficient capacity available over the Plan period as set out in Table 13 below.

Table 33: Kent CD&E Waste Management Requirements against Existing Capacity 2019

Management Route	Peak Annual or Cumulative (for permanent deposit /landfill) Requirement to 2038 (tonnes) Table 25	Capacity Assessed as available	Comment
INERT COMPONENT			
Inert Recycled Aggregate	1.4M	3.9Mtpa See Table A1 in Appendix 1	KMWLP states "5.8.2 The consented secondary and recycled aggregates processing capacity within Kent currently exceeds 2.7Mtpa, 0.63 Mtpa of which is identified as temporary capacity." Para 5.8.3 includes a commitment to maintain productive capacity of at least 2.7 million tonnes per annum throughout the Plan period via Policy CSM 8. **No additional capacity required.**
Permanent Deposit to Land (Inert CDEW)	11.8 million t = 7.86Mm3 at 1.5t/m3	Table A4 in Appendix 1 indicates inert void of just over 5.7M tonnes but does not include operations permitted as recovery to land	**KMWLP states " 6.11.2** The *Needs Assessment* shows that Kent has existing permitted inert waste landfill capacity that is more than sufficient to meet Kent's need for the plan period. " However, this refreshed review suggests that void may not be as plentiful as previously assessed. Moreover, the current assessment of available void is highly dependent on minerals being worked at the rate required to create the void needed. **Depending upon the above additional capacity may be required.**
NON-INERT COMPONENT			
Separated for recycling	352,554	>2.4Mtpa See Table A2 in Appendix 1	**No additional capacity required.**
Non-Inert (EfW)	125,912	44ktpa (surplus)	MVV Biomass Plant at Ridham has capacity c 170,000 tpa. So, it suggests a capacity surplus of c44ktpa. **No additional capacity required.**
Non-Inert Landfill	150,581t - 150,581m3 as 1:1 assumed with trommel	Table A4 indicates 1.6Mm3 of non-haz void	Given the surplus of EfW capacity in Kent, the remaining landfill capacity ofc1.6Mm3at Shelford Landfill is not required to meet a predicted need for the future management of LACW & C&I waste. Therefore, non-inert residues from C, D

	fines		& E waste may be accommodated. **No additional capacity required.**

It is proposed that Policy CSW 11: Permanent Deposit of Inert Waste, be modified in the emerging Plan to make more explicit reference to the possible role that the deposit of inert waste for beneficial use including engineering operations can make to managing inert excavation waste providing it does not have an adverse effect on the availability of material for progressive restoration of Kent's mineral workings within the vicinity. This should encourage such schemes to come forward, ensuring that sufficient permanent deposit to land capacity remains for inert waste for the Plan period.

5.2.4 Hazardous Waste

Policy CSW 12 contained in the adopted plan seeks to ensure sufficient capacity is provided in Kent to maintain net self-sufficiency in the management of hazardous waste throughout the Plan period. It should be noted however that there is no national policy expectation for net self-sufficiency in this waste stream alone to be achieved at Plan area level therefore the emerging Plan now proposes deletion of this requirement.

Hazardous waste arises from households, commercial and industrial, and from the incineration (with or without energy recovery) process of managing residual wastes from these waste streams. Also, this waste arises from the C, D & E waste stream, typically asbestos bearing construction wastes. In 2020 the total amount of hazardous waste consigned through the HWI as arising in Kent was c172,000 tonnes. This compares with c 146,000 tonnes consigned into Kent facilities for management (including Kent waste). Given the potential for omission, the WDI has also been interrogated to find that c199,173 tonnes of hazardous waste arising from Kent was reported as managed through permitted sites reporting through the WDI. This compares with c 168,091 tonnes managed at permitted sites within Kent.

5.2.5 Air Pollution Control (APCr) Wastes

During the course of incinerating waste flue gases are generated that require treatment. This is achieved through the addition of catalysts such as ammonia. This generates a solid residue known as APCr which has in the past required onward management as a hazardous waste.

At the time the Allington EfW plant was consented (2000) a need for a reliable management route for the resulting APCr was identified. This was met through the provision of dedicated hazardous waste landfill capacity at Norwood Quarry on the Isle of Sheppey. Given the ongoing production of APCr at Allington, the void at the landfill is forecast to be exhausted during the Plan period. In addition, further incineration capacity has been consented and is operational within Kent, generating more APCr requiring management. Hence Policy CSW5 makes provision for an extension to Norwood Quarry to ensure sufficient capacity is provided for Kent produced APCr over the Plan period. This was against the backdrop of the Kent MWLP objective of maintaining net self-sufficiency for hazardous waste management throughout the Plan period as set out in the adopted version of the Plan. It is proposed to amend this objective in the forthcoming Plan review and therefore it is expected this requirement will no longer exist.

Defra’s strategy for the management of hazardous waste released (2010) sought to ensure that hazardous waste moves up the waste hierarchy, while ensuring that the Best Overall Environmental Option (BOEO) is secured for hazardous waste. It specifically addressed the landfilling of waste such as APCr which required seeking a relaxation of waste acceptance criteria of hazardous waste landfill from the European Commission. It was stated that this arrangement would be phased out noting that continued landfilling of hazardous waste is contrary to proper application of the waste hierarchy and acts as a disincentive to alternative treatment. The Government's commitment to moving hazardous waste up the hierarchy was reiterated in the Resources & Waste Strategy for England released in 2018.

In 2020, APCr arisings continued to be landfilled at Norwood Quarry albeit at a reduced rate as Allington APCr was managed through treatment methods as well. At the end of 2020 the remaining void at the consented landfill at Norwood Quarry stood at 98,187m^3, with less than 19,000 tonnes of the total c37,000 tonnes produced at Allington actually having being landfilled there. It should be noted that a Section 73 application was granted to allow residues from facilities other than Allington EfW to be accepted at Norwood Quarry. Given the above the necessity of the strategic allocation is being kept under review, and Policy CSW 5 was modified during the Early Partial Review of the KMWLP to ensure that in the event that the allocated extension was consented the site can be restored to the approved final landform should landfilling of APCr cease.

5.3 Exports and Imports of Waste in Kent

Information concerning the quantities, origins and destinations of waste managed at permitted sites is published annually in arrears by the Environment Agency in their Waste Data Interrogator (WDI). Table 14 below shows the tonnages of Kent waste managed in permitted facilities within Kent and outside, and the tonnages of waste managed in Kent, whether from within Kent or outside.

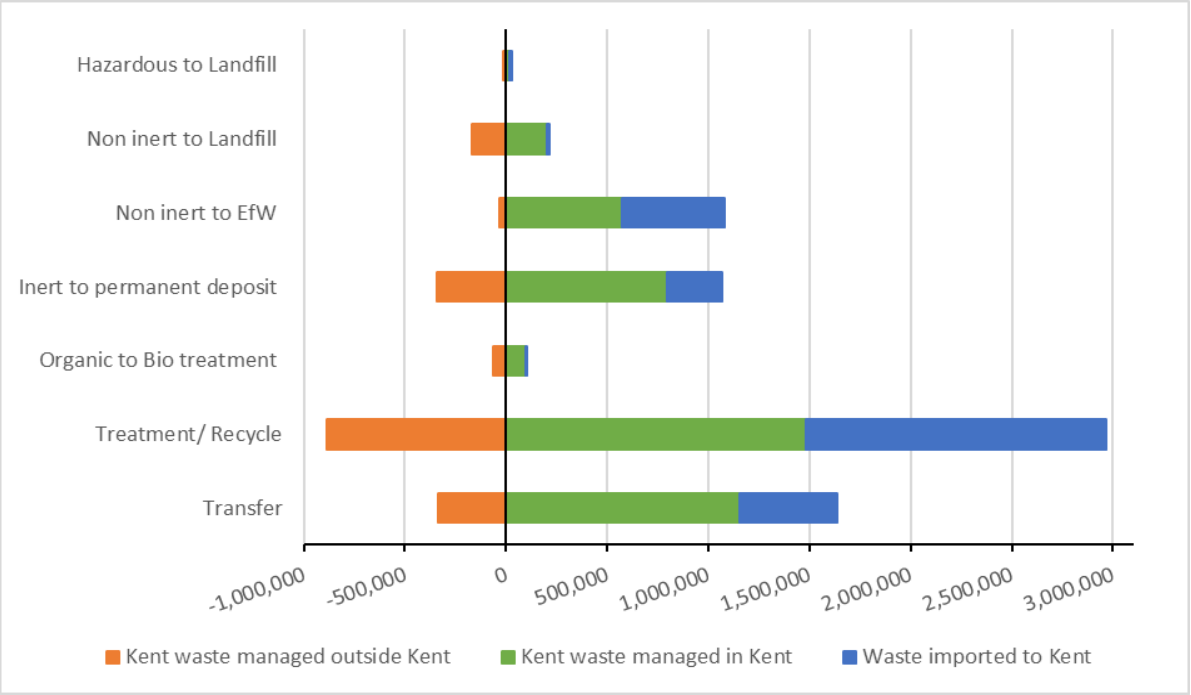
Table 44: Tonnages of Kent waste managed in permitted facilities within Kent and outside, and tonnages of other waste managed at Kent facilities 2020

Aspect	Flow	Total
Kent waste managed	Kent waste exported for management	-1,845,675
	Kent waste managed in Kent	4,326,548
Managed in Kent		
	Waste imported into Kent	2,767,851

The bottom two lines of Table 14 above show that some 7 million tonnes of waste were reported as being managed at Kent waste management facilities in 2020. This compares with around 1.84 million tonnes managed outside the county (top line of Table 14). As shown in Table 14 this export is more than offset by imports of waste for management from outside Kent (bottom line Table 14), so taking a simple balance, Kent remains net self-sufficient[19]. Figure 13 below graphically displays the 2020 import and export balance by management method and waste type (where known) that make up the overall tonnages set out above in Table 14 above.

[19] This presents a crude approximation for annual monitoring purposes. Net self-sufficiency is actually a measure of arisings against consented capacity.

Figure 43: Waste Import and Export Balance in Kent 2020 by management method and waste type where known (tonnes)



Of the imports, just over 360,000 tonnes came from London, of which c126,000 tonnes of non-hazardous residual waste went to EfW, and around 500 tonnes to non-inert landfill This movement is consistent with the Plan provision for management of a reducing amount of waste from London. It should be noted that the non-hazardous waste capacity assessment[20] underpinning the Early Partial Review of the KMWLP projected c55,000 tpa of residual non-hazardous waste from London. However, the data now shows this was substantially exceeded in 2020. This is largely as a result of the Kemsley K3 EfW plant and the Ridham Dock Biomass Plant coming on stream.

In addition, circa 224,000 tonnes of inert waste went to permanent deposit to land via non-inert waste landfill, inert landfill and recovery to land projects. This compares with a predicted requirement of up to 300,000 tpa from London.

As a consequence of the updated Waste Needs Assessment finding a projected shortfall in capacity for the management of inert waste and a surplus of EfW capacity which is already being utilised by London, it is now proposed that Kent makes reduced provision for the management of London's waste.

A list of permitted waste management facilities in Kent is set out in a separate list published alongside the AMR on the KCC website

[20] Kent Waste Needs Assessment 2018 Capacity Requirement for the Management of Residual Non Hazardous Waste September 2018 BPP Consulting

6. Summary of Monitoring the Delivery of the adopted KMWLP Strategy

In order to ensure that the monitoring of the adopted KMWLP (as Partially Reviewed in 2020) is based on up-to-date and relevant evidence, the County Council has monitored the KMWLP indicators for both waste capacity needs and for providing a steady and adequate supply of minerals. The relevant indicators are shown in the Kent Minerals and Waste Local Plan 2013-30 Monitoring Schedule: Sustainable Development Policies (see Section 8 Managing and Monitoring the delivery of the Strategy of the KMWLP).

The production of evidence to support the Minerals Sites Plan (adopted in 2020) demonstrated that the aggregate landbank requirements included in Policy CSM2: Supply of land-won Minerals were no longer up to date. This is unsurprising as the rates of supply and level of reserves have changed since the Plan's preparation in 2014-16. However, the policy recognises this and has inherent flexibility by stating:

> *"A rolling average of ten years' sales data and other relevant information will be used to assess landbank requirements* ***on an on-going basis****, and this will be kept under review through the annual production of a Local Aggregates Assessment"*.

In addition, the policy requirement to maintain at least 10.08mt and a landbank at least 7 years (5.46 mt) for sharp sand and gravels is caveated with "*while resources allow"*. Assessment of other land-won mineral supply indicators undertaken to establish policy effectiveness, show that the Plan's policies are still generally adequate for delivering the mineral supply strategy. This was reflected in the 2020 Early Partial Review changes to the KMWLP to remove the requirement of a Sites Plan to allocate any chalk and clay sites in a Minerals Sites Plan, as there was no evidential requirement for such allocations for the remainder of the Plan period. The position has not changed as a consequence of the Plan's current review work. This includes the other mineral transportation infrastructure safeguarding (wharfs and railheads) policy indicators demonstrating that review of these policies was unnecessary (CSM 6: Safeguarded Wharves and Rail Depots and CSM 7: Safeguarding Other Mineral Plant Infrastructure) as they remain effective.

Early monitoring of the Plan's effectiveness in allowing for future waste management requirements indicated that several policies required review in that the policy requirements no longer were based on relevant data. As stated earlier this was addressed by the Early Partial Review of several waste policies.

The need to maintain net self-sufficiency in waste management (plus a reducing amount of London's wastes) is part of the adopted Plan's overarching waste strategy. Import and export data (Table 14) demonstrates that in 2020 the balance is below the 10% of the indicator's trigger. Moreover, the data for LACW shows that none of the recycling/composting and landfill diversion indicator trigger points are reached in 2020.

Ensuring the effectiveness of Safeguarding policy requires Mineral Safeguarding Area (MSA) boundaries to be reviewed annually to ensure that where changes can be evidentially justified the MSA boundaries are updated, and this is being addressed in the update to the KMWLP.

The available monitoring data indicates that most other policies of the Plan regarding minerals supply, waste management capacity requirements, waste and minerals safeguarding and development management that relate to the protection of the environment and communities are considered generally effective, though a degree of modification to increase their relevance with carbon neutrality and circular economy and other national policy is being undertaken. A Regulation 18 consultation for a modified KMWLP took place in late 2021 into early 2022.

7. Duty to Co-operate Activity

The AMR prepared by the Local Planning Authority (LPA) must contain details of the co-operation undertaken with other LPAs and the prescribed Duty to Co-operate (DtC) bodies[21]. The Duty applies to all LPAs, councils and prescribed bodies and requires that they actively co-operate with each other to maximise the effectiveness with which development plans are prepared and implemented.

The Duty requires that engagement occurs constructively, actively and on an on-going basis during the plan making process and beyond into the plan monitoring process and that regard is given to the activities of other authorities where these are relevant to the LPA in question. For Kent this represents: the Districts and Boroughs within the county of Kent; planning authority areas bordering Kent; and other local authorities linked to Kent by movements of mineral aggregates and waste (imports/exports).

In 2019 and 2020 the County Council continued its co-operation duties with neighbouring minerals and waste planning authorities and the recognised technical advisory bodies. These included the South East Waste Planning Advisory Group (SEWPAG), the South East England Aggregates Working Party (SEEAWP) and the Planning Officer's Society Mineral and waste Planning Group (POS).

The SEWPAG meetings (held remotely) discussed waste planning issues such as the technical advisory group's responses to such governmental consultations as:

- Planning White Paper
- Revised National Policy Statement on Energy

Also, such meetings also facilitated the sharing of waste specific technical knowledge and experience from plan preparation on evidence gathering and interpretations. Ongoing work includes an assessment of the area's hazardous waste arisings and capacities and Kent is a co-signatory to the SEWPAG Inert Waste Joint Position Statement, Statement of Common Ground between Waste Planning Authority members of the South East Waste Planning Advisory Group Concerning Strategic Policies for Waste Management and waste assessment methodologies.

POS meetings continued the practice of the County Council being an active participant in the Society's Mineral and Waste Planning Policy Group. Membership of the Group is made up of mineral and waste planning authorities from across the Country and is well represented by those authorities in the South East. This Group provides a forum where mineral and waste planning policy matters and considerations relevant to the Plan preparation and review. The meetings enable an exchange of experience and knowledge over issues relevant to a wider appreciation of cross boundary matters and collaborative solutions can be developed.

KCC participated in South East Aggregate Working Party (SEEAWP) meetings in 2020/21 and 2021/22. In its capacity as an 'additional signatory', during this period, the AWP considered various Statements of Common Ground (SoCG) between various mineral planning authorities. The Soft Sand Statement of Common Ground specifically included Kent, given the extensive occurrence of the Folkestone Formation as the base of the North Downs in Kent.

The County Council has also engaged with Essex and Surrey County Council's and Medway Council on the production of SoCG in relation to strategic cross border issues relating to both waste and mineral supply. These are ongoing.

The County Council continues to engage with the borough and district councils and the Ebbsfleet Development Corporation in Kent regarding mineral and waste safeguarding matters in both planning applications and in the formulation of local plan policy. Giving input

[21] According to Regulation 34 (6) of The Town and Country Planning (Local Planning) (England) Regulations 2012

into these processes by explaining how the safeguarding matters should be considered in the determination of applications and the identification and assessment of sustainable non-mineral or waste development allocations. To clarify this process, and how the Early Partial Review safeguarding exemption policies (DM 7 and DM 8) should be interpreted, the County Council reviewed the Supplementary Planning Document (SPD) on Safeguarding in 2020. This included consultation and engagement with the borough and district councils and the Ebbsfleet Development Corporation in Kent. The SPD was formally adopted in March 2021[22].

8. Conclusion and Next Steps

8.1 Mineral Indicator Monitoring

The **total aggregate** mineral sales in Kent during 2021 from all sources amounted to some 6.47mt up from the 5.32mt recorded in 2020. This was a significant increase on the previous year. The reason for this may have been related to market uncertainty due to the impending exit from the European Union in 2019 becoming less important in 2020 and 2021 with the resulting certainty of having left the European Union. Continued monitoring will demonstrate what sectors are declining and which are increasing to maintain the overall supply.

The shift away from landwon supply to imports, with particular reference to the **sharp sands and gravels** has not altered significantly in that it has continued to increase with 1.44mt recorded in 2020 and 1.663mt recorded in 2021. The landwon **sharp sand and gravels** slightly increased from 0.13mt in 2020 to 0.20mt in 2021. Landwon **crushed rock** significantly increased with 1.51mt being recorded in 2020 compared to 2019 at 1.0mt. However, in 2021 the importation fell back to 0.81mt. A level more consistent with past monitoring. **Imported hard crushed rock** fell and then rebounded over this period, with 2020 seeing 1.66mt and in 2021 a new high of 2.21mt. The **sharp sands and gravels importation** that showed a significant contraction in 2019 (0.633mt) and then a marked recovery in 2020 (1.443mt) and again in 2021 a significant increase to 1.663mt. Uncertainties in demand in 2019 appear to have been an 'exceptional event' and historic demand levels quickly re-established itself and is now increasing. However, this illustrates the necessity for the safeguarding of wharf capacity. This will be imperative to maintain the NPPF's requirement of a 'steady and adequate supply' of **sharp sand and gravel** to meet market requirements into the future.

Permitted reserves of **soft sand** at the end of 2021 were 6,224,773t. Both the 10 and 3-year sales averages were down, although productive capacity has increased by 0.225mtpa. The total soft sand requirements (sufficient for 15 years and a 7-year landbank at the end of the Plan, 22 years in all) is 10.032mt. Reserves at the end of 2021 were 6.225mt and are forecast to be 5.769mt at the beginning of the Plan period (2023) (assuming a reduction at the 10-year sales average rate). This results in a shortfall of 4.263mt in the required landbank to the end of 2037 (+7). However, a soft sand allocation in the Kent Minerals Sites Plan at Chapel Farm (West), Lenham (3.2mt) is expected to come forward during the plan period to replenish the landbank. This could allow a 7-year landbank (of 3.192mt) to be maintained until 2035. Resulting in a deficit estimated to be 1.063mt in 2037. The estimate of available reserves and sales rates will likely change over time and there is the potential for the maintained soft sand landbank requirement to increase or decrease over time. As the landbank will be around 20 years at the start of the plan period (taking account of the Chapel Farm allocation), any increase in depletion rates will be revealed by annual aggregate monitoring well ahead of the landbank decreasing below 7 years. The policy enables the matter to be reassessed well ahead of any identified supply constriction and so it is considered that further allocation of soft sand is not justified.

Landwon sales of **crushed rock were** historically confidential and did not allow for actual sales figures to be reported. They were assumed as 0.78mtpa. This confidentiality has been waived

[22] See link: https://www.kent.gov.uk/__data/assets/pdf_file/0011/120530/supplementary-planning-document.pdf

by the operator allowing the sales and available reserves to be reported. The exact nature and quantity of the reserves (two sites Hermitage Quarry and Blaise Farm) were a matter of discussion with the operator in 2021-22. It has been concluded that the total reserves of the landwon hard crushed rock at the end of 2021 was 16.10mt.

The reserves, coupled with a need to plan for the 8 years of the remaining adopted Plan period and a 10-year landbank at the end of the Plan, would result in a deficit. This and the extent of the remaining adopted Plan period being planned for indicates that the sources of supply are not able to secure the ability of Kent to maintain a 10-year landbank of crushed rock over the life of the Kent MWLP 2013-30 as reflected in KMWLP Policy CSM 2: Supply of Landwon Minerals in Kent. Further reserves will need to be secured as the monitoring indicates that a 10-year landbank will only be maintained until 2031.

Secondary and recycled aggregate sales in 2020 increased to 0.91mt and increased again to 0.99mt in 2021. The 10-year sales average has increased from 0.688mt to 0.81mtpa and the more recent 3-year sales average increased 0.690mt to 0.77mtpa in 2021. The **secondary and recycled aggregates** however have a probable long-term trend around the 0.70-0.80mtpa level and may now be showing an increasing role in overall supply terms into the future, given the 4.0mtpa available permitted capacity. Further monitoring will demonstrate whether the circa 1.0mtpa in 2021 level of production represents the new 'normal' level of sales and the retraction in 2019 (0.42mtpa) was an exceptional event. The market share of **secondary and recycled aggregate** of overall aggregate supply could significantly expand in response to economic trends as well as any further legislative changes to encourage their use.

There are three permitted **clay** and **brickearth** sites with remaining reserves in Kent. These sites have a combined landbank of 25-30 years, given a re-estimation of the expected yearly drawdown sales rate.

Kent has two operational **silica sand** sites and the combined reserves meet the national policy requirement of maintaining a stock of permitted reserves of at least 10 years at established existing sites. One silica sand site (not one of the above) has been declared by the owner as containing un-viable reserves of silica sand and this was confirmed at the Independent Examination of the KMWLP in 2015 and the Plan's subsequent adoption in 2016.

Kent's **chalk** reserves for cement manufacture are entirely contained at the strategic site at Holborough Cement works. Though not constructed, the lawfully implemented planning permission has sufficient supply at the planned extraction rate for 25 years. This meets the NPPF requirement where substantial new investment in a kiln is required. The KMWLP makes provision for this level of resource required to support new kiln by identifying a Strategic Site (see Policy CSM 3 of the KMWLP).

Kent's chalk reserves for agriculture and engineering purposes are not required to meet any prescribed landbank level in the NPPF. The total reserves were estimated at over a million tonnes in 2019. More recent monitoring in 2021 has revealed this as an overestimate. In 2021 some 0.502 million tonnes constituted the permitted available reserves remaining in Kent.

Based on data for **chalk** reserves and sales in the period 2011- 2014 (that used a per annum proxy of 70,000 tpa and a reserve of 1.516mt in 2014), it was found that by 2019 the estimated permitted reserves had dropped to 1.16mt. This gave an indicative permitted landbank of 16.57 years of chalk reserves in 2019. However, though available reserves have fallen to just 0.657 million tonnes, extraction was recorded in 2020 to be a mere 6,324 tonnes, giving a 100-year landbank. In 2021 this had slightly fallen to an 81+ year landbank. These estimated and actual recorded data conclusions demonstrate that the sector is highly variable in its response to market needs. Also, past participation in AMR survey data requests have been incomplete. Given the need to supply sufficient quantities of minerals of all types as set out in the NPPF and that the adopted KMWLP has a period to 2030, it is possible that further chalk reserves will be needed to meet this level of demand towards the end of the Plan period. However, it is not

clear that this is a reliable conclusion at this time. Further monitoring will demonstrate what is occurring in terms of this mineral's market and if further provision is necessary before the end of the adopted Plan period.

8.2 Waste Indicator Monitoring

Arisings of **LACW** in 2020/21 fell by 2.4% to just under 679,000 tonnes. This is consistent with 2018/19 which showed a negative rate of growth of minus 3.5%. While Kent's population is growing, there is an expectation that arisings will increasingly decouple from population growth, and hence while arisings of **LACW** are predicted to continue to grow over the Plan period, it will be at a reduced rate. Hence it was forecast that arisings will grow at a rate of 0.2% per annum to stand at around 740,000 tonnes in 2030/31 in the most recent WNA (waste needs assessments). The fall of 2.4% in 2020/21 and 3.5% in 2019/20 suggest the rate of growth applied ought to be less than that indicated. However, it should be noted that the varying distribution of arisings across the county brings increased pressure on existing infrastructure in particular parts, and it is these which the Waste Disposal Authority (WDA) is seeking to address.

The **LACW** management profile data for 2020/21 shows that the waste recycling targets included in the Early Partial Review for the first milestone year of 2020/21 were not met, having been met in previous years. Moreover, the landfilling target of no more than 2% in 2020/21 was also missed by a small margin although it had been surpassed in previous years. The remainder managed through incineration with EfW being 54% was somewhat higher than predicted. Future monitoring will demonstrate if this is a continuing trend that requires policy intervention.

Some 7 million tonnes of waste were reported as being managed at Kent waste management facilities in 2020. This compares with around 1.84 million tonnes of Kent waste managed outside the county. However, this export is more than offset by imports, so taking a simple balance, Kent remains net self-sufficient. Of the imports, just over 360,000 tonnes came from London, of which c126,000 tonnes went to EfW, and around 500 tonnes to non-inert landfill[23] with c224,000 tonnes to inert landfill/permanent deposit to land.

Over the monitoring period there were 8 major planning applications that increased available capacity to manage waste. These included a new household waste recycling centre for the Maidstone and Tonbridge and Malling Borough Council areas, additional waste transfer stations, material recovery facilities, a green waste composting facilities, inert materials processing and anaerobic digestion facilities. These developments contribute towards a continued shift towards a more sustainable waste management profile.

[23] It should be noted that the non hazardous waste capacity assessment underpinning the Early Partial Review of the KMWLP projected c55,000 tpa of residual non-hazardous waste from London, which is close to the c50,000 tonnes reported for 2019.

Appendix 1: Permitted Quarries in Kent 2020

Site	Operator	Aggregate			Status
		Sand &Gravel	*Soft Sand*	Hard Rock	
Hermitage Quarry, Maidstone	Gallagher Aggregates Ltd	-	-	Yes	Active
Blaise Farm Quarry, West Malling	Hanson Aggregates Ltd	-	-	Yes	Active
Stone Castle Farm, Whetsted	*Tarmac Ltd*	*Yes*	-	-	*Inactive*
Lydd Quarry, Lydd	Brett Aggregates Ltd	Yes	-	-	Active[24]
Allens Bank, Lydd	*Brett Aggregates Ltd*	*Yes*	-	-	*Inactive*
Conningbrook Quarry	*Brett Aggregates Ltd*	*Yes*	-	-	*closed*
Highstead Quarry, Chislet	*Brett Aggregates Ltd*	*Yes*	-	-	*Inactive*
Denge Quarry, Lydd	Cemex UK	Yes	-	-	Active
Darenth & Joyce Green Quarry, Dartford	J Clubb Ltd	Yes	-	-	Active
East Peckham Quarry, East Peckham	J Clubb Ltd	Yes	-	-	Active
Joyce Green Quarry, Dartford	Ingrebourne Valley Ltd	Yes	-	-	Active[25]
Aylesford Quarry, Aylesford	Aylesford Heritage Ltd	-	Yes	-	Active [26]
Addington Sand Pit (Wrotham Quarry)	Fern Aggregates	-	Yes	-	Active
Borough Green Sand Pit, Sevenoaks	Borough Green Sandpits Ltd	-	Yes	-	Active
Burleigh Farm, Charing	*Brett Aggregates Ltd*	-	*Yes*	-	*Inactive*[27]
Charing Quarry, Charring	*Brett Aggregates Ltd*	-	*Yes*	-	*Inactive*
Ightham sandpit (H&H Celcon)	*H&H Celcon*	-	*Yes*	-	*Inactive*
Lenham Quarry, Maidstone	Brett Aggregates Ltd	-	Yes	-	Active
Nepicar Sand Quarry, Wrotham	Nepicar Sand Ltd	-	Yes	-	Active
Greatness Farm, Sevenoaks[28]	Tarmac Ltd	-	Yes	-	Active

[24] Extraction has moved into East Sussex, the processing of material and some reserves are within Kent in 2020
[25] Planning permissions to erect a new plan site and to extend the life of the extraction site until 2024 were granted planning permission subject to pre-commencement conditions in 2018, site is active as of 2020
[26] No off-site sales in 2018 of soft sand though actively extracting a sand and gravel-based material (Hoggin) for construction fill purposes
[27] Inactive in 2018, early 2019 became active
[28] The site also produces sharp sand and gravel, though predominantly soft sands from the Folkestone Formation

Appendix 2: Safeguarded Wharves and Rail Transportation Depots 2020

Site Name	Current Operator	Site Code in KMWLP 2013-30	Activity
Allington Rail Depot	Hanson UK	A	Inactive in 2020 for aggregate importation
Sevington Rail Depot	Brett Aggregates (UK) Ltd	B	Inactive for aggregate importation currently
Hothfield Works Rail Depot	Tarmac	C	Active
East Peckham Rail Depot	J. Clubb	D	Active for aggregate imports, PFA importation now occurring
Ridham Dock	Brett Aggregates (UK) Ltd & Tarmac	E	Active
Johnsons Wharf	Tarmac Ltd	F	Active
Robin's Wharf, Northfleet	Aggregate Industries (UK) & Brett Aggregates (UK) Ltd	G	Active
Clubbs Marine Terminal	J. Clubb	H	Active
East Quay, Whitstable	Brett Aggregates (UK) Ltd	J	Active
Red Lion	Stema	K	Active

Wharf	Shipping Ltd		
Ramsgate Port	Brett Aggregates (UK) Ltd & Tarmac	L	Active
Dunkirk Jetty, Dover Western Docks[29]	Brett Aggregates (UK) Ltd	M	Re-activated though Dover Western Docks re-development scheme is still a potential threat to the safeguarded status of the facility
Wharf 42, Northfleet (including Northfleet Cement Works)	Lafarge UK	N	No active for aggregate importation in 2020
Sheerness	Aggregate Industries	O	Inactive for marine aggregate importation currently
Northfleet Wharf	Cemex UK	P	Active
Old Sun Wharf	Fleetmix Ltd	Q	Inactive for marine aggregate importation currently

[29] Site still technically safeguarded though the operator has ceased operation and the site is cleared of all aggregate plant and machinery. It is anticipated that the redevelopment of Dover Western Docks will cause the permeant loss of this importation capacity

Appendix 3: List of Mineral sites that are included in Landbank Calculations

The table below sets out the permitted land-won mineral working sites in Kent included in landbank calculations that inform the policy modifications of the Kent Minerals and Waste Local Plan following its full formal revision in 2021. Sites that have been inactive for more than 10 years are not included in the landbank calculations, though those that have been active during this period and are now being restored have been included; sites that were inactive in 2021 are shown in *italics.*

Sites	Predominant Aggregate Type	Operator Details
1. Aggregate Minerals		
Hard Rock Hythe Formation (Ragstone)		
Hermitage Quarry, Maidstone	Crushed Rock	Gallagher Aggregates Ltd, Gallagher Group
Blaise Farm, West Malling	Crushed Rock	Gallagher Aggregates Ltd, Gallagher Group
River Terrace Alluvial and Sub-Alluvial Sand and Gravel		
Stonecastle Farm, Whetsted	*Sand and Gravel ('Sandstone' or 'Siltstone' sand and gravel)*	*Tarmac Ltd*
East Peckham Quarry, East Peckham	*Sand and Gravel ('Sandstone' or 'Siltstone' sand and gravel)*	*J.Clubb Ltd*
Faversham Quarries, Faversham	*Sharp sand and gravel*	*Brett Aggregates Ltd*
Conningbrook Quarry, Ashford	Sharp sand and gravel	Brett Aggregates Ltd
Highstead Quarry, Chislet	*Sharp sand and gravel*	*Brett Aggregates Ltd*
Darenth & Joyce Green Quarry, (Darenth Court) Dartford	Sharp (flint) sand and gravel	*J.Clubb Ltd*
Joyce Green Quarry, Dartford	Sharp (flint) sand and gravel	Ingerbourne Valley Ltd
Storm Beach Sand and Gravel		
Lydd Quarry (Scotney Court Farm), Lydd	Sharp (flint) sand and gravel	Brett Aggregates Ltd
Denge Quarry, Lydd	Sharp (flint) sand and gravel	Cemex UK
Allens Bank, Lydd	*Sharp (flint) sand and gravel*	*Brett Aggregates Ltd*
Folkstone Formation Soft Sand		
Aylesford Quarry, Aylesford	*Building Sand*	*Aylesford Heritage Ltd*
Borough Green Sandpit, Wrotham	Building Sand	Borough Green Sandpits Ltd
Charing Quarry-Burleigh Farm Extension, Charing	Building Sand	Brett Aggregates Ltd
Lenham Quarry, Lenham	Building Sand	Brett Aggregates Ltd

Ightham Sand Pit, Sevenoaks	*Building Sand*	*H&H (UK) Ltd*
Wrotham Quarry (Addington Sand Pit), Wrotham	Building Sand	Fern Aggregates, Ferns Group UK
Greatness Quarry, Sevenoaks	Building Sand	Tarmac Ltd
1. Industrial Minerals		
Silica (Industrial) Sand		
Nepicar Sand Pit, Wrotham	Silica Sand	Nepicar Sand Ltd
Wrotham Quarry (Addington Sand Pit), Wrotham	Silica Sand	Fern Aggregates, Ferns Group UK
Brickearth and Brickclay		
Babylon Tileworks, Tonbridge	Clay	Mr. M Gash
Orchard Farm, Sittingbourne	Brickearth	Wienerberger UK Ltd
Paradise Farm, Sittingbourne	Brickearth	Wienerberger UK Ltd
Clay (engineering)		
Norwood Quarry, Isle of Sheppey	Clay	FCC Environmental (UK) Ltd
Chalk (cement)		
Medway Works , Holborough	*High purity chalk for cement*	*LaFarge Cement UK*
Chalk (agricultural and use in other construction and industrial applications)		
Darenth road Quarry, Dartford	*Chalk*	*J. Clubb Ltd*
Pinden Quarry, Dartford	Chalk	Pinden Ltd
Beacon Hill Quarry, Ashford	Chalk	JKS Group Ltd
Crundale Quarry, Ashford	Chalk	Mr. C Peach
Hegdale Quarry, Ashford	Chalk	R H Ovenden Ltd
Rowling Quarry, Dover	Chalk	R H Ovenden Ltd

Appendix 4: Safeguarding Considerations - Local Plan allocations in Kent

The table below sets out the adopted local plan allocations for development that have been the subject of safeguarding considerations and, for the period of the local plan in question, are exempt from further mineral or waste consideration against the exemption criteria of the following Kent Minerals and Waste Local Plan (KMWLP) policies:

- **Policy DM 7: Safeguarding Mineral Resources**
- **Policy DM 8: Safeguarding Mineral Management, Transportation, Production & Waste Management Facilities**

Or, conversely those that contain development allocations that are still subject to the presumption to safeguard land-won minerals, mineral importation, handling and transportation and waste management facilities as set out in the following KMWLP policies:

- **Policy CSM 5: Land-won Mineral Safeguarding**
- **Policy CSM 6: Safeguarded Wharves and Rail Depots**
- **Policy CSM 7: Safeguarding Other Mineral Plant Infrastructure**
- **Policy CSW 16: Safeguarding of Existing Waste Management Facilities**

Administrative Area and Local Plan	Allocation Exemption Justification (where relevant)	Within Urban Area	Exempt Allocations	Safeguarded Minerals and/or Waste Management and Minerals Mineral Management, Transportation, Production Facilities and other Relevant Information
Ashford Borough Council **Ashford Local Plan to 2030 (adopted 2019)**				The area has significant and important deposits of the Folkestone Formation. Other important safeguarded land-won minerals present are Limestone-Hythe Formation and the Sandgate Formation. The area also has some Sub-Alluvial River Terrace Deposits and Brickearth (Other Areas-Ashford, Canterbury, Dover, Folkestone and Hythe). In addition, the area has specialist building stone minerals including the Tunbridge Wells Sand Formation, Wadhurst Clay Formation, Ashdown Formation, and Paulinda Limestone. In addition, there are important safeguarded mineral importation (Site B: Sevington Rail Depot, Site C: Hothfield Works),

				handling, processing infrastructure and safeguarded waste management facilities in the area
Allocations that lie either within an existing built-up area or are existing allocations in the previous Development Plan and were therefore exempt from safeguarding by virtue of criterion 7 of Policy DM 7 of the KMWLP		Y	S1	River Terrace deposits
		Y	S7	Sub-Alluvial River Terrace deposits
		Y	S8	Sandstone (Sandgate Formation)
		Y	S9	Sandstone (Sandgate Formation)
		Y	S10	Sub-Alluvial River Terrace deposits
		Y	S11	Sub-Alluvial River Terrace deposits
		Y	S11a	River Terrace deposits
			S15	Sub-Alluvial River Terrace deposits
			S16	Sub-alluvial river terrace deposits and Limestone (Hythe Formation – Kentish Ragstone)
			S17	Sub-alluvial river terrace deposits and Sandstone (Sandgate Formation and Folkestone Formation)
			S19	Sandstone (Folkestone Formation)
			S20	Sub-Alluvial River Terrace deposits and Sandstone (Sandgate Formation and Folkestone Formation)
			S21	Sub-Alluvial River Terrace deposits and Limestone (Hythe Formation – Kentish Ragstone)
		Y	S22	Sub-Alluvial River Terrace deposits
		Y	S23	Sub-Alluvial River Terrace deposits and Sandstone (Sandgate Formation and Folkestone Formation)
			S24	Sandstone (Wadhurst Clay Formation)
		Y	S26	Sandstone (Wadhurst Clay Formation)
			S29	Sub-Alluvial River Terrace deposits
			S32	Sub-Alluvial River Terrace deposits
			S37	River terrace deposits
		Y	S38	Sandstone (Folkestone Formation)
Due to the nature of the particular mineral			S4	Limestone (Wealden Clay

being safeguarded and the availability/ demand for these resources, the sites were allocated without the need for a prior Minerals Assessment, exemption criteria 1, 2 or 5 of Policy DM 7 of the KWMLP applied				Formation)
			S25	Sandstone (Wadhurst Clay Formation)
			S30	Limestone Hythe Formation (Kentish Ragstone)
			S43	Sandstone (Tunbridge Wells Sand Formation)
			S51	Limestone Hythe Formation (Kentish Ragstone)
			S59	Limestone Hythe Formation (Kentish Ragstone)
			S60	Tunbridge Wells Sandstone Formation
			S4	Limestone (Wealden Clay Formation)
			S25	Sandstone (Wadhurst Clay Formation)
			S30	Limestone Hythe Formation (Kentish Ragstone)
			S43	Sandstone (Tunbridge Wells Sand Formation)
			S51	Limestone Hythe Formation (Kentish Ragstone)
	Given the small size of the allocations themselves and/or the proportion of the allocation covered by the MSA, the sites were allocated without the need for a prior Minerals Assessment based on exemption criteria 1 or 2 of Policy DM 7 of the KMWLP		S5	Sub-Alluvial River Terrace deposits
			S14*	Sub-Alluvial River Terrace deposits *In proposed allocation S14 (Park Farm South East), the MSA covers the area of the allocation that lies within the 100 year floodplain and therefore would lie outside the developable footprint of the proposed dwellings there.
			S28	Sub-Alluvial River Terrace deposits
			S35	Sub-Alluvial River Terrace deposits
			S44	Sandstone (Folkestone Formation)
			S56	Sub-Alluvial River Terrace deposits
			S61**	Sandstone Ashdown Formation **Proposed allocation S61 just clips the MSA, the

				boundary of which is coterminous which the Ancient Woodland that bounds S61 to the north
	Given the accepted strategic importance of the site for non-mineral development, the parties agreed that the presumption to safeguard the landwon mineral from sterilisation could be set aside by exemption criteria 3 or 5 of Policy DM7 of the KMWLP		S2	Sandstone (Folkestone Formation)
	Given the small scale of the site, the parties agree that this may be adequately addressed by inserting an additional clause into policy S34 as follows: - '*Prior to the grant of planning permission for non-minerals development at the site, the applicant shall prepare and submit a Minerals Assessment to establish whether any prior extraction of Minerals should take place in advance of residential development'*		S34	Sandstone (Folkestone Formation)
	Given the site was not expected to come forward for housing development until the adjoining site [S14] is developed out, it was reasonable to expect a Minerals Assessment in advance of a grant of planning permission for the residential development to be undertaken to satisfy Policy DM7 of the KMWLP. Therefore, the parties		S45	Sub-Alluvial River Terrace deposits

	agree that this may be adequately addressed by inserting an additional clause into policy S45 as follows: - '*Prior to the grant of planning permission for non-minerals development at the site, the applicant shall prepare and submit a Minerals Assessment to establish whether any prior extraction of Minerals should take place in advance of residential development'*			
	The parties agreed that, on balance, the weight of material considerations including the potential impact on housing land supply and the potential impact from excavation activities on the commercial operations at the Banyan Retreat premises, the presumption to safeguard the landwon mineral from sterilisation could be set aside by exemption criteria 3 or 5 of Policy DM 7 of the KMWLP		S47	Sandstone (Folkestone formation)
	The parties agreed that, on balance, the weight of material considerations including the potential impact on housing land supply the presumption to safeguard the landwon mineral from sterilisation could be set aside by exemption criteria 3 or 5 of Policy DM 7 of the KMWLP.		S48	Sandstone (Folkestone Formation) plus small part as sub-alluvial river terrace deposits
	The parties agreed		S49	Sandstone (Folkestone

	that, on balance, the weight of material considerations including the potential impact on housing land supply and the potential impact from excavation activities on the commercial operations at the Banyan Retreat premises, the presumption to safeguard the landwon mineral from sterilisation could be set aside by exemption criteria 3 or 5 of Policy DM 7 of the KMWLP.			Formation)
	The size of the residential allocation makes this an important, strategic allocation for the rural part of the borough. The relatively small scale of the potential mineral deposit and its location adjacent to existing residential properties means that, on balance, the parties agreed the weight of material considerations including the potential impact on housing land supply and the potential impact from excavation activities on the residential amenity of neighbouring residential occupiers, the presumption to safeguard the landwon mineral from sterilisation could be set aside by exemption criteria 3 or 5 of Policy DM 7 of the KMWLP.		S55	Sub-Alluvial River Terrace deposits
Administrative Area and Local Plan	**Allocation Exemption Justification (where relevant)**	**Within Urban Area**	**Exempt Allocations**	**Safeguarded Minerals and/or Waste Management and Minerals Mineral**

				Management, Transportation, Production Facilities and other Relevant Information
Canterbury City Council **Canterbury District Local Plan (adopted July 2017)**	The adopted Local Plan has both land-won safeguarded minerals and minerals and waste management safeguarded infrastructures within its area		None	The presence of any safeguarded minerals and/or safeguarded facilities were not formally considered when the allocations of the plan were formulated, examined and adopted. Therefore, any development proposals arising in the Plan's allocations that have safeguarding issues are not exempt by any criteria of Policy DM 7 or DM 8 of the Kent Minerals and Waste Local Plan 2013-30 (as partially Reviewed 2020)
New Canterbury Local Plan to 2040	This is Local Plan is in its early stages of formulation with consultations on preferred options for growth, town centre strategies, housing and communities, employment and local economy, local facilities, transport, historic and natural environment and sustainability appraisal		N/A	Both local authorities are in early discussions to consider potential safeguarding issues. Safeguarded resources relate to Brickearth (Other Areas-Ashford, Canterbury, Dover, Folkestone and Hythe) and Sub-Alluvial River Terrace deposits. The area also has safeguarded waste management infrastructure (non haz-landfill) and important safeguarded mineral importation (Site J: East Quay, Whitstable) facilities
Dartford Borough Council **Core Strategy (adopted 2011)**	The adopted Core Strategy area plan has both land-won safeguarded minerals		None	The County and Borough planning authorities are in discussion to ensure that future local plans for the

	and minerals and waste management safeguarded infrastructures within its area			area will ensure that minerals and waste safeguarding requirements are addressed in allocation assessment. The borough area has River Terrace and
Development Policies Plan (adopted 2017)	The adopted Development Policies Plan addresses development management matters unrelated to any minerals and waste safeguarding		None	Sub-Alluvial River Terrace deposits and safeguarded waste management capacity (including hazardous landfill) infrastructure and important mineral importation (Site F: Johnsons Wharf) facilities
Stone Neighbourhood Development Plan (adopted July 2022)	The neighbourhood plan addresses the urban planning issues as they apply to the settlement of Stone, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area		N/A	
Dover District Council				
Core Strategy (adopted 2010)	The adopted Core Strategy area plan has both land-won safeguarded minerals and minerals and waste management safeguarded infrastructures within its area. The strategic allocation at Dover western Docks affects a mineral importation facility		None	The presence of any safeguarded minerals and/or safeguarded facilities were not formally considered when the allocations of the plan were formulated, examined and adopted. Therefore, any development proposals arising in the 2010 and more specifically the 2015 Land Allocations Plan's allocations that have safeguarding issues are not
Land Allocations Plan (adopted 2015)	The adopted Land Allocations Plan identifies development areas within the defined urban limits of the settlements of the district. The impact on land-won minerals is therefore irrelevant as they are, where they occur, are exempt.		None	exempt by any criteria of Policy DM 7 or DM 8 of the Kent Minerals and Waste Local Plan 2013-30 (as partially Reviewed 2020) The District and County planning authorities have been in discussion to ensure that the future local plan for the area (the

	With regard to any waste management facility, such as Dover Waste Recycling facility, the plan does not explicitly consider safeguarding exemptions			emerging Dover Local Plan to 2040) will ensure that minerals and waste safeguarding requirements are addressed in allocation assessment. The district area has River Terrace, Brickearth (Other Areas-Ashford, Canterbury, Dover, Folkestone and Hythe) and Storm beach gravel and safeguarded waste management infrastructure and important safeguarded mineral importation facilities (Site M: Dunkirk Jetty, Dover Western Docks)
Worth Neighbourhood Plan (adopted 2015)	The neighbourhood plan addresses the urban planning issues as they apply to the settlement of Worth, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area		N/A	
Ash Neighbourhood Plan (adopted 2021)	The neighbourhood plan addresses the urban planning issues as they apply to the settlement of Ash, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area		N/A	
Review of the adopted Core Strategy for a Local Plan to 2040	Regulation 18 Public Consultation in early 2021		NA	
Folkestone and Hythe District Council				
Folkestone and Hythe & Places and Policies (adopted 2020)	The adopted Folkestone and Hythe & Places and Policies plan has both land-won safeguarded minerals and minerals and waste management safeguarded infrastructures within its area.	None		The area has significant and important deposits of the Folkestone Formation and highly protected land designations (in addition to land-won mineral safeguarding) containing Storm beach deposits. Other important safeguarded land-won minerals are Limestone-Hythe Formation and the Sandgate Formation. The area also has some Sub-Alluvial River Terrace Deposits and Brickearth (Other Areas-Ashford,
Core Strategy Review 2022 (adopted 2022)	The adopted Core Strategy addresses the future (to 2037) strategic needs of the	None		

	area. In so doing it defines several strategic allocations. New Garden Settlement of Otterpool in the North Downs Area as both land-won safeguarded minerals and minerals and waste management safeguarded infrastructures within its area			Canterbury, Dover, Folkestone and Hythe). The area has important safeguarded waste management capacity infrastructure Though not an allocation exempt from the presumption to safeguard the land-won minerals and waste management capacity features according to policies CSM 5, 6 and CSW 16, the County Planning Authority and the District Planning Authority are in discussion regarding safeguarding considerations.
Gravesham Borough Council **Gravesham Local Plan Core Strategy (adopted 2014) and Gravesham Local Plan Core Strategy-Policies Map (adopted 2014)**	This plan identifies several key 'opportunity' areas that are key to the regeneration of the area's waterfront to the river Thames (Northfleet Embankment). These areas have several important mineral importation wharfs that are safeguarded. Reference is made to retention of the mineral importation activity at Red Lion Wharf (sub-area 1.8) and the recognition of bulk aggregates importation being permitted at Wharf 42 (sub-are 1.5), Old Sun Wharf (sub-area 1.10) is not recognised as a 'potential' and thus protected wharf in Policy CS03.	None [the formal process of infrastructure assessment and exemption testing with Policy DM 8 did not occur in 2014] though the matter was considered at the Examination in Public in 2015 of the KMWLP	Y	The rural area of the Borough contains safeguarded land-won minerals. Significantly the Sub-Alluvial River Terrace Deposits and River Terrace Deposits that mainly occur in the protected Stone and Higham marshes areas to the east of the defined urban area. Therefore, the main element of safeguarding within the Borough area are mineral importation infrastructure. The matter of their safeguarding, in terms of their allocation in the local plan as being prior to the adoption of the KMWLP was considered by the Inspector into the KMWLP in 2015. It was stated: *166. An additional site "Old Sun Wharf" is to be added to the list under **MM5/9A**. Though there is no wharf on this site at present, permission has in the past been granted for the*

				construction of a maritime jetty for the importation of sand and stone by river. That permission expired in February 2015 without the jetty having been constructed. Nonetheless, the site must be regarded as having potential under the provisions of the NPPF. It would not be sound to exclude it. Another site "Red Lion Wharf" is retained in the list, despite reservations from some representors. That wharf has permission for full port operational use and is only conditioned for aggregate use. It too falls within the NPPF expectations of safeguarding; and similarly it would not be sound to exclude it. *1.67. Both sites lie within a key regeneration site identified in Gravesham Borough Council's Core Strategy (Policy CS03). I recognise that their safeguarding could have implications for the successful implementation of the regeneration strategy. But "new" Policy DM 8* ***[MM7/3A]*** *(consistent with the proposed modification to "new" Policy DM 7 in relation to minerals safeguarding) includes an exception to the general presumption of safeguarding from incompatible development in the*

				case of a site that has been allocated in the adopted development plan. Thus, the safeguarding of these sites will not be prejudicial to the regeneration strategy. All the mineral importation wharfs in the borough area remain safeguarded (Site G: Robins Wharf, Site H: Clubbs Marine Terminal, Site K: Red Lion Wharf, Site N: Wharf 42, Northfleet, Site P: Northfleet Wharf and Site Q: Old Sun Wharf) and subject to adopted safeguarding policy of the KMWLP at this time.
Local Plan Review	The Plan has, as required by the NPPF, commenced its statutory review process. Policy CS03 is not listed as requiring 'no modification'	N/A		

Maidstone Borough Council **Maidstone Borough Local Plan 2011-2031 (adopted 2017)**	The plan identifies several allocations that are coincident with safeguarded land-won minerals that occur in the borough. A Joint Position Statement (JPS) was drafted but not concluded between the authorities, but was overridden by the Inspector into the plan's Independent Examination (ongoing in 2016) to exempt all allocations that were coincident with the safeguarded Limestone-Hythe Formation and Sandgate Formation from further mineral safeguarding consideration	Allocations where exemption applies are: H1 (2), (11), (17), (30), (31), (32), (33), (34), (35), (37), (45), (46), (47), (48), (51), (65), H2 (2), RMX (1), RMX (4), EMP1 (2), EMP1 (5)		The area contains important safeguarded deposits of aggregate forming minerals. Including Sub-Alluvial River Terrace Deposits and River Terrace Deposits, the Folkestone Formation (including an allocation in the KMSP), Limestone-Hythe Formation and the Sandgate Formation. In addition, the area has specialist building stone mineral Paulinda Limestone. There is also important mineral importation (Site A: Allington Rail Depot) handling, processing and transportation and safeguarded waste management facilities in the area
North Loose Neighbourhood Plan 2015-2031 (adopted 2016)	The neighbourhood plan addresses the urban planning issues as they apply to the settlement of North Loose, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		
Staplehurst Neighbourhood Plan 2016-2031 (adopted 2020)	The neighbourhood plan addresses the urban/rural planning issues as they apply to the settlement of Staplehurst, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		
Loose Neighbourhood	The neighbourhood plan addresses the	N/A		

Plan 2018-2031 (adopted 2019)	urban/rural planning issues as they apply to the settlement of Loose, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area			
Marden Neighbourhood Plan 2017-2031 (adopted 2020)	The neighbourhood plan addresses the urban/rural planning issues as they apply to the settlement of Marden, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		
Boughton Monchelsea Neighbourhood Plan (adopted 2021)	The neighbourhood plan addresses the urban/rural planning issues as they apply to the settlement of Boughton Monchelsea, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		
Lenham Neighbourhood Plan 2017-2031 (adopted 2021)	The neighbourhood plan addresses the urban/rural planning issues as they apply to the settlement of Lenham, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		
Otham Neighbourhood Plan 2020-2035 (adopted 2021)	The neighbourhood plan addresses the urban planning issues as they apply to the settlement of Otham, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		

Local Plan Review 2022	Regulation 19 Submission Plan consultation has been completed. The plan identifies significant growth in the proximity of Lenham and affects both permitted reserves of aggregates (Folkestone Formation) an allocation in the Kent Mineral Sites Plan (KMSP) and for further supply of this mineral and safeguarded deposits of this mineral in the locality	None. A Statement of Common Ground (SoCG) is being finalised to ensure that the local Plan allocation does not compromise the supply of this important mineral from permitted reserves, the allocation in the KMSP and safeguard deposits		
Sevenoaks District Council				The area contains important safeguarded deposits of aggregate forming minerals. Including Sub-Alluvial River Terrace Deposits and River Terrace Deposits, the Folkestone Formation, Limestone-Hythe Formation. In addition, the area has specialist building stone minerals including the Upper Tunbridge Wells Sand Formation, Ashdown Formation, Ardingly Sandstone and Cuckfield Stone Bed. In addition, there are important safeguarded mineral quarrying handling, processing and waste management (non haz-landfill) facilities in the area
Core Strategy (adopted 2011)	The plan sets of the spatial vision and objectives for the issues facing the district. The plan is silent on minerals and waste safeguarding matters	N/A		
Allocations and Development Management Plan (adopted 2015) to be read alongside the Interactive Policies Map	The plan sets out the policy background for allocations for development to occur in the district area to deliver the Core Strategy. The plan is silent on minerals and waste safeguarding matters	None		
An emerging new Local Plan is currently being progressed with an updating of the necessary evidence base (July 2022)	A SoCG was prepared and concluded in 2019. To ensure that minerals and infrastructure assessments were to be required as part of			

	any subsequent planning application where minerals or waste management safeguarding issues had been identified. This will be updated once the emerging Local Plan has been progressed such that allocations and their safeguarding issues are identified accordingly			
Sevenoaks Town Neighbourhood Plan (unadopted 2022)	The neighbourhood plan will address the urban planning issues as they apply to the settlement of Sevenoaks, and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		
Swale Borough Council **Swale Borough Local Plan (adopted 2017)**	The plan sets out the policies for the strategy to deliver sustainable development in Swale to 2031. In doing so it not only sets out the core objectives in growth terms but also the allocations for development. Where they are coincident with any safeguarded minerals the policy makes reference to the need to address the matter with a Minerals Assessment	None		The area contains important safeguarded deposits of aggregate forming minerals. Including Sub-Alluvial River Terrace Deposits and Brickearth. In addition, there are important mineral quarrying and waste management safeguarded facilities in the area, including hazardous landfill, recycling and recovery operations. In addition, safeguarded mineral importation (Site O: Sheerness, Site E: Ridham Dock) and processing infrastructure is present
Swale Local Plan Review (Issues and Options consultation 2021)	The review is anticipated to plan to 2038. The Issues and Options consultation identified, where relevant, the need to undertake MA to	N/A		

	establish if the proposed allocation can be exempt from further mineral safeguarding. A further consultation (under Regulation 19) is anticipated in 2022.			
Thanet District Council **Thanet District Council Local Plan (adopted 2020)** **Thanet Local Plan Update (2022)**	The plan sets out the policy background for allocations for development to occur in the district area to deliver the sustainable development to 2031. The plan is silent on minerals and waste safeguarding matters Partial update of the Local Plan in progress with a view to publish a draft plan in 2022	None N/A		The district area has almost no safeguarded mineral deposits, that which exits (Sub-Alluvial River Terrace Deposits) is entirely within the defined urban area at Birchington and is therefore exempt from land-won mineral safeguarding considerations. The area has important safeguarded mineral importation processing and transportation infrastructure (Site L: Ramsgate Port) and a number of important waste management sites that collectively make up a significant component of the County's waste safeguarded recycling and recovery capacity
Tonbridge and Malling Borough Council **Core Strategy (adopted in 2007) to be read alongside the Local Plan Proposals Map** **Development Land**	The Core Strategy sets out the vision and core policies to create the sustainable communities in the borough to 2022. It acknowledges the policies of the KMWLP. It sets out the locations of strategic sites required by the vision, minerals and waste safeguarding is not considered The document sets	None None		The Borough area contains important safeguarded deposits of aggregate forming minerals. Including Sub-Alluvial River Terrace Deposits and River Terrace Deposits (including one allocation in the KMSP), the Folkestone Formation, Limestone-Hythe Formation and the Sandgate Formation. In addition, there are important mineral handling, processing and transportation (Site D : East Peckham rail depot) and waste management

Allocations (Supplementary Planning Document adopted 2008)	out the allocations for development to realise the Core Strategy. . It sets out the locations of the allocation sites required by the Core Strategy vision, minerals and waste safeguarding is not considered			safeguarded facilities in the area.
Tonbridge Central Area Action Plan (adopted 2008)	The action plan addresses the urban planning issues as they apply to the settlement of Tonbridge (Central Area), and is unrelated to any minerals and waste safeguarding requirements in the wider borough area	None		
Managing Development and the Environment (Development Plan Document adopted 2008)	The document sets out the development management policies that would be applicable to the determination of any planning applications at the allocated sites. The document is silent on minerals and waste safeguarding requirements	None		
Tunbridge Wells Borough Council **Local Plan (adopted 2006) and Local Plan Proposals Maps**	The plan set out the policies for growth and conservation of the borough. Now largely superseded by the more recent plan documents. The document is silent on minerals and waste safeguarding requirements	None		The Borough area contains safeguarded deposits of aggregate forming minerals, including Sub-Alluvial River Terrace Deposits and River Terrace Deposits (including an allocation in the KMSP). Significant to the borough area is the very extensive coverage of safeguarded specialist building stone minerals including, and predominantly, the Upper

Core Strategy (adopted 2010) to be read alongside the Local Plan Proposals Maps	The plan sets out where development will occur that is concurrent with the overarching principles of what the area needs to develop sustainably, according to a spatial vision and the strategic objectives as set out in the document. The document is silent on minerals and waste safeguarding requirements	N/A		Tunbridge Wells Sand Formation, and to a lesser extent the Tunbridge Wells Sand Formation, Ashdown Formation, Ardingly Sandstone, Wadhurst Clay, Pauldina Limestone and the Cuckfield Stone Bed. In addition, there are important mineral quarrying (Stonecastle Farm Quarry at Hadlow) and waste management (such as the North Farm Waste Recycling Facility) safeguarded facilities in the area.
Site Allocations Local Plan (adopted 2016)	The plan details the specific locations of site allocations for development and how they were evidentially assessed for appropriate suitability and arrived at. The document is silent on minerals and waste safeguarding requirements	None		
New Local Plan (unadopted)	This plan has a timeline to 2038 and has reached Independent Examination stage in 2022. Adoption is anticipated in early 2023. The plan, like earlier plan documents sets out the special vision and policy framework to enable the areas sustainable growth to be realised. The plan does acknowledge the existence of the KMWLP and the need to address minerals and waste safeguarding where relevant in the area at, or proximate to, specific allocations where relevant when applications are being	None. A comprehensive SoCG was agreed between the authorities that expanded upon the minerals and waste safeguarding matters as relevant to the borough area.		

Neighbourhood Plans • **Benenden** • **Brenchley and Matfield** • **Capel** • **Cranbrook and Sissinghurst** • **Goudhurst** • **Hawkhurst** • **Horsmonden** • **Lamberhurst** • **Pembury** • **Sandhurst**	determined The various neighbourhood plans address the urban/rural planning issues as they apply to the settlements detailed, and are unrelated to any minerals and waste safeguarding requirements in the wider borough area	N/A		