

EEAWP

EAST OF ENGLAND

AGGREGATES WORKING PARTY



ANNUAL REPORT: 2022

Bedford, Central Bedfordshire and Luton • Cambridgeshire and Peterborough
Essex, Southend-on-Sea and Thurrock • Hertfordshire • Norfolk • Suffolk

East of England Aggregates Working Party

Annual Monitoring Report

2022 Data



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ACRONYMS

AMS	Aggregate Mineral Survey
AMS 2019	AMS undertaken by the BGS in 2019
AWP	Aggregate Working Party
BAA	British Aggregates Association
BGS	British Geological Survey
DLUHC	Department for Levelling Up, Housing and Communities
EEAWP	East of England Aggregate Working Party
LAA	Local Aggregate Assessment
MASS	Managed Aggregate Supply System
MHCLG	Ministry of Housing, Communities and Local Government
MPA	Mineral Products Association
NACG	National Aggregate Co-ordinating Group
NPPF	National Planning Policy Framework
PPG	Planning Practice Guidance
SOCG	Statement of Common Ground

GLOSSARY

Aggregate Working Party	A technical advisory group of mineral planning authorities and other relevant organisations who work together to produce data on aggregate demand and supply in their area and to provide advice to mineral planning authorities and to the National Aggregate Co-ordination Group
Department for Levelling Up, Housing and Communities	Government department formerly known as the Ministry of Housing, Communities and Local Government
Local Aggregate Assessment	An annual assessment of the demand for and supply of aggregates in a mineral planning authority's area
Managed Aggregate Supply System	This system works through national, sub-national and local partners working together to ensure a steady and adequate supply of aggregate mineral across the country
National Aggregate Co-ordinating Group	The National Aggregate Co-ordinating Group comprises representatives from each AWP, as well as from key government departments and other organisations as deemed appropriate by DLUHC, to monitor the overall provision of aggregates in England and to provide timely advice to Government and to individual AWP's
National and Sub-National Guidelines	Guidelines for the provision of aggregates published in June 2009 to replace those which had existed since 2003 (link: National and regional guidelines for aggregates provision in England 2005 to 2020)
Recycled aggregates	Aggregates resulting from the processing of inorganic materials previously used in construction, eg construction and demolition waste
Secondary aggregates	Aggregates from industrial wastes such as glass (cullet), incinerator bottom ash, coal derived fly ash, railway ballast, fine ceramic waste (pitcher), and scrap tyres; and industrial and minerals by-products, notably waste from china clay, coal and slate extraction and spent foundry sand. These can also include hydraulically bound materials
Statement of Common Ground	A written record of the progress made by strategic policy-making authorities during the process of planning for strategic cross-boundary matters

EXECUTIVE SUMMARY

This Annual Monitoring Report for the East of England covers the calendar year 2022 and has been compiled by the East of England Aggregates Working Party (AWP).

Aggregate sales and reserve data for 2022 have been taken from survey returns made by operators to their respective mineral planning authorities, or, in the case of marine aggregate data, from The Crown Estate's Non Confidential Statistics for 2022. Information has also been sought on secondary and recycled aggregates along with records of mineral planning applications which have been granted, refused, withdrawn or remain undetermined over the monitoring period. In the case of recycled aggregate data, this has either been provided via survey returns or ascertained using the 2022 Waste Data Interrogator which was published by the Environment Agency on 25 September 2023.

East of England Sand and Gravel and Crushed Rock Sales Figures (2022)

	Sales (thousand tonnes)	% change from 2021	3 year average sales 2020- 2022 (thousand tonnes)	% change from 2019- 2021	10 year average sales 2013- 2022 (thousand tonnes)	% change from 2012- 2021
Sand and Gravel	11,291	-9.0	11,385	+1.5	11,435	+2.4
Crushed Rock	171	-17.4	176	+15	308	-3.8

Sales of land-won sand and gravel in the East of England in 2022 decreased by 9% compared with the 2021 sales figure – from 12.41mt in 2021 down to 11.29mt in 2022. Both the three and ten year averages over the periods 2020-2022 and 2013-2022 respectively were slightly higher than those recorded in 2021.

Sales figures for local crushed rock have, as in previous years, been combined for confidentiality reasons to provide an overall figure for the East of England. The figure now includes limestone from Cambridgeshire and Peterborough, Carstone from Norfolk and, since 2019, sandstone from Bedfordshire. In 2022, sales stood at 0.171mt representing a 17% decrease on 2021 sales (0.207mt). The 2022 sales figure was just shy of the 3 year average of 0.176mt but remained well below the 10 year average of 0.308mt.

East of England Sand and Gravel and Crushed Rock Reserves and Landbank Figures (2022)

	Reserves (thousand tonnes)	% change from 2021	Landbank based on 10 year sales average	% change from 2021
Sand and Gravel	116,304	-1.6*	10.2	-3.8
Crushed Rock	4,438	-4.2	14.4	-0.7

*Note that the total sand and gravel permitted reserves figure reported in the 2021 Annual Monitoring Report was 119.606mt. Since publication of that report, this figure has been revised downwards to 118.199mt following an update to Norfolk's figures to reflect saleable rather than permitted reserves. The percentage change shown is based on the corrected 2021 figure of 118.199mt.

At the end of 2022, reserves of land-won sand and gravel in the East of England stood at 116.304mt. Applying the NPPF methodology based on a rolling average of 10 year sales indicates a landbank of 10.2 years at the end of 2022 (116.304/11.435) down from the (corrected) landbank figure of 10.6 years recorded in 2021. Using the 10 year average sales figure methodology as set out in the NPPF indicates that all mineral planning authorities within the East of England except Hertfordshire could demonstrate sand and gravel landbanks in excess of the seven year threshold as at the end of 2022 (see Table 5 below) although some authorities are drawing quite close to the 7 year minimum. Hertfordshire's sand and gravel landbank at the end of 2022 was just 4.9 years.

By comparison, reserves of crushed rock stood at 4.438mt continuing a fairly level trajectory of reserves recorded since 2013 with a range over the 10 year period of just 1.315mt (5.61mt in 2013 (highest figure) – 4.295mt in 2018 (lowest figure)). In terms of landbanks of crushed rock, based on the rolling average of 10 year sales, a landbank of 14.4 years can be demonstrated in 2022 compared with 14.5 years in 2021.

New planning permissions in the East of England were granted in respect of a total of 8.9mt of aggregate (sand and gravel) in 2022. As at the year end, the collective authorities had undetermined applications proposing a total of over 25mt of additional reserves. Of these, one in Hertfordshire for 3.52mt and two in Greater Essex¹ with a combined potential reserve of 1.58mt have resolutions to approve, subject to a section 106 agreement, whilst one in Suffolk (for 0.4mt) was refused at the start of 2023.

Sales for both sand and gravel and crushed rock are below the levels of provision anticipated within the sub-national apportionment figures (11.29mt (actual 2022 sand and gravel sales) versus 14.75 mtpa (Guideline figure) and 0.17mt (actual 2022 crushed rock sales) versus 0.5 mtpa (Guideline figure)). It is also important to consider the context of continued sales against the backdrop of a general downward trend in reserves. The Mineral Products Association, in its 10th Annual Mineral Planning Survey Report (AMPS 2022), has revealed that as of the end of 2021, the rolling 10-year average for replenishment of sand and gravel reserves was 63% whilst, for crushed rock reserves, the replenishment rate was just 52%. This position is clearly unsustainable in the long run. Caution should, therefore, continue to be exercised when assessing the position against 10 year sales figures and individual mineral planning authorities are encouraged to give careful consideration to their

¹ Greater Essex comprises three individual authorities, namely Essex, Thurrock and Southend-on-Sea.

annual aggregate provision rates when preparing their Local Aggregate Assessments and particularly when reviewing their development plans.

It should also be noted that the East of England is heavily dependent on imports of both sand and gravel and crushed rock, with the AMS 2019 recording that 2.3mt of sand and gravel and 8.8mt of crushed rock were imported in 2019.

From the data available in the East of England, it can be established that there are a number of large-scale schemes in the pipeline that will require significant quantities of aggregates. However, it is not currently possible to establish the likely total demand for minerals required for these large scale projects, either from a lack of estimate of demand from those within the region, or in the absence of a comprehensive list of projects outside the region.

Accordingly, in the absence of up to date guidelines and without clear visibility on future demand, the EEAWP considers that it is presently unable to advise the NACG and DLUHC that the authorities comprising the East of England are currently making a full contribution to both local and national aggregate needs.

Finally, whilst this annual report looks at landbanks based on a rolling average of 10 year sales data, thereby adopting the suggested methodology within the NPPF, it should be noted that both Cambridgeshire and Peterborough and Greater Essex prefer to rely on rates set out within their development plans whilst Norfolk, in its emerging Minerals and Waste Local Plan, proposes to base its annual provision rate on the rolling 10 year average sales figure plus ten percent. In a change from previous years, with effect from last year, Hertfordshire has opted to calculate its landbank based on the rolling 10 year sales average (this year covering the period 2013-2022).

Table 1: Dashboard Key Data Summary 2022

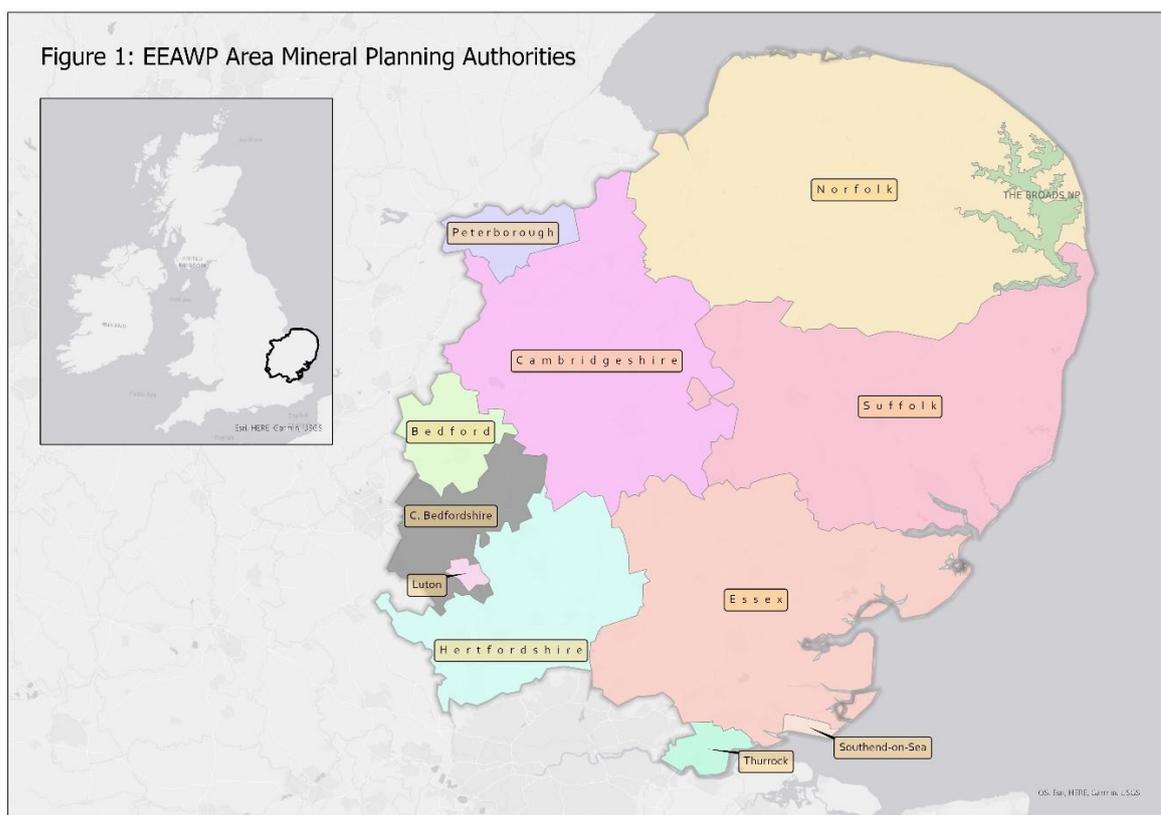
	2022 Sales (thousand tonnes)	Change (from 2021)	10-year Sales Average (thousand tonnes)	3-year Sales Average (thousand tonnes)	10-year Change (from 2021)	Reserves as at 31.12.22 (thousand tonnes)	Change (from 2021)	Landbank (based on 10-year Sales Average)	Change (from 2021)
All land-won sand and gravel	11,291	↓	11,435	11,385	↑	116,304	↓	10.2	↓
All crushed rock	171	↓	308	176	↓	4,438	↓	14.4	↓
Marine sand and gravel (landings)	705	↑	398	529	↑				
Total primary aggregates	12,167	↓							
Secondary aggregates	311.0	↓	304.2	292.57	Note: secondary and recycled aggregate figures in Hertfordshire are combined and Greater Essex's figures are not included as based on a single operator response. Accurate figures are therefore unavailable.				
Recycled aggregates	2,191.0	↓	1,758.5	2,146.0					

1. AWP MEMBERSHIP

1.1 The Aggregates Working Parties² (AWPs) were established in the 1970s to collect and monitor data on aggregates provision as an aid to minerals planning. AWP are joint local government, central government and industry bodies that monitor the supply of, demand for, and reserves of all aggregates including primary aggregate and alternative sources in local authority areas. They also consider the implications of supply to and from these areas. Whilst not policy-making bodies, they do provide information to facilitate the work of mineral planning authorities, national government agencies and the minerals industry. The AWP operate under contracts made between the Department for Levelling Up, Housing and Communities (DLUHC) (formerly the Ministry of Housing, Communities and Local Government (MHCLG)) and the secretaries of the AWP.

1.2 The East of England Aggregates Working Party (EEAWP) was established in 2001. It comprises the former East Anglia mineral planning authorities (Norfolk, Suffolk, Cambridgeshire and Peterborough) and mineral planning authorities from the former South East (Essex, Southend-on-Sea, Thurrock, Hertfordshire, Central Bedfordshire, Bedford Borough and Luton) as highlighted on Figure 1.

Figure 1: Mineral Planning Authorities in the East of England



² Aggregate Working Parties were previously known as Regional Aggregate Working Parties but this was changed to reflect national guidelines.

1.3 Membership of the EEAWP is listed below (by organisation rather than individual).

Chair
Essex County Council
Secretariat
David Jarvis Associates Ltd
Mineral Planning Authority Representatives
Cambridgeshire County Council
Bedford Borough, Central Beds & Luton Borough Councils
Essex County Council
Hertfordshire County Council
Peterborough City Council
Norfolk County Council
Thurrock Borough Council
Southend-on-Sea City Council
Suffolk County Council
Minerals Industry Representatives
Aggregates Industries
Brett Aggregates Ltd
British Aggregates Association (BAA)
Breedon Group
Heidelberg Materials UK (formerly Hanson UK)
Middaggs
Mineral Products Association (MPA)
Tarmac
Cemex
Other
The Crown Estate
Marine Management Organisation
DLUHC

1.4 The EEAWP met on a number of occasions during 2022. Details of these meetings together with a link to the relevant minutes are included at Appendix 1.

2. PRIMARY AGGREGATES

Introduction

- 2.1 Data on land-won aggregates and crushed rock reserves and sales together with information on recycled and secondary aggregates has been derived both from the local aggregate assessments (LAAs) produced by the mineral planning authorities within the East of England, the annual survey returns provided by operators and from the Environment Agency's Waste Data Interrogator.

Land Won Aggregates

Sand and Gravel

- 2.2 Aggregate sand and gravel is found throughout the East of England and consequently all the East of England mineral planning authorities contribute towards local and national aggregate needs. A list of permitted primary aggregate extraction sites operational within the East of England by mineral planning authority area in 2022 is set out in Appendix 2.

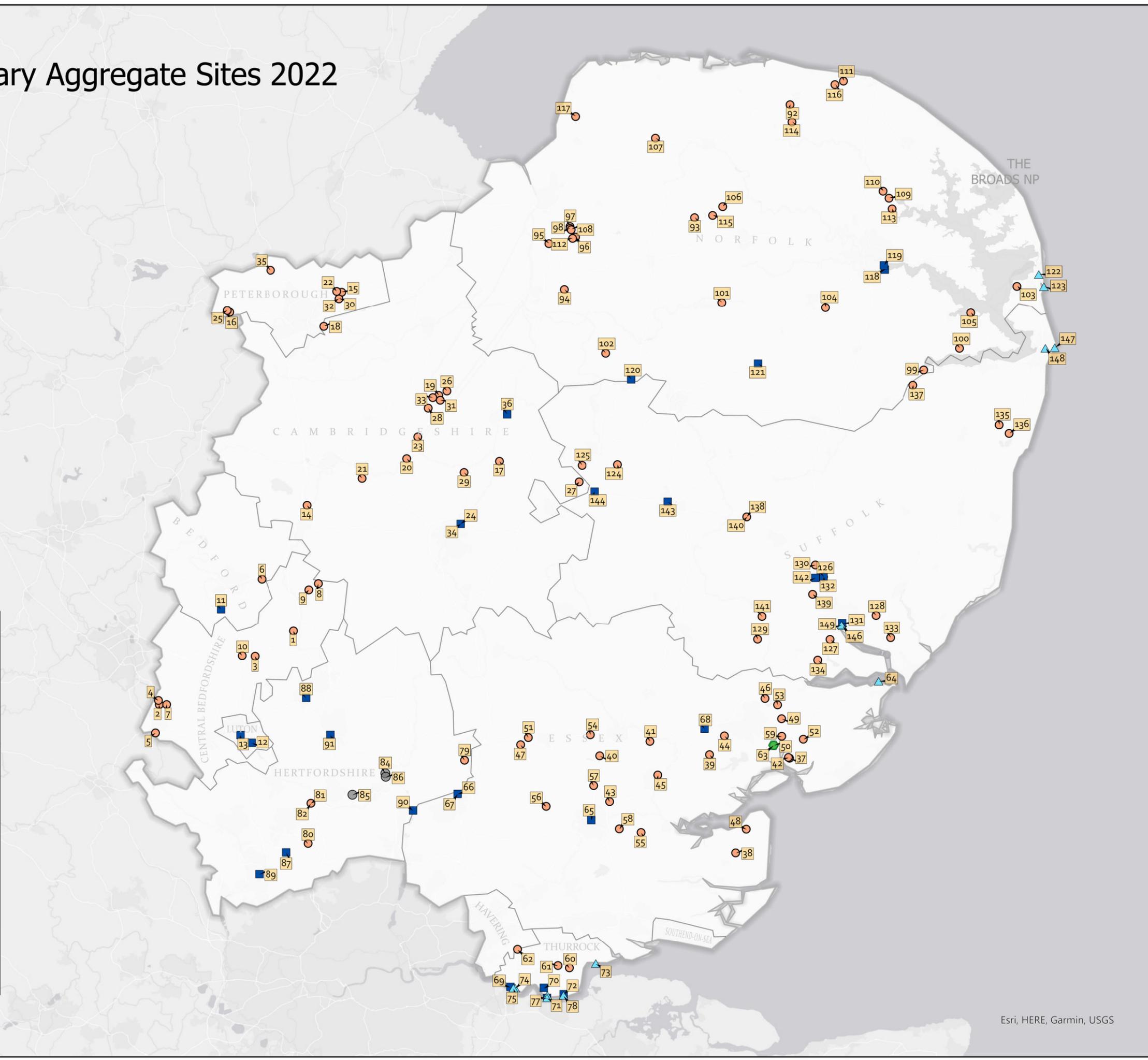
Crushed Rock

- 2.3 The crushed rock resource in the East of England is not of sufficiently high quality for it to be economic to transport any significant distance and is therefore not a truly regional resource. However, it is a non-energy mineral that may be used in substitution for aggregate in certain situations depending on specification.
- 2.4 Until recently, Cambridgeshire and Peterborough and Norfolk were the only two mineral planning authorities within the East of England region to produce crushed rock, with the former producing limestone and the latter Carstone. However, with effect from 2019, the Bedfordshire Authorities have also reported limited sales and reserves of crushed rock (sandstone). As these figures stem from just one sandstone quarry, they have been combined with the figures for Cambridgeshire/Peterborough and Norfolk.
- 2.5 Figure 2 below is a map of all rail depots, wharves and quarries in the East of England in 2022.

Figure 2: EEAWP Primary Aggregate Sites 2022

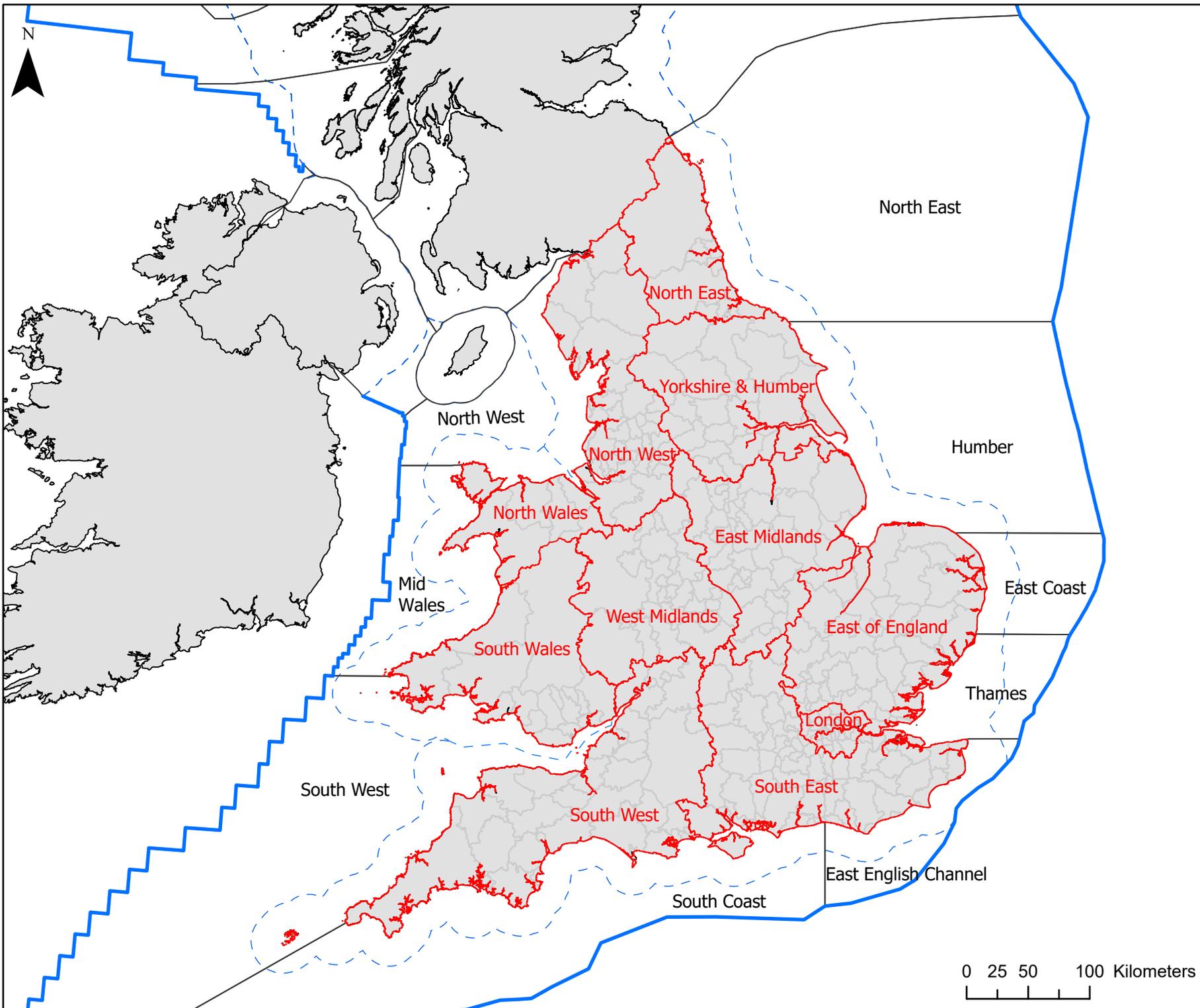
Site Locations 2022

- Former quarry
- Quarry
- ◆ Quarry/Wharf
- Rail depot
- ▲ Wharf



Marine Aggregates

- 2.6 In 2022, in the East of England AWP area, a total of 0.7mt of marine dredged aggregates were landed into Ipswich, Thurrock and Tilbury comprising approximately 5.8% of the region's total sand and gravel production ($0.7/(0.7+11.29)$). This compared with 0.45mt in 2021 which amounted to approximately 3.5% of that year's total regional sand and gravel production.
- 2.7 Marine dredged aggregates (sand and gravel) that were dredged from licensed areas and landed in the East Coast region (in which Ipswich is located) amounted to 0.44mt in 2022 compared with 0.22mt in 2021. The East Coast region had a permitted licence tonnage of 7.1mt in 2022. In the Thames Estuary region (in which Thurrock and Tilbury are located) 7.9mt were landed in 2022 compared with 8.2mt in 2021. The aggregate that is landed here is extracted from a number of different dredging regions which include the East Coast, the Thames Estuary, the East English Channel, the South Coast and to a lesser extent the Humber. The permitted licence tonnage in the Thames Estuary itself for 2022 was 4.35mt. It is understood that these amounts exclude material dredged from areas not in the ownership of the Crown Estate and material that was removed for navigational purposes and not used beneficially.
- 2.8 Figure 3 below comprises a map showing The Crown Estate marine aggregate dredging regions in England and Wales in 2022 accompanied by a schedule showing 2022 marine aggregate extraction and delivery tonnages in England and Wales.



Location of Aggregate Working Party boundaries and The Crown Estate marine aggregate dredging regions - England and Wales

Legend:

- - - 12 Mile Limit
- UK Continental Shelf
- AWP Regions
- Counties
- UK
- TCE dredge regions

0 25 50 100 Kilometers

2022 marine aggregate extraction and delivery tonnages (England and Wales)

Construction Use	Extraction from Crown Estate dredging regions							
Delivery to AWP Regions	Humber	East Coast	Thames	East English Channel	South Coast	South West	North West	Total
North East (England)	719,806	186,899	38,748	5,746				951,199
Yorkshire and The Humber	124,487	206,088						330,575
East of England	15,602	49,310	127,424	452,466	59,845			704,647
London	167,303	1,965,150	413,484	1,329,604	179,979			4,055,520
South East (England)	54,359	1,126,594	1,015,520	859,832	3,317,027	1,969		6,375,301
South West (England)				1,021	66,337	660,155		727,513
South Wales (RAWP)						632,992		632,992
North Wales (RAWP)							6,304	6,304
North West (England)							211,580	211,580
Export (EU)	2,610,073	64,616	99,631	1,887,556	31,415			4,693,291
Total	3,691,630	3,598,657	1,694,807	4,536,225	3,654,603	1,295,116	217,884	18,688,922

Beach replenishment and reclamation use	Extraction from Crown Estate dredging regions							
Delivery to AWP Regions	Humber	East Coast	Thames	East English Channel	South Coast	South West	North West	Total
East Midlands (England)	690,437							690,437
South East (England)				77,264	20,408			97,672
South West (England)						45,829	2,669	48,498
North Wales (RAWP)							973,870	973,870
Total	690,437	0	0	77,264	20,408	45,829	976,539	1,810,477

*There are no licensed areas in the North East Crown Estate dredging region all figures quoted in tonnes

Sales of Primary Aggregate

- 2.9 Sales of land-won sand and gravel in the East of England in 2022 decreased by 9% compared with the 2021 sales figure – from 12.41mt in 2021 down to 11.29mt in 2022. Both the three and ten year averages over the periods 2020-2022 and 2013-2022 respectively were slightly higher than those recorded in 2021.
- 2.10 Sales figures for local crushed rock have, as in previous years, been combined for confidentiality reasons to provide an overall figure for the East of England. The figure now includes limestone from Cambridgeshire and Peterborough, Carstone from Norfolk and, since 2019, sandstone from Bedfordshire. In 2022, sales stood at 0.171mt representing a 17% decrease on 2021 sales (0.207mt). The 2022 sales figure was just shy of the 3 year average of 0.176mt but remained well below the 10 year average of 0.308mt.
- 2.11 A full list of sales data for the 10 year period from 2013 – 2022 is set out in Table 2 below.

Table 2: Land-won Aggregate Sand and Gravel, Marine Sand and Gravel and Crushed Rock Sales 2013 – 2022³ (thousand tonnes)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year average	3 year average
Land Won Sand and Gravel												
Bedford, Central Bedfordshire and Luton	1,255	1,622	1,322	1,692	1,643	1,675	1,217	1,212	1,480	1,414	1,453	1,369
Cambridgeshire and Peterborough	1,837	2,650	2,548	2,565	3,559	3,199	3,211	2,823	3,482	3,035	2,891	3,113
Essex, Southend-on-Sea and Thurrock	3,184	4,368	3,454	3,400	3,415	3,559	2,936	2,962	3,636	3,400	3,431	3,333
Hertfordshire	1,130	1,210	1,224	1,165	1,167	1,207	1,245	1,123	1,148	1,021	1,164	1,097
Norfolk	1,115	1,462	1,415	1,623	1,605	1,511	1,280	1,312	1,491	1,367	1,418	1,390
Suffolk	1,061	1,000	871	1,203	1,277	1,221	886	1,025	1,171	1,054	1,077	1,083
Total Land Won Sand and Gravel Sales (thousand tonnes)	9,582	12,312	10,834	11,648	12,666	12,372	10,775	10,457	12,408	11,291	11,435	11,385

³ To avoid under-reporting sales and reserves, mineral planning authorities may have included estimates of sales and reserves figures for sites without a submitted return.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year average	3 year average
Marine Sand and Gravel⁴												
Bedford, Central Bedfordshire and Luton	n/a	n/a										
Cambridgeshire and Peterborough	n/a	n/a										
Essex, Southend-on-Sea and Thurrock	C	C	C	C	C	C	C	C	233	261	U	U
Hertfordshire	n/a	n/a										
Norfolk	no data	<0.5	no data	no data	nil	no data	nil	nil	nil	nil	n/a	nil
Suffolk	c	c	c	c	c	c	c	c	222	444	U	U
Total Marine Sand and Gravel Landings⁵ (thousand tonnes)	273	295	324	435	403	371	295	428	455	705	398	529

⁴ NB Marine data has been taken from the non-confidential document entitled 'Marine Aggregates The Crown Estate Licences Summary of Statistics 2022' and refers to landings rather than sales.

⁵ Figures may not match owing to rounding.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year average	3 year average
Crushed Rock												
Bedford, Central Bedfordshire and Luton	c	c	c	c	c	c	c	c	c	c	c	c
Cambridgeshire and Peterborough	c	c	c	c	c	c	c	c	c	c	c	c
Essex, Southend-on-Sea and Thurrock	n/a	n/a										
Hertfordshire	n/a	n/a										
Norfolk	c	c	c	c	c	c	c	c	c	c	c	c
Suffolk	n/a	n/a										
Total Crushed Rock Sales (thousand tonnes)	355	668	353	456	399	217	104	149	207	171	308	176
Total Aggregate Sales (thousand tonnes)	10,210	13,275	11,511	12,539	13,468	12,960	11,174	11,034	13,070	12,167	12,141	12,090
Notes: C = confidential figure U = unknown												

Permitted Reserves and Infrastructure Capacity

- 2.12 At the end of 2022, reserves of land-won sand and gravel in the East of England stood at 116.304mt. It should be noted that the total sand and gravel permitted reserves' figure reported in the 2021 Annual Monitoring Report for the end of 2021 was 119.606mt. However, since publication of the report, this figure has been revised downwards to 118.199mt following an amendment to Norfolk's reserves' figure to reflect saleable rather than permitted reserves. This means that there has been a 1.6% decrease in permitted reserves between the end of 2021 and the end of 2022, based on the corrected 2021 figure of 118.199mt.
- 2.13 By comparison, at the end of 2022, reserves of crushed rock stood at 4.438mt continuing a fairly level trajectory of reserves recorded since 2013 with a range over the 10 year period of just 1.315mt (5.61mt in 2013 (highest figure) – 4.295mt in 2018 (lowest figure)).
- 2.14 Table 3 below shows aggregate reserves within the East of England for the period 2013-2022.

Table 3: Permitted Reserves in AWP area (thousand tonnes)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sand & Gravel										
Bedford, Central Bedfordshire and Luton	21,726	13,559	19,386	18,341	15,910	15,219	16,215	17,265	15,952	13,548
Cambridgeshire and Peterborough	48,967	45,410	43,330	43,920	41,429	41,828	39,173	36,057	33,865	32,391
Essex, Southend-on-Sea and Thurrock	32,885	30,724	32,687	35,368	31,953	29,980	33,099	33,589	33,856	37,146
Hertfordshire	16,260	14,440	13,216	11,752	10,458	10,056	8,951	7,684	6,471	5,710
Norfolk	13,335	15,316	18,348	16,536	14,732	13,311	13,515	14,511	18,550 ⁶	17,954
Suffolk	13,705	13,205	13,190	12,747	11,822	10,690	9,590	10,676	9,505	9,555
Total Sand & Gravel Permitted Reserves (thousand tonnes)	146,878	132,654	140,157	138,664	126,304	121,084	120,543	119,782	118,199	116,304

⁶ NB. Figures in red have been revised since publication of the Annual Report for 2021. Norfolk's amendment now reflects saleable rather than permitted reserves in 2021.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Crushed rock										
Bedford, Central Bedfordshire and Luton	c	c	c	c	c	c	c	c	c	c
Cambridgeshire and Peterborough	c	c	c	c	c	c	c	c	c	c
Essex, Southend-on-Sea and Thurrock	n/a	n/a								
Hertfordshire	n/a	n/a								
Norfolk	c	c	c	c	c	c	c	c	c	c
Suffolk	n/a	n/a								
Total Crushed Rock Permitted Reserves (thousand tonnes)	5,610	4,807	4,415	4,881	4,480	4,295	5,121	5,005	4,631	4,438
Total Permitted Reserves (Sand and Gravel + Crushed Rock) (thousand tonnes)	152,488	137,461	144,572	143,545	130,784	125,379	125,664	124,787	122,830⁷	120,742
Notes: C = confidential figure										

⁷ Figures in red have been revised since publication of Annual Report for 2021.

- 2.15 Information has been sought by mineral planning authorities from operators within the East of England region as to maximum capacity of rail depots and wharves within each mineral planning authority area. This is a different figure from actual throughput of goods. However, in many cases, maximum capacity has not been ascertained.
- 2.16 Table 4 below shows infrastructure capacity in terms of rail depots and wharves over the period 2013-2022, where it has been reported.

Table 4: Infrastructure Capacity (thousand tonnes)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rail depot capacity										
Bedford, Central Bedfordshire and Luton								U	U	U
Cambridgeshire and Peterborough								U	U	U
Essex, Southend-on-Sea and Thurrock	U	U	U	C	U	U	U	C	1,980** combined	2,770** combined
Hertfordshire	U	U	U	U	U	675.3*	756.2*	853.1*	906.2*	906.2*
Norfolk	385*	385*	385*	385*	605*	605*	605*	605*	605*	605*
Suffolk								C	U	U
Total reported rail capacity	385	385	385	385	605	1,280.3	1,361.2	1,458.1	3,491.2	4,281.2
Wharf capacity										
Bedford, Central Bedfordshire and Luton								n/a	n/a	n/a
Cambridgeshire and Peterborough								U	U	U
Essex, Southend-on-Sea and Thurrock	U	U	U	C	U	U	U	C	1,980** combined	2,770** combined

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hertfordshire	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Norfolk	2,000*	2,000*	2,000*	2,000*	2,000	2,000	2,000	2,000	2,000	2,000*
Suffolk								C	U	U
Total reported wharf capacity	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	3,980	4,770
Total reported infrastructure capacity	2,385	2,385	2,385	2,385	2,605	3,280.3	3,361.2	3,458.1	5,491.2	6,281.2
Notes:										
C = confidential figure; U = unknown; * = estimated; ** = combined wharf and rail capacity at transshipment sites for reasons of confidentiality										

Landbank in EEAWP Area

- 2.17 As stated in the Planning Practice Guidance (paragraph 080 Reference ID: 27-080-20140306), landbanks of aggregate mineral reserves, or aggregate landbanks, are principally a monitoring tool to provide a mineral planning authority with early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregates in their particular area. Aggregate landbanks should be used principally as a trigger for a mineral planning authority to review the current provision of aggregates in its area and to consider whether to conduct a review of the allocation of sites in the plan. In doing so, a mineral planning authority may take into account the remaining planned provision in the minerals local plan.
- 2.18 Aggregate landbanks should be recalculated each year. The length of the aggregate landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, divided by the annual rate of future demand based on the latest annual local aggregate assessment. In calculating landbanks, the term 'permitted reserve' includes current non-working sites but excludes those sites where mineral working cannot take place until there has been a review of the planning conditions attached to the relevant planning permission (paragraph 083 Reference ID: 27-083-20140306).
- 2.19 At the end of 2022, reserves of land-won sand and gravel in the East of England stood at 116.304mt. Applying the NPPF methodology based on a rolling average of 10 year sales indicates a landbank of 10.2 years at the end of 2022 (116.304/11.435) down from the (corrected) landbank figure of 10.6 years recorded in 2021. Using the 10 year average sales figure methodology as set out in the NPPF indicates that all mineral planning authorities within the East of England except Hertfordshire could demonstrate sand and gravel landbanks in excess of the seven year threshold as at the end of 2022 (see Table 5 below) although some authorities are drawing quite close to the 7 year minimum. Hertfordshire's sand and gravel landbank at the end of 2022 was just 4.9 years.
- 2.20 In terms of an overall landbank of crushed rock in the East of England, based on the rolling average of 10 year sales, a landbank of 14.4 years can be demonstrated in 2022 compared with 14.5 years in 2021.
- 2.21 Finally, whilst this annual report looks at landbanks based on a rolling average of 10 year sales data, thereby adopting the suggested methodology within the NPPF, it should be noted that both Cambridgeshire and Peterborough and Greater Essex prefer to rely on rates set out within their development plans whilst Norfolk, in its emerging Minerals and Waste Local Plan, proposes to base its annual provision rate on the rolling 10 year average sales figure plus ten percent. In a change from previous years, with effect from last year, Hertfordshire has opted to calculate its landbank based on the rolling 10 year sales average (this year covering the period 2013-2022).
- 2.22 Table 5 below gives details of the landbank in each mineral planning authority area within the East of England.

Table 5: Landbank in East of England 2022

Mineral Planning Authority	Sand and Gravel					Crushed Rock				
	10-year average sales (thousand tonnes)	LAA Rate (thousand tonnes)	Reserves (as at 31 st December 2022) (thousand tonnes)	Landbank in years based on Reserves / LAA Rate	Landbank in years based on Reserves / 10-year average	10-year average sales (thousand tonnes)	LAA Rate (thousand tonnes)	Reserves (as at 31 st December 2022) (thousand tonnes)	Landbank in years based on Reserves / LAA Rate	Landbank in years based on Reserves / 10-year average
Bedford, Central Bedfordshire and Luton	1,453	1,453	13,548	9.3	9.3	c	c	c	c	c
Cambridgeshire and Peterborough	2,891	2,600	32,391	12.5	11.2	c	c	c	c	c
Essex, Southend-on-Sea and Thurrock	3,431	4,450	37,146	8.3	10.8	n/a	n/a	n/a	n/a	n/a
Hertfordshire	1,164	1,164	5,710	4.9	4.9	n/a	n/a	n/a	n/a	n/a
Norfolk	1,418	1,554 ⁸	17,954	11.6	12.7	c	c	c	c	c
Suffolk	1,077	1,077	9,555	8.9	8.9	n/a	n/a	n/a	n/a	n/a
AWP TOTAL	11,434	n/a	116,304	n/a	10.2	308	n/a	4,438	n/a	14.4

⁸ NB Norfolk's LAA rate is based on the 10 year sales average plus 10% assuming a 10 year sales average of 1.413mt. This is at slight variance with the 10 year sales average reported here owing to a disparity in reported figures for 2019 where this document relies on BGS data whilst Norfolk's LAA uses locally obtained figures.

Imports and Exports

- 2.23 The following text is taken from the final published version of the four yearly Aggregate Mineral Survey carried out by the British Geological Survey in 2019 (AMS 2019). These four yearly surveys are the only published source of information on aggregate sales by destination region.
- 2.24 *'Inter-regional flows of crushed rock are significantly larger than for sand and gravel because of the overall larger demand for crushed rock, particularly for roadstone, and because regions such as the South East, London and the East of England have only minor, or inferior quality, crushed rock resources. In addition, the consistency and extent of some hard rock deposits permits their working on a very large scale, enabling much wider geographical areas to be served economically by rail. The transfer of crushed rock between regions is, therefore, more complex and uneven than for sand and gravel. It reflects the combined pattern of the extent of crushed rock resources and markets /population (demand).'*
- 2.25 *'Total exports of crushed rock from Wales to England were 3.2 Mt compared with 0.19 Mt in the opposite direction. The traditionally large crushed rock producers in England, the East Midlands and South West, have the largest exports representing 49% (14.3 Mt) and 33% (8.4 Mt) of their respective total crushed rock sales. Exports of crushed rock from North Wales, another traditional crushed rock exporter were 41% (1.8 Mt) of crushed rock sales. The main importing regions were the East of England (8.8 Mt), mainly from the East Midlands and the South West, the North West (6.2 Mt), mainly from the East Midlands and North Wales, and the South East (5.3 Mt), mainly from the South West. A significant amount of crushed rock (4.8 Mt) was imported from outside England and Wales, mainly from Scotland and Norway. The largest proportion (1.5 Mt) was landed in the South East followed by London (1.4 Mt) and the East of England (1.2 Mt).'*
- 2.26 *'Flows of sand and gravel were around one third the level of crushed rock. Total exports of sand and gravel from Wales to England were 0.52 Mt compared with Welsh imports from England of 0.06 Mt. The leading exporters of sand and gravel were the East Midlands (2.2 Mt), London (2.1 Mt) and the South East (1.7 Mt), and the leading importing regions were the East of England (2.3 Mt) and the South East (1.6 Mt). The majority of marine sand and gravel was used within the region where it was landed. The South East (4.9 Mt) and London (4.2 Mt) dominate marine-dredged sales.'*
- 2.27 As is clear from the above, the East of England is heavily dependent on imports of both sand and gravel and crushed rock, with the AMS 2019 recording that 2.3mt of sand and gravel and 8.8mt of crushed rock were imported in 2019.

3. SECONDARY AND RECYCLED AGGREGATES

Introduction

- 3.1 The revised NPPF (paragraph 210) specifically requires mineral planning authorities to take account of the contribution made by substitute or secondary and recycled materials and mineral waste before considering the extraction of primary materials whilst aiming to source mineral supplies indigenously.

Secondary Aggregates

- 3.2 Secondary aggregates are defined within the NPPF as ‘aggregates from industrial wastes such as glass (cullet), incinerator bottom ash, coal derived fly ash, railway ballast, fine ceramic waste (pitcher), and scrap tyres; and industrial and minerals by-products, notably waste from china clay, coal and slate extraction and spent foundry sand. These can also include hydraulically bound materials’.
- 3.3 There are just 10 secondary aggregate sites within the East of England AWP area. Table 6a below shows secondary aggregate sales in the East of England over the ten year period 2013-2022 whilst Figure 4 shows the location of secondary aggregate sites in the EEAWP area in 2022.

Table 6a: Secondary Aggregate Sales

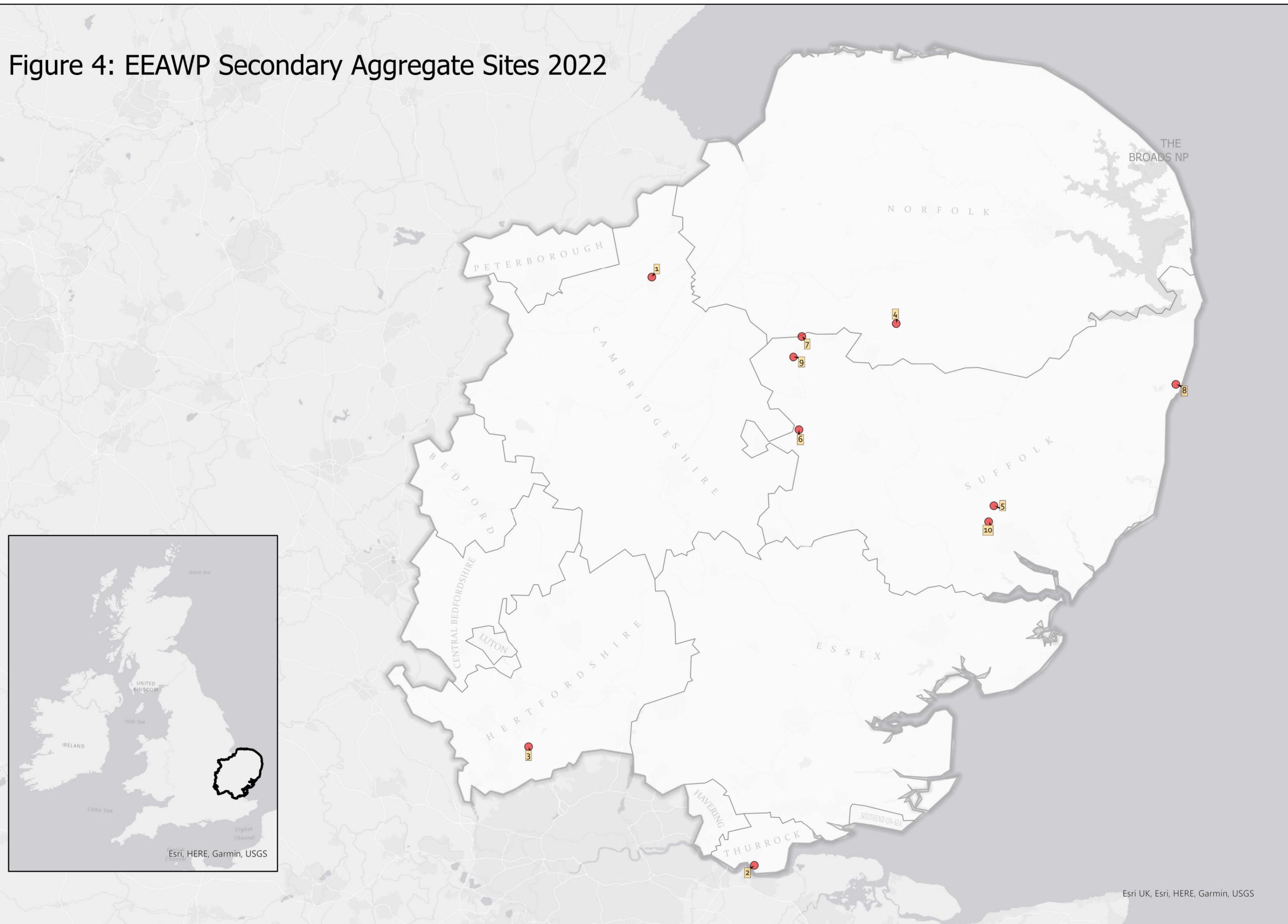
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year average	3 year average
Secondary Aggregate Sales (thousand tonnes)												
Bedford, Central Bedfordshire and Luton	n/a	n/a	n/a	n/a								
Cambridgeshire and Peterborough ⁹	No data	No data	No data	No data								
Essex, Southend-on-Sea and Thurrock	U	U	U	U	U	U	U	U	U	U	U	U
Hertfordshire ¹⁰	329.46	362.20	317.31	234.78	246.11	272.66	237.79	236.07	315.83	311.0	286.32	287.63
Norfolk	U	U	U	U	U	U	U	U	U	U	U	U
Suffolk					81.11	82.90		11.68	3.14	C	n/a	n/a
Total Reported Secondary Aggregate Sales (thousand tonnes)¹¹	329.46	362.20	317.31	234.78	327.22	355.56	237.79	247.75	318.97	311.0	304.20	292.57
Notes: C = Confidential figure												

⁹ Only one secondary aggregate site in area.

¹⁰ Secondary and recycled aggregate figures in Hertfordshire are combined.

¹¹ Note: Secondary and recycled aggregate figures in Hertfordshire are combined.

Figure 4: EEAWP Secondary Aggregate Sites 2022



Recycled Aggregates

- 3.4 Recycled aggregates are defined within the NPPF as ‘aggregates resulting from the processing of inorganic materials previously used in construction, e.g. construction and demolition waste’. This will include crushed concrete, bricks, tiles, glass, asphalt planings and spent railway ballast. Such materials need to comply with national specifications and aggregate standards and therefore continue to provide an increasingly important contribution as substitutes for primary aggregates.
- 3.5 For the purpose of reporting annual sales in Local Aggregates Assessments, recycled aggregate is taken as being material which meets the ‘end of waste’ criteria set out in the WRAP/Environment Agency Quality Protocol¹², that is, the criteria that the production of aggregates from inert waste must meet to achieve end of waste status. It is worth noting that the guidance produced by Planning Officers Society/Mineral Products Association on Local Aggregates Assessments¹³ gives a less stringent definition of recycled aggregates, as ‘normally defined as an aggregate returning from the processing of inorganic materials previously used in construction’.
- 3.6 Robust data on arisings of construction, demolition and excavation waste including the amount sold as recycled aggregates have often been difficult to obtain and a standard methodology has not been adopted nationally. As a result of this, a guidance note has been prepared by representatives from the National Waste Technical Advisory Board Chairs and Aggregate Working Party Chairs¹⁴. This guidance note details the various options available for the collection and collation of data in order to estimate arisings and sales of recycled aggregates. These options include obtaining data from annual surveys provided to mineral operators, filtering information from that included within the Waste Data Interrogator (WDI) (which is produced annually by the Environment Agency and is based on data received from regulated waste management facilities), or relying on national data produced through a government commissioned survey (the last one of which, it is understood, took place in 2005).
- 3.7 In the East of England, most mineral planning authorities choose to rely on survey data taken from the WDI. Whilst efforts continue in order to improve data reliability and comprehensiveness, estimates have had to be made by some mineral planning authorities. When reported estimates for recycled aggregates’ production are collated, an East of England total of just under 2.2mt is reached for 2022 (though it should be noted that Hertfordshire’s figures combine both recycled and secondary aggregate data).
- 3.8 Table 6b below shows recycled aggregate sales in the East of England over the ten year period 2013-2022 whilst Figure 5 shows the location of recycled aggregate sites in the EEAWP in 2022.

¹² Aggregates from Inert Waste - Quality Protocol (the Quality Protocol is currently subject to a revision).

¹³ A Guide to the Production and Use of Local Aggregate Assessments (planningofficers.org.uk)

¹⁴ Recycled Aggregates Data – Guidance on Assessing Levels of Recycled Aggregates – link:
(<https://www.cornwall.gov.uk/media/1jdpi3jc/final-guidance-on-recycled-aggregates-data-v5-may-22.pdf>)

Table 6b: Recycled Aggregate Sales

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year average	3 year average	Calculation method	Comment
Recycled Aggregate Sales (thousand tonnes)														
Bedford, Central Bedfordshire and Luton	111.13	129.69	128.68	124.19	221.99	207.79	172.20	175.20	191.35	224.0	168.62	196.85	WDI	Footnote ¹⁵
Cambridgeshire and Peterborough	497	963	730	460	419	640	707	318	534	461	573	438	WDI	Footnote ¹⁶
Essex, Southend-on-Sea and Thurrock	U	U	U	U	U	U	930	800	840	837	n/a	826	WDI	Footnote ¹⁷

¹⁵ The following waste types have been included: 01 04 04 waste from chemical processes; 01 04 09 waste from chemical processes; 17 01 01 concrete; 17 01 02 bricks; 17 01 03 tiles; 17 01 07 mixed; 17 03 03 bituminous - none; 17 05 08 track ballast; 17 09 04 mixed. Note that the tonnage of waste that was sent to landfill has been removed where possible. 20% has been added to each year's final figure, as recommended in the Recycled Aggregates Data Guidance document.

¹⁶ Estimate based on method used in previous Cambridgeshire LAAs for consistency. (Total Estimate Recycled Aggregate WDI National Method: 583)

¹⁷ Methodology based on recycled aggregates data: Guidance on Assessing Levels of Recycled Aggregates (Final May 22) Section 3 (pg 3) WDI approach (including the 20% increase to account for mobile plant (para 14, pg 4))

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year average	3 year average	Calculation method	Comment
Hertfordshire ¹⁸	329.46	362.20	317.31	234.78	246.11	272.66	237.79	236.07	315.83	311	286.32	287.63	See footnote 19	Footnote ¹⁹
Norfolk ²⁰	178	241	397	450	417	399	357	288	409	358	349.4	351.7	WDI	Footnote ²¹
Suffolk					156	110.05		32.89	106.64	C	n/a	n/a	Survey	Footnote ²²
Total Reported Recycled Aggregate Sales (thousand tonnes)²³	1,115.6	1,695.9	1,573.0	1,269.0	1,460.1	1,629.5	2,404.0	1,850.2	2,396.8	2,191.0	1,758.5	2,146.0		
Notes: C = Confidential figure														

¹⁸ Secondary and recycled aggregate figures in Hertfordshire are combined.

¹⁹ Survey data used from 2017 – 2020. WDI used for 2021 and 2022 data. 20% buffer added on top of WDI figure to account for material which is being reused and recycled directly on construction sites.

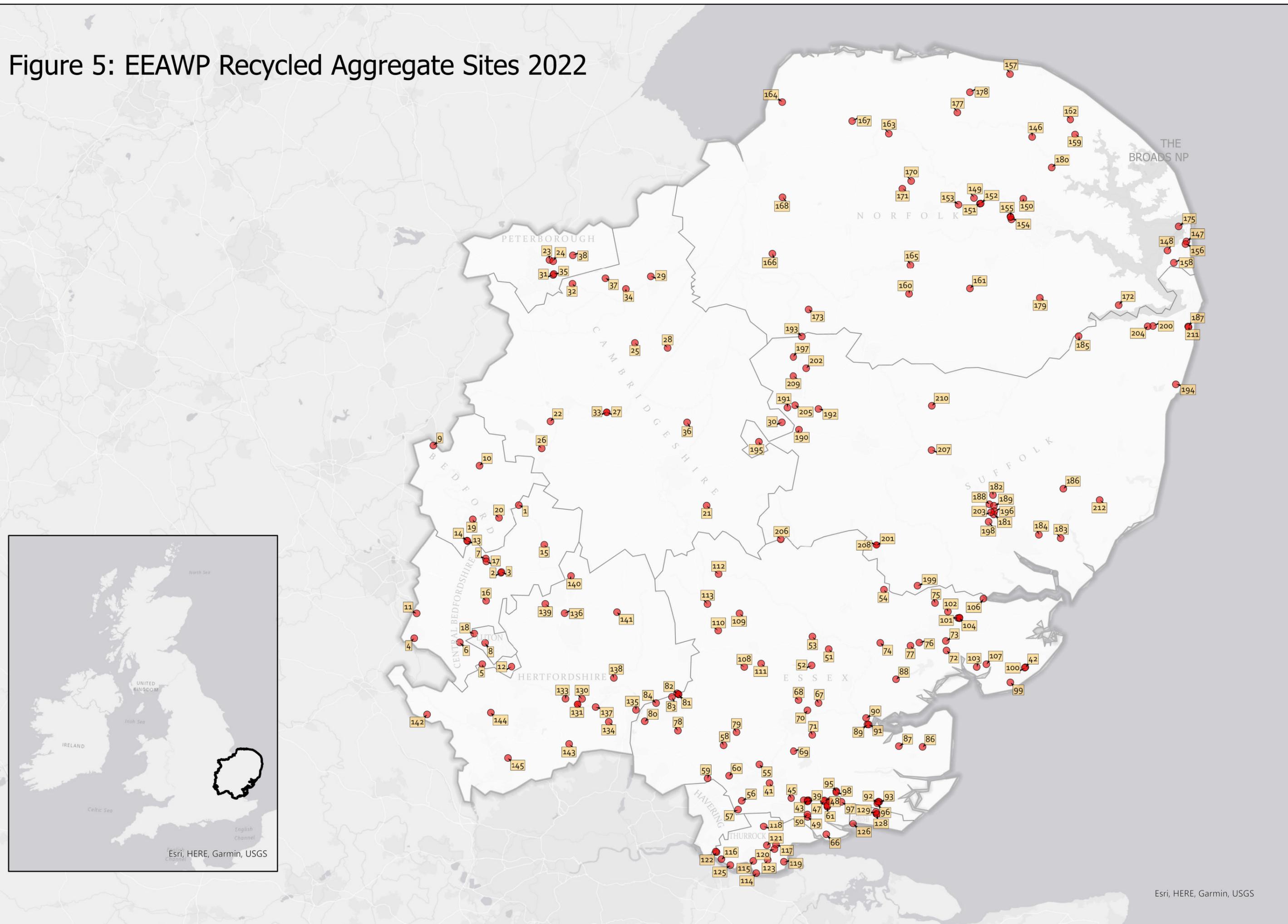
²⁰ Figures in red have been amended since the last report to correct an error in the waste codes and to include an additional 20% to cover the proportion of recycled aggregate likely to be processed by mobile plant at construction sites. Totals have been adjusted accordingly.

²¹ For recycled aggregates, data has been taken from the WDI for every year using the waste codes: 01 04 04, 01 04 08, 01 04 09, 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 03 02, 17 05 08, 17 09 04. Facilities are located in Norfolk only; Waste arising from anywhere; Selected waste facility types to exclude landfill, storage, on/in land, use in reclamation (this mainly results in waste facilities types of transfer and treatment remaining); Where information on fate was available (2017-2022) quantities of waste with fates to landfill, incineration and transfer for disposal have been excluded. Before 2016, information on fates was not included. Mobile plant data from the WDI has been excluded because their location is unknown. 20% has then been added to the total to cover the proportion likely to be processed by mobile plant at construction sites.

²² 2022 figure is confidential as based on single operator response.

²³ Note: Secondary and recycled aggregate figures in Hertfordshire are combined.

Figure 5: EEAWP Recycled Aggregate Sites 2022



National Data vs Survey Data

- 3.9 It is important to understand the data limitations associated with secondary and recycled aggregates. Most notably, the data within the WDI is collected from the returns from permitted facilities and records only waste received and waste exported from site. Secondary aggregates, where certain quality protocol specifications are met, are considered to be non-waste and are therefore not included within the waste tonnage returns. The data within the WDI does not account for mobile crushers or recycling and re-use that occurs on individual construction sites. Therefore, the tonnage of recycled aggregates reported in the WDI is likely to represent just a proportion of the recycled aggregates in circulation. As such, these figures are only estimates and should be treated with caution.
- 3.10 Latest figures available from the Mineral Products Association²⁴ estimate that, in 2021, total recycled and secondary sources of aggregates accounted for 28% (69.6mt) of total aggregates supply in Great Britain. This is against a total of 183.3mt of primary aggregates comprising quarried crushed rock and both land-won and marine dredged sand and gravel.
- 3.11 The AMS 2019 also collected sales data on secondary aggregates (section 10 of the AMS 2019 refers). These principally included china clay waste and slate waste. In total, 2.4mt of such alternative aggregates were sold across England and Wales in 2019. The equivalent total in 2014 was 2.3mt.

²⁴ 'The Contribution of Recycled and Secondary Materials to Total Aggregates Supply in Great Britain – Estimates for 2021' by the Mineral Products Association.

4. TRENDS AND ANALYSIS

East of England

- 4.1 Sales of land-won sand and gravel in the East of England in 2022 decreased by 9% compared with the 2021 sales figure – from 12.41mt in 2021 down to 11.29mt in 2022. Both the three and ten year averages over the periods 2020-2022 and 2013-2022 respectively were slightly higher than those recorded in 2021.
- 4.2 At the end of 2022, reserves of land-won sand and gravel in the East of England stood at 116.304mt. Applying the NPPF methodology based on a rolling average of 10 year sales indicates a landbank of 10.2 years at the end of 2022 (116.304/11.435) down from the (corrected) landbank figure of 10.6 years recorded in 2021. (Note that the total sand and gravel permitted reserves figure reported in the 2021 Annual Monitoring Report was 119.606mt. Since publication of that report, this figure has been revised downwards to 118.199mt following an update to Norfolk's figures to reflect saleable rather than permitted reserves.) The latest reserves figure continues to reflect a steady decline from the start of the decade when reserves stood at 147.792mt (2012).
- 4.3 Using the 10 year average sales figure methodology as set out in the NPPF indicates that all mineral planning authorities within the East of England except Hertfordshire could demonstrate sand and gravel landbanks in excess of the seven year threshold as at the end of 2022 (see Table 5 above) although some authorities are drawing quite close to the 7 year minimum. Hertfordshire's sand and gravel landbank at the end of 2022 was just 4.9 years. Note that, as was the case last year but in a change from preceding years, Hertfordshire has again opted to calculate its landbank based on the rolling 10 year sales average, which this year covers the period 2013-2022.
- 4.4 The distribution of permitted sand and gravel reserves amongst the mineral planning authorities within the East of England is detailed in Appendix 2. The two largest proportions of reserves within the region are held by Cambridgeshire and Peterborough and Essex, Southend-on-Sea and Thurrock with 32.391mt and 37.146mt, respectively, representing 28% and 32% of the region's total reserves.
- 4.5 New planning permissions in the East of England were granted in respect of a total of 8.9mt of aggregate (sand and gravel) in 2022. As at the year end, the collective authorities had undetermined applications proposing a total of over 25mt of additional reserves. Of these, one in Hertfordshire for 3.52mt and two in Greater Essex²⁵ with a combined potential reserve of 1.58mt have resolutions to approve, subject to a section 106 agreement, whilst one in Suffolk (for 0.4mt) was refused at the start of 2023.
- 4.6 Crushed rock within the East of England is produced within Cambridgeshire and Peterborough, Norfolk and, since 2019, Bedfordshire comprising, respectively, limestone, Carstone and sandstone. As in previous annual monitoring reports, sales data for crushed rock have been combined for confidentiality reasons given the small number of operators. In 2022, sales stood at 0.171mt

²⁵ Greater Essex comprises three individual authorities, namely Essex, Thurrock and Southend-on-Sea.

representing a 17% decrease on 2021 sales (0.207mt). The 2022 sales figure was just shy of the 3 year average of 0.176mt but remained well below the 10 year average of 0.308mt.

- 4.7 At the end of 2022, reserves of crushed rock stood at 4.438mt continuing a fairly level trajectory of reserves recorded since 2013 with a range over the 10 year period of just 1.315mt (5.61mt in 2013 (highest figure) – 4.295mt in 2018 (lowest figure)). In terms of the overall landbank of crushed rock in the East of England, based on the rolling average of 10 year sales, a landbank of 14.4 years can be demonstrated in 2022 compared with 14.5 years in 2021.
- 4.8 Whilst the National and Sub-national Guidelines are now considered to be out of date, it is still worth noting that sales for both sand and gravel and crushed rock are below the levels of provision anticipated within the sub-national apportionment figures (11.29mt (actual 2022 sand and gravel sales) versus 14.75 mtpa (Guideline figure) and 0.17mt (actual 2022 crushed rock sales) versus 0.5 mtpa (Guideline figure)). It is also important to consider the context of continued sales against the backdrop of a general downward trend in reserves. The Mineral Products Association, in its 10th Annual Mineral Planning Survey Report (AMPS 2022), has revealed that as of the end of 2021, the rolling 10-year average for replenishment of sand and gravel reserves was 63% whilst, for crushed rock reserves, the replenishment rate was just 52%. This position is clearly unsustainable in the long run. Caution should, therefore, continue to be exercised when assessing the position against 10 year sales figures and individual mineral planning authorities are encouraged to give careful consideration to their annual aggregate provision rates when preparing their Local Aggregate Assessments and particularly when reviewing their development plans.
- 4.9 Finally, it should also be noted that the East of England is heavily dependent on imports of both sand and gravel and crushed rock, with the AMS 2019 recording that 2.3mt of sand and gravel and 8.8mt of crushed rock were imported in 2019.

Bedford Borough, Central Bedfordshire and Luton

- 4.10 Sales of aggregate sand and gravel for Bedford, Central Bedfordshire and Luton in 2022 stood at 1.41mt, a slight decrease on the 2021 figure of 1.48mt and just shy of the 10 year average of 1.46mt but still higher than the 3 year average of 1.37mt. Overall, the Bedfordshire authorities accounted for 12.5% of sand and gravel sales within the East of England in 2022.
- 4.11 Reserves of sand and gravel in the area at the end of 2022 amounted to 13.55mt compared with 15.95mt at the end of 2021. No additional sand and gravel reserves were permitted at quarries within the Bedfordshire region in 2022.
- 4.12 Applying the methodology set out in the NPPF based on the rolling average of 10 year sales to the stated reserves, this indicates a landbank of 9.3 years for land-won sand and gravel compared with 11.1 years at the end of 2021. Whilst this landbank remains in excess of the minimum 7 year supply referred to in the NPPF, the current trajectory of continued sales against falling reserves would suggest that, in the absence of any new applications for new / extensions to sand and gravel quarries, the landbank may fall below the minimum 7 year level within the next two years. As in previous reports, it is again highlighted that the reserves figure returned for 2014, produced as part of the national survey, appears dubious, although without access to the returns from previous surveys it is difficult to offer any detailed explanation as to this apparent anomaly.

-
- 4.13 For the fourth year running, some crushed rock in the form of sandstone has been reported emanating from a single site in Bedfordshire. For reasons of confidentiality, figures relating to this source of sandstone have been combined with those relating to sales of limestone in Cambridgeshire and Peterborough and Carstone in Norfolk. Commentary on these combined figures is set out within the Cambridgeshire and Peterborough section, below.

Cambridgeshire and Peterborough

- 4.14 Sand and gravel sales during 2022 in Cambridgeshire and Peterborough totalled 3.04mt representing a slight drop compared with the sales figure of 3.48mt recorded in 2021. The 2022 sales figure exceeded the ten year average for 2013-2022 of 2.9mt but dropped below the three year average (2020-2022) of 3.1mt. Sales in the area during 2022 accounted for just under 27% of sales within the East of England.
- 4.15 Reserves of aggregate sand and gravel in Cambridgeshire and Peterborough dropped by 1.5mt between the end of 2021 and 2022, from 33.9mt to 32.4mt. This represents a decrease of approximately 34% since the start of the decade when reserves stood at 49.0mt (2013). The 2022 figure, which is the lowest recorded over the ten year period 2013-2022, equates to an approximate 28% proportion of sand and gravel reserves within the East of England.
- 4.16 Additional reserves of 1.083mt of sand and gravel were permitted during the year pursuant to planning applications pertaining to Mepal Reservoir and Coopers Farm. A number of other mineral and waste permissions were granted during 2022 but none of these resulted in additional reserves. At the end of the year, an application relating to Bridge Farm (which, if granted, would result in additional reserves of 796,000t) remains pending.
- 4.17 Adopting the NPPF approach of applying the rolling average of ten year sales and based on the reserves figure of 32.4mt indicates a sand and gravel landbank for the area of 11.2 years ($32,391/2,891$), a significant drop from the 17.5 years recorded at the end of 2018, though still well above the minimum 7 year landbank required by the NPPF. In practice, Cambridgeshire and Peterborough usually adopts the policy rate included within its Minerals and Waste Local Plan (adopted in 2021) of 2.6mtpa when calculating its sand and gravel landbank. The Plan explains at paragraph 3.19 that this figure *'represents the mid-point between the 10 year sales average and the 3 year sales average, and is also a 10% increase on the 10 year sales average (10% often being used as a proxy for a buffer above the 10 year sales average in other Minerals and Waste Local Plans).'* Whilst using the 2.6mtpa figure results in a slightly longer landbank of 12.5 years ($32,391/2.6$), it should be noted that the 10 year sales average referred to within the supporting text to the policy is stated to be 2.36mtpa whilst the 3 year average is stated to be 2.89mtpa. These averages are assumed to relate, respectively, to the 10 year period 2008-2017 and the 3 year period 2015-2017. Clearly, these figures are a little out of date, with the corresponding 10 and 3 year averages for periods ending in 2022 being 2.89mtpa and 3.11mtpa.
- 4.18 Cambridgeshire and Peterborough is also required to meet an apportionment for the production of crushed rock, namely limestone. As in previous years, sales data relating to crushed rock sales in the area has been combined with crushed rock (Carstone) sales in Norfolk for confidentiality reasons owing to the limited number of operators. From 2019 onwards, sales data have also been combined with sales of sandstone from one site in Bedfordshire.
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- 4.19 The combined sales of crushed rock during 2022 totalled 0.171mt representing a 17% decrease on 2021 sales (0.207mt). The 2022 sales figure was just shy of the 3 year average of 0.176mt but remained well below the 10 year average of 0.308mt.
- 4.20 Reserves of crushed rock as at the end of 2022, again combined with reserves within Norfolk and Bedfordshire, stood at 4.44mt representing a 4% decrease from the reserves figure of 4.63mt recorded at the end of 2021 but still similar to reserves' figures recorded during the middle of the 2010s. In terms of landbanks of crushed rock, based on the rolling average of 10 year sales, a landbank of 14.4 years can be demonstrated in 2022 ($4.438/0.308$) compared with 14.5 years in 2021.

Essex, Southend-on-Sea and Thurrock

- 4.21 Sales of sand and gravel in 2022 for the Greater Essex area stood at 3.4mt, a drop of around 6% compared with the 2021 sales figure (3.64mt), but still on a par with sales figures recorded between 2015 and 2018. As a consequence, the 2022 sales figure is just shy of the ten year average (2013-2022) of 3.43mt but a little above the three year average (2020-2022) of 3.33mt. Sales of sand and gravel within Greater Essex in 2022 accounted for 30% of those recorded within the East of England.
- 4.22 Sand and gravel reserves within Greater Essex at the end of 2022 stood at 37.1mt, a reasonable increase on the 33.9mt recorded at the end of 2021 and a result of the grant of a number of planning applications during 2022, which together generated 6.69mt of additional sand and gravel reserves. As was reported in last year's annual report, it is understood that the COVID recovery period in 2021 provided an opportunity for some operators to review their assets. In so doing, a number of 2021 data returns suggested a higher permitted reserves figure than had previously been expressed. This resulted in an uplift in the overall Greater Essex permitted reserves figure in December 2021 compared with December 2020, despite the fact that no planning permissions were granted for additional sand and gravel reserves within Greater Essex in 2021. The 2022 reserves figure of 37.1mt equates to 32% of reserves within the East of England.
- 4.23 Adopting the NPPF approach of applying the rolling average of ten year sales and based on the reserves figure of 37.146mt indicates a sand and gravel landbank for the area of 10.8 years ($37.146/3.431$) compared with 10.2 years at the end of 2021. However, Greater Essex also calculates its landbank using the policy rate contained within the Essex Minerals Local Plan (adopted in 2014) and replicated within the Thurrock Core Strategy which was updated in 2015. This is stated to be 4.45mtpa (of which 4.31mtpa is to be provided by Essex and 0.14mtpa is to be provided by Thurrock). Based on this annual provision rate, the landbank drops to 8.3 years ($37.146/4.45$) which is not far above the minimum 7 year landbank required by the NPPF.
- 4.24 As noted above, a number of planning applications for sand and gravel were granted during 2022 generating 6.69mt of additional sand and gravel reserves. An additional potential 4.1mt of reserves are pending as at the end of 2022 – relating to planning applications which either have a resolution to grant subject to signature of a section 106 agreement or are yet to be determined. These will be reported on further in next year's annual report.

Hertfordshire

- 4.25 Sales of sand and gravel in Hertfordshire during 2022 totalled 1.02mt, down on the 2021 sales figure of 1.15mt and representing the lowest level of sales of the decade. Consequently, the 2022 sales figure is less than both the 3 year (2020-2022) sales average (1.10mt) and the 10 year (2013-2022) sales average (1.16mt). As was the case in 2021, sales of sand and gravel in Hertfordshire during 2022 accounted for just 9% of the total sales within the East of England.
- 4.26 Reserves of sand and gravel in Hertfordshire continued their steady decline from the start of the decade, standing at 5.71mt at the end of 2022 compared with 6.47mt at the end of 2021 and 16.3mt in 2013. As has been the case each year since 2013, this is the lowest figure recorded. However, it is due to be boosted following a resolution to approve an application for extraction of 3.52mt of sand and gravel on land adjoining Coopers Green Lane which remains subject to completion of a section 106 agreement. Hertfordshire's actual reserves at the end of 2022 accounted for just 5% of the total reserves within the East of England.
- 4.27 The landbank for sand and gravel in Hertfordshire at the end of 2022 stood at just 4.9 years when based on the 10 year average sales figure (5,710/1,164) compared with 5.5 years at the end of 2021 and 6.48 years at the end of 2020. Note that, as was the case last year but in a change from preceding years, Hertfordshire has again opted to calculate its landbank based on the rolling 10 year sales average, which this year covers the period 2013-2022. This change was carefully considered to take into account changes in reserves as well as changes in projected future demand based on PPG guidance which provides that '*Aggregate landbanks should be recalculated each year. The length of the aggregate landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, divided by the annual rate of future demand based on the latest annual Local Aggregate Assessment*' (Paragraph: 083 Reference ID: 27-083-20140306). This figure, which will change each year in the LAA, will be called the 'LAA Rate', and Hertfordshire's landbank will change each year based on this changing rate. This is a different rate from the 'annual provision rate' which is the rate fixed in the emerging Minerals and Waste Local Plan. If the landbank continued to be calculated each year simply using the rate fixed in the Plan, then it is considered that this would not be an accurate reflection of the landbank.
- 4.28 Hertfordshire's landbank is evidently below the 7 year minimum landbank required by the NPPF. Hertfordshire continues to monitor its decreasing landbank and is seeking to address the shortfall in its supply of sand and gravel via a review of its Minerals Local Plan.

Norfolk

- 4.29 After last year's encouraging rise in sales of sand and gravel to almost pre-pandemic levels with a sales figure of 1.5mt, sales in 2022 dropped back a little to 1.37mt. The 2022 sales are lower than both the 3 year (2020-2022) and 10 year (2013-2022) sales averages which are 1.39mt and 1.42mt respectively. The 2022 sales in Norfolk accounted for 12% of those recorded within the East of England.
- 4.30 Since publication of the annual report for 2021, Norfolk has revised down its 2021 reserves figure from 19.96mt to 18.55mt to reflect saleable rather than permitted reserves. The figure for the end of 2022 is 17.95mt. Both of these figures represent a healthy boost on the 14.5mt recorded at the

end of 2020 and the revised 2021 figure still amounts to the highest level of reserves recorded over the 10 year period from 2013. The 2022 figure equates to 15% of the total reserves within the East of England.

- 4.31 Norfolk's landbank for sand and gravel as at the end of 2022 based on a rolling average of 10 years' sales stood at 12.7 years (17,954/1,418). However, in its emerging plan - the Minerals and Waste Local Plan which is expected to be adopted in 2024 - Norfolk is proposing an LAA rate comprising the rolling 10 year sales average plus 10%. For 2022, this figure is stated to amount to 1.554mt. On this basis, the landbank drops to 11.6 years. (Note that the 1.554mt figure is based on a 10 year sales average figure of 1,413. This is at slight odds with the 1,418 average sales figure used in this annual report owing to variance between the 2019 figure in the annual report which is based on the AMS 2019 compared with locally derived figures used by Norfolk).
- 4.32 2022 saw the grant of just two permissions which resulted in additional reserves of sand and gravel, together totalling 0.429mt of reserves.
- 4.33 In addition to sand and gravel, Norfolk is also required to meet an apportionment for crushed rock, namely Carstone. As noted above, the figures pertaining to crushed rock have been collated with those relating to limestone within Cambridgeshire and Peterborough and, since 2019, with sandstone from Bedfordshire in order to avoid disclosure of confidential data. In Norfolk, the production of Carstone is concentrated into relatively few workings and production levels can vary significantly each year depending on individual construction projects.
- 4.34 Combined crushed rock reserves in the East of England as at the end of 2022 stood at 4.4mt reflecting a slight drop on 2021 (when the figure was 4.6mt) but remaining within the range of reserves recorded over the 10 year period since 2013 during which the highest reserve figure was 5.61mt and the lowest 4.3mt. Applying the rolling average of ten year sales produces a combined landbank of 14.4 years as at the end of 2022 (compared with 14.5 years as at the end of 2021). This increases substantially to 25.2 years when based on the three year sales average (4,438/176) compared with 30.3 years at the end of 2021. No new planning applications for additional Carstone extraction were received in 2022 and no new permissions were granted.

Suffolk

- 4.35 Sales of sand and gravel in Suffolk during 2022 were recorded as 1.054mt compared with 1.171mt in 2021 thus continuing a fairly consistent trajectory recorded over the past ten years during which time sales have generally hovered around the 1mt level. The three and ten year averages continue to reflect the consistent sales level with figures of 1.083mt and 1.077mt respectively. Sales of sand and gravel in Suffolk during 2022 accounted for 9.3% of the total sold within the East of England.
- 4.36 In terms of reserves of sand and gravel in the area, these were recorded as being 9.56mt at the end of 2022 compared with 9.51mt at the end of 2021. This translates to a landbank figure of 8.9 years based on the 10 year average sales figure, compared with last year's 8.8 year landbank.
- 4.37 One permission which generated additional sand and gravel reserves was granted at the start of 2022. This was for 0.7mt of sand and gravel at Barham Quarry. Three other applications were pending at the end of 2022 with a combined sand and gravel reserve of 5.7mt, though the smallest

one of these (for 0.4mt) was, in fact, refused in February 2023. Suffolk will need to continue to be mindful of its decreasing sand and gravel landbank as it approaches the minimum threshold of 7 years set out in the NPPF. As within all mineral planning authority areas, particular development projects may or may not come forward; however particular attention should continue to be drawn to the proposals for Sizewell C nuclear power station in Suffolk. This is expected to start in 2023 and to take 12 years to complete. It should be recognised that in the event of this project proceeding, it is likely to have a rapid and significant impact on the complexion of aggregate reserves.

Major Construction Projects or Developments

4.38 DLUHC requires the Annual Monitoring Reports to include information on 'major construction projects' within the East of England. 'Major construction projects' are considered to be those developments which are anticipated to have greater than local influence on aggregate demand. In order to provide some focus for the purposes of the AMR, major construction projects have been taken to be significant transport/infrastructure projects and residential/mixed residential schemes in excess of 200 units. Table 7 below identifies those construction projects that have been identified in the East of England as being of relevance in 2022.

Table 7: Major Construction Projects in EEAWP area

Mineral Planning Authority	Major Construction Project	Comments
Bedford, Central Bedfordshire and Luton	<ul style="list-style-type: none"> • Arlesey relief road and gateway bridge • London Luton Airport proposed expansion • A428 Black Cat to Caxton Gibbet Road Improvement Scheme 	<p>Construction work began in spring 2022 and will take about 18 months to complete.</p> <p>An application for a Development Consent Order to increase capacity of the airport (using the existing runway to handle 32 million passengers per year by 2043 up from its current limit of 18 million per year) plus expanding the current terminal and building a new terminal and associated facilities is currently being considered by the Planning Inspectorate. A decision is expected in 2024.</p> <p>The Development Consent Order was unsuccessfully challenged in the High Court. Construction is now underway and the road is expected to open in 2027. Two borrow pits within Bedford Borough and two borrow pits within Cambridge will be used to supply aggregate for the project.</p>
Cambridgeshire and Peterborough	<p><u>Peterborough City Council:</u></p> <ul style="list-style-type: none"> • Kings Dyke Crossing scheme • Junction 3 Improvements • A16 Norwood Improvements 	<p>Commenced July 2020; construction due for completion October 2022.</p> <p>Highway improvement works and active travel schemes (2023)</p> <p>Highway improvement works along the A16 and A47 to facilitate planned growth at Norwood (future project 2024-25)</p>

Mineral Planning Authority	Major Construction Project	Comments
	<p><u>Cambridge County Council:</u></p> <ul style="list-style-type: none"> • Chisholm Trail • A428 Black Cat to Caxton Gibbet Road Improvement scheme (TR010044) (CCC) • (EA) Cranbrook & Counter Drain Flood Risk Management Strategy (CCC) • (AW) Fens Reservoir Project (CCC) • A47 Highways Dualling • Note – planned housing not included in above list 	<p>Commenced late 2018; construction in progress during 2021; completion expected during 2022.</p> <p>Pre-Submission 2020; DCO/NSIP Examination 2021/22; Construction likely to commence 2023.</p> <p>Future project - Initial Planning Phase Started 2022</p> <p>Future project - Initial Planning Phase Started 2022</p> <p>Planning 2022/23; construction 2024</p>
	<p><u>Essex</u></p> <ul style="list-style-type: none"> • M11 Junction 7a • M25, Junction 28 • Chelmsford Northeast Bypass • A120/A133 Link Road and Rapid Transit System • Beaulieu Park Station • A12 Widening (19 – 25) • Lower Thames Crossing • New A120 Braintree to the A12 route 	<p>Completed June 2022</p> <p>Due to open to traffic summer 2025</p> <p>Due to open to traffic – 2025</p> <p>Due to open to traffic – 2025</p> <p>Due to open - late 2025</p> <p>Due to open to traffic 2027/28</p> <p>Due to open to traffic 2029/30</p> <p>Await RIS3 (2025 – 2030) to be published in 2024</p>

Mineral Planning Authority	Major Construction Project	Comments
<p>Essex, Southend-on-Sea and Thurrock</p>	<ul style="list-style-type: none"> • A127/A130 Fairglen Interchange – (short term) • A127 Improvement Package • Army and Navy Sustainable Transport Package • Stansted Airport • A13 Widening (A128 – Orsett Cock to A1014, The Manorway, Stanford- le-Hope) • Freeport East (Harwich Bathside Bay component) • London Gateway Port - Development of Employment areas • Tilbury 2 (Tilbury Port Expansion) • Purfleet Regeneration Scheme • South of West Thurrock Way/West of Euclid Way • Bradwell B Nuclear Power Station • Sizewell C Nuclear Power Station • Bramford to Twinstead Connection Project 	<p>Due to open to traffic – 2023/24</p> <p>Due to open to traffic – 2023.24</p> <p>Construction scheduled to start in early 2025</p> <p>Implementation date - varies as set out in unilateral undertaking. Dependent on passenger throughput and future need. Sustainable Development Plan published in 2015 - currently under review.</p> <p>Opened May 2022</p> <p>Land and reclamation estimated to run from January 2023 to December 2025</p> <p>Expected beyond 2023</p> <p>Open January 2021</p> <p>Construction started in 2021 - no definitive completion date</p> <p>Expect completion 2022</p> <p>Paused January 2021</p> <p>Scheme recommencement - not defined</p> <p>Construction could commence before 2024, taking between nine and twelve years.</p> <p>Expected to be fully operational in 2028</p>

Mineral Planning Authority	Major Construction Project	Comments
	<ul style="list-style-type: none"> • North Falls Wind Farm • Five Estuaries Wind Farm • East Anglia Green Energy Enablement 	<p>Expected to be fully operational by 2030</p> <p>Expected to be fully operational by 2030</p> <p>Expected to be fully operational from 2031</p>
	<p><u>Thurrock</u></p> <ul style="list-style-type: none"> • A13 Widening (A128 – Orsett Cock to A1014, The Manorway, Stanford- le-Hope, Thurrock) • London Gateway Port - Development of Employment areas (Thurrock) • Purfleet Regeneration Scheme 	<p>Completed 2022</p> <p>Ongoing, expected in 2023 or beyond</p> <p>Construction started including demolition of existing buildings, site preparation, erection of up to 3,000 residential units, and mixed use development comprising retail, employment, leisure, community, school and civic uses, relocation of railway station and new highway access.</p>
<p>Hertfordshire</p>	<ul style="list-style-type: none"> • Updates to the A602 from Stevenage to Ware • HS2 	<p>Close to completion; some finishing works continue</p> <p>September 2020 - estimated 2035/2040</p>
	<ul style="list-style-type: none"> • Three Score Site, Land South of Clover Hill Road, Norwich - Phase one 755 dwellings, Phase Two 153 dwellings • Barrack Street Development Site, Norwich - 218 dwellings 	<p>Phase one began 08/2014, Phase two began 2020. Anticipated end: 2034/35</p> <p>Start: 2020 Anticipated end: 2026/27</p>

Mineral Planning Authority	Major Construction Project	Comments
	<ul style="list-style-type: none"> • St Annes Wharf, King Street, Norwich - 437 residential units, 2128 sq m of A1, A2, A3 and D2 uses and car parking • St Crispins House, Duke Street, Norwich - 274 dwellings - Conversion of an existing office building to student accommodation containing 686 student bed spaces and communal accommodation. • Land north of Carrow Quay, Kerrison Road, Norwich - 200-250 residential flats with commercial and office space • The Nar Ouse Regeneration Area (NORA), Wisbech Road, King's Lynn - 413 dwellings • Land South of Salhouse Road, Sprowston, Norwich - 351 dwellings • Royal Norwich Golf Club, Drayton High Road, Hellesdon, Norwich - 987 dwellings and a primary school site and 1,900m² for D1/D2 community use • Land East of Holt Road, Horsford - 304 dwellings • Land at St Faiths Road, Old Catton, Norwich - 328 dwellings • White House Farm, Land at Blue Boar Lane, Sprowston, Norwich - up to 1233 dwellings including link road and primary school • Land South of Salhouse Road, Sprowston - minimum 803 dwellings and site for new primary school. • Land South of Smea Lane, Postwick, Norwich - 520 dwellings and infrastructure incl. primary school site, nursing home and retirement community • Land off Green Lane West, Rackheath, Norwich - 322 dwellings • Land East of Buxton Road, Spixworth, Norwich - 225 dwellings 	<p>Start: 04/2019 Anticipated end: 2024/25</p> <p>Start: 11/2020 Anticipated end: 2023</p> <p>Start 2014; completed in 2022/23</p> <p>Ongoing; anticipated end 2026/27</p> <p>11/2021 - beyond 2027</p> <p>2018 - beyond 2027</p> <p>03/2019 - 2024/25</p> <p>07/2019 - 2026/27</p> <p>05/2015 – 2025/26</p> <p>03/2022 - beyond 2027</p> <p>01/2023 - Beyond 2027</p> <p>05/2022 - 2026/27</p> <p>09/2022 - 2026/27</p>

Mineral Planning Authority	Major Construction Project	Comments
Norfolk	<ul style="list-style-type: none"> • Land at Manor Park, Drayton, Norwich - 267 dwellings • Land to the East of Broadland Way and to the North of the A4, Postwick, Norwich - Business park of up to 42,000 sqm of B1 and B2 uses, up to 4,500 sqm of A1, A2, A3 and A4 uses, and up to 7,500 sqm of C2, C3 • Greater Norwich Food Enterprise Zone, Red Barn Lane, Honingham, Norwich, 18.7 hectares in total. • Land West of Lodge Farm, Costessey - 495 dwellings and a primary school. • Land SW Of Newfound Farm, Cringleford - 650 dwellings • Land N of A11 & SW of Round House Way, Cringleford - 203 dwellings • Land E of A11 and N/S of Round House Way, Cringleford, Norwich - 650 dwellings • Land North of Hethersett village Phases A2 and B2 - 372 dwellings (part of a larger site for 1196 units) • N of George Lane, Loddon 200 dwellings • Land North of Shotesham Road, Poringland 236 dwellings and commercial units • Land NW Of Carpenters Farm, Wymondham 133 dwellings (part of a larger site for 350 dwellings) • Land N of the A11, Wymondham - 1219 dwellings plus care home and retail • Wymondham Rugby Club and Land West Of Elm Farm, Norwich Common, Wymondham - 300 dwellings • Land between London Road and Sutton Lane, Wymondham - 375 dwellings (in 2 phases) plus employment • Land N&S of Dereham Road, Easton - 291 dwellings (part of a larger scheme for 890 dwellings) • Site 25, Beacon Park, Bradwell, Great Yarmouth - 231 dwellings remaining to build in March 2023 	<p>2022 - 2026/27</p> <p>12/2020 - No known end date</p> <p>02/2019 – No known end date</p> <p>04/15 - 2025/26</p> <p>04/20 – 2027/28</p> <p>04/20 - 2025/26</p> <p>04/20 - 2024/25</p> <p>04/21 - 2026/27</p> <p>10/16 - 2022/23</p> <p>12/19 - 2027/28</p> <p>08/19 - 2022/23</p> <p>04/17 - 2029/30</p> <p>04/21 - 2024/25</p> <p>01/20 - 2028/29</p> <p>08/22 - 2026/27</p> <p>12/18 - Beyond 2027</p>

Mineral Planning Authority	Major Construction Project	Comments
	<ul style="list-style-type: none"> • Land East of Lowestoft Road, Lowestoft Road, Hopton, Great Yarmouth - 200 dwellings (156 units remaining to build in March 2023) • Great Yarmouth Third River Crossing • Wheatcroft Farm, Land at South Bradwell, Great Yarmouth - 850 dwellings (265 units remaining to build in March 2023) • Land at Haverscroft House Farm, London Road, Attleborough - 200 dwellings • Land at London Road, Attleborough - 375 dwellings & Employment Development • Land at Greenfields Road, Dereham - 279 dwellings (200 units remaining to build in March 2023) • Land North of Red House Norwich Road, Thetford, Croxton & Kilverstone - 343 dwellings (152 units remaining to build in March 2023) • Land north of Norwich Road, Attleborough - 327 dwellings (355 units remaining to build in March 2023) 	<p>07/21 - 2027</p> <p>01/21 - 2023</p> <p>10/2014 - 2026</p> <p>Completed in 2022</p> <p>Completed in 2022</p> <p>Under construction - 2027/28 (estimate)</p> <p>Under construction - 2026/27</p> <p>Under construction - 2031 (estimate)</p>
<p>Suffolk</p>	<ul style="list-style-type: none"> • Sizewell C • Gull Wing Bridge • Scottish offshore windfarm 	<p>Initially approved July 2022 but subject to challenge. Expected to take 12 years to complete.</p> <p>Under construction with completion expected 2023.</p> <p>Phase EA1 built; EA3 recently commenced with completion planned for 2026; EA1N consented in March 2022, currently subject to judicial review, completion planned for 2026; EA2 consented in March 2022, currently subject to judicial review, completion planned for 2026.</p>

Mineral Planning Authority	Major Construction Project	Comments
	<ul style="list-style-type: none"> • Ipswich Garden Suburb • Progress Power 	<p>Comprises 3 developments; All have commenced. Total housing being delivered is 3,654 of which at least 3,295 to be delivered by 2036.</p> <p>Construction recently commenced; aiming for completion by October 2024.</p>

Development Plans and Mineral Policies in the EEAWP Area

4.39 Table 8 below shows details of relevant minerals plans within the East of England AWP area. Table 8b shows the total volume of aggregates allocated within plans together with estimated quantities of minerals which have been permitted to date from those allocations.

Table 8: Mineral Plan Status within the EEAWP Area

Mineral Planning Authority	Mineral Plan / Development Plan Document	Document URL	Draft Plan Publication (Reg 18)	Published (Reg 19)	Submitted	Adopted	Comment on status
Bedford, Central Bedfordshire and Luton	Minerals and Waste Local Plan: Strategic Sites and Policies LDD	Development framework Central Bedfordshire Council			Aug-12	Jan-14	
Cambridgeshire and Peterborough	Minerals and Waste Local Plan	https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/adopted-minerals-and-waste-plan			Mar-20	Jul-21	
	RECAP Waste Management Design Guide (SPD)	https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/recap-waste-management-design-guide				Feb-12	
Essex, Southend-on-Sea and Thurrock	Essex Minerals Local Plan	https://www.essex.gov.uk/minerals-waste-planning-policy/minerals-local-plan				Jul-14	
	Essex Minerals Plan Review	https://www.essex.gov.uk/background-and-current-progress-with-the-minerals-local-plan-review	Feb 2024	tbc	tbc	tbc	

Mineral Planning Authority	Mineral Plan / Development Plan Document	Document URL	Draft Plan Publication (Reg 18)	Published (Reg 19)	Submitted	Adopted	Comment on status
	Thurrock Core Strategy	https://www.thurrock.gov.uk/core-strategy-local-plan/about-core-strategy				Dec-11 and Jan-15	
	Thurrock Minerals and Waste Local Plan	https://www.thurrock.gov.uk/core-strategy-local-plan/minerals-and-waste	tbc	tbc	tbc	tbc	
	Southend New Local Plan	https://www.southend.gov.uk/planning-building/southend-new-local-plan	Apr-19 – Autumn 19	Anticipated Q2 2024	tbc	tbc	
Hertfordshire	Hertfordshire Minerals Local Plan Review 2002-2016	https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/planning-in-hertfordshire/minerals-and-waste-planning/minerals-planning/minerals-planning.aspx				Mar-07	
	Emerging Minerals and Waste Local Plan	https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/planning-in-hertfordshire/minerals-and-waste-planning/local-plan.aspx	Jul-22	tbc	tbc	tbc	Plan on hold
Norfolk	Core Strategy and Development Management Policies 2010-2026 DPD	https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/minerals-and-waste-planning/core-strategy-and-minerals-and-waste-development-management-policies-development-20102026.pdf				Sep-11	To be replaced by new Minerals and Waste Local Plan

Mineral Planning Authority	Mineral Plan / Development Plan Document	Document URL	Draft Plan Publication (Reg 18)	Published (Reg 19)	Submitted	Adopted	Comment on status
	Minerals Site Specific Allocations DPD	https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/minerals-and-waste-planning/minerals-site-specific-allocations-development-plan-document.pdf				Oct-13 and revised Dec-17	To be replaced by new Minerals and Waste Local Plan
	Waste Site Specific Allocations DPD	https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/minerals-and-waste-planning/waste-site-specific-allocations-development-plan-document.pdf				Oct-13	To be replaced by new Minerals and Waste Local Plan
	Minerals and Waste Local Plan	https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/minerals-and-waste-planning/norfolk-minerals-and-waste-local-plan-publication.pdf	Aug-18	Sep-22	Expected Sept 2023	Expected autumn 2024	
Suffolk	Suffolk Minerals and Waste Local Plan	https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/suffolk-minerals-and-waste-development-scheme/				Jul-20	

Table 8b: Estimated quantity of minerals allocated in development plan

Mineral Planning Authority	Mineral Plan / DPD	Total allocated sand and gravel	Quantity from sand and gravel allocation permitted to date	Total allocated crushed rock	Quantity from crushed rock allocation permitted to date
Bedford, Central Bedfordshire and Luton	Minerals and Waste Local Plan: Strategic Sites and Policies LDD	10.07mt	5.74mt	nil	nil
Cambridgeshire and Peterborough	Minerals and Waste Local Plan	17.623mt	2.463mt	nil	nil
Essex, Southend-on-Sea and Thurrock	Essex Minerals Local Plan	40.824mt	29.32mt ²⁶	nil	nil
Hertfordshire	Hertfordshire Minerals Local Plan Review 2002-2016	18.5mt	14mt remaining ²⁷	nil	nil
Norfolk	Minerals Site Specific Allocations DPD	24.866mt ²⁸	12.08mt	1.42mt	nil
Suffolk	Suffolk Minerals and Waste Local Plan	9.3mt	0.877mt	nil	nil

²⁶ Figure corrected since 2021 annual report which included pending as well as permitted applications

²⁷ NB 7.1mt was permitted from an allocated site identified with a potential yield of 4.5mt so remaining potential yield from allocations is shown here.

²⁸ Note that the adopted DPD allocates sites with an estimated mineral resource of 27.591mt. However, a 'call for sites' for the emerging Minerals and Waste Local Plan in 2017 resulted in mineral operators promoting five of the allocated sites responding with lower mineral resource figures, which brought the total estimated mineral resource in the allocated sites down to 24.866mt.

Planning Applications in the EEAWP Area

- 4.42 Table 9 below gives details of planning applications current within the EEAWP area during 2022, together with estimates of tonnages likely to be generated by the sites permitted.
- 4.43 A number of planning permissions generating a total of 8.9mt of additional reserves of sand and gravel were granted in the East of England during 2022 with other applications for a healthy potential total of 25.1mt remaining pending as at the end of 2022. Sand and gravel tonnages generated (or pending) are as follows:
- Cambridgeshire and Peterborough: 1.083mt (with 0.796mt pending);
 - Greater Essex: 6.69mt (with 4.14mt pending);
 - Hertfordshire: (11.52mt pending);
 - Norfolk: 0.429mt (with 2.95mt pending);
 - Suffolk: 0.7mt (with 5.7mt pending).
- 4.44 The pending tonnages, if approved, will contribute towards relevant reserves and landbanks and will be included within subsequent versions of this report.

Table 9: Planning Applications (Note: permitted tonnages are shown in green whilst those pending at the end of 2022 are shown in orange.)

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
Bedford, Central Bedfordshire and Luton	Grovebury Quarry	492218 223240	Aggregate Industries	VC (to extend time period for extracting permitted reserves)	Sand	26.08.21	29.07.22	Permitted	n/a	Extraction to be completed by 31.07.26; Restoration to be completed by 31.07.27
	Luton Concrete Plant	507411 222972	Breedon	Full	Aggregate for making concrete	04.11.21	25.02.22	Permitted	An additional 50,000tpa	No end date
Cambridgeshire and Peterborough	Kennett Quarry / Landfill	568960 268703	Mick George Ltd	VC	S/G	22.12.21	31.10.22	Permitted	0	N/A
	Mepal Reservoir (aka Sutton Gault)	540471 281677	Mick George Ltd	N	S/G	29.09.21	28.07.22	Permitted	0	N/A
	Coopers Farm	545062 285192	Mick George Ltd	N	S/G	10.09.21	08.06.22	Permitted	363,000	Commencement plus 4 years
	Saxon Pit / Saxon Brickworks	525444 297162	Peter Johnsons Aggregates & Recycling Ltd	CoU	RA	22.02.21	22.04.22	Permitted		
	Mepal Reservoir (a.k.a. Sutton Gault)	540471 281677	Mick George Ltd	N	S/G	09.07.20	28.07.22	Permitted	720,000	Commencement plus 7 years
	Bridge Farm	539714 276703	Mick George Ltd	E / ET	S/G	09.08.22		Pending	(796,000)	
	Queen Adelaide Way, Ely	555871 280853	Tillicoultry Quarries Ltd	CoU	SA/RA	26.09.22		Pending		

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
	Land to the south of Royston Sewage Treatment Works, Royston	535541 242287	Mick George Ltd	New	Recycled Aggs	23.02.22		Pending	Total throughput of 75,000 tpa	
Essex, Southend on Sea and Thurrock	Orsett Quarry & Walton Hall Farm, Linford 19/01709/FUL	567223 180614	Ingrebourne Valley Ltd	E	Sand & Gravel	01.11.2019		Pending	(1.5mt)	
	Bradwell Quarry, Bradwell ESS/12/20/BTE	582814 220828	Blackwater Aggregates	E	Sand & Gravel	31.01.2020	22.06.22	Permitted	6.5mt	22.08.2034
	Land south of A1060, Chalk End, Roxwell ESS/77/20/CHL	563032 209943	HR Philpot & Son	N	Sand & Gravel	11.06.2020	01.03.22	Permitted	0.19mt	To be commenced within 3 years with development not lasting more than 8 years after commencement
	Elmstead Hall, Elmstead, Colchester	605931 225788	R W Mitchell & Sons	ET	Sand & Gravel	05.11.2021	04.02.22	Permitted	n/a	06.11.2025
	Boro Farm, Newmarket Road, Great Chesterford, Saffron Walden, CB10 1FN ESS/20/22/UTT	549977 243468	Norwood Group	N	Recycled Aggs	28.02.2022	22.07.2022	Refused	(0.075mt)	
	Colchester Quarry ESS/82/22/COL	595406, 222705	Tarmac Ltd	E	Sand & Gravel	30.08.2022	28.11.2022	Refused	n/a	
	Bulls Lodge Quarry, ESS/44/22/CHL	572843 211221	Hanson	Conditions	Sand & Gravel	16.05.2022	20.10.2022	Withdrawn	n/a	

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
	Marks Tey Brickworks, ESS/117/22/COL	591137 224251	WH Collier Ltd	R – Review of Mineral Permission	Clay / Shale	24.11.2022	23.02.2023	Pending	n/a	
	Boro Farm, Newmarket Road, Great Chesterford, Essex, CB10 1NU ESS/109/22/UTT	549945 243456	Norwood Group	N	Recycled Aggs	14.11.2022		Pending		
	Colchester Quarry ESS/31/22/COL	594951 222427	Tarmac	E	Recycled Aggs	30.03.2022		Pending but resolution to approve subject to a s106 agreement	(0.08mt)	31.10.2026
	Colemans Farm Quarry ESS/36/21/BTE	583353, 215770	Brice Aggregates	E	Sand & Gravel	01.04.2021	Jan 2023 (resolution to approve subject to s106)	Pending	(0.265mt)	
	Lufkins Farm, Frating ESS/101/21/TEN	609724 221924	Messrs S and G Poole & Wright and Mrs A Watts	N	Sand & Gravel	19.11.2021		Pending	(1.068mt)	
	Land at Martells Quarry, Slough Lane, Ardleigh ESS/29/20/TEN	604898 227986	SRC Ltd	E	Sand & Gravel	26.02.2020		Pending but resolution to grant subject to a section 106 agreement	(1.31mt)	Operations and supporting infrastructure to be removed by 30.09.41

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
Hertfordshire	Land at Hatfield Aerodrome	519837 08389	Brett Aggregates	New	S&G	Appeal submitted on 30 June 2021		Appeal refused in January 2022	(8mt)	
	Land adjoining Coopers Green Lane	518875 208516	Cemex UK Operations Ltd	E	S&G		22.10.20	Pending but resolution to approve subject to a s106 agreement	(3.52mt)	
	Land at Hatfield Aerodrome	519837 08389	Brett Aggregates	New	Sand & Gravel	03.09.21		Pending	(8mt)	
	Land to the south of Royston Sewage Treatment Works, Royston	535541 242287	Mick George Ltd	New	Recycled Aggs	23.02.22		Pending	Tonnage relevant to Cambs area as cross boundary	
	Land east of Mill Drove, Blackborough End, King's Lynn (FUL/2021/0003)	567568 315087	Middleton Aggregates Ltd	VC, ET	Carstone	03.12.21	04.03.22	Permitted (Delegated)	N/A	
	Castle Acre Quarry, Castle Acre Road, Newton, Newton by Castle Acre, PE32 2BY (FUL/2021/0034)	583565 315035	Castle Acre Quarry Limited	VC, N	Chalk, RA	25.06.21	25.01.22	Permitted (Delegated)	0.044 tpa RA	
	Land off Crab Apple Lane, Haddiscoe, NR14 6SJ (FUL/2022/0056)	643891 297279	Breedon Trading Limited	N	G	07.12.22		Pending	(0.65mt)	

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
Norfolk	Land off B1108 Norwich Road, Carbrooke (FUL/2020/0050)	595279 300806	Skillplane Ltd	N	RA	04.01.21	02.02.22	Withdrawn	(10,000 tpa)	
	Land Adjoining Longham Heath and Spreadoak Plantation, Bittering Quarry, Reed Lane, Bittering, Dereham (FUL/2021/0052)	593380 317122	Raymond McLeod (Farms) Ltd	N	RA	28.09.21	16.02.22	Permitted (Committee)	N/A	
	Kirby Cane Quarry, Leet Hill, Yarmouth Road, Kirby Cane, NR35 2HJ (FUL/2021/0050)	638079 292910	LP Pallett Quarry Ltd	N	RA	14.12.21	14.04.22	Refused	(0.05mt)	N/A
	Carbrooke Quarry, Land off Summer Lane, Carbrooke, Thetford, IP25 6TJ (FUL/2022/0013)	595047 301224	Mick George Ltd	VC, ET	S/G	13.04.22	(17.05.23)	Pending (permitted in 2023)	N/A	
	Carbrooke Quarry, Summer Lane, Carbrooke, Thetford, IP25 6TJ (FUL/2022/0012)	595272 301004	Mick George Ltd	VC, ET	S/G	13.04.22	(17.05.23)	Pending (permitted in 2023)	N/A	
	Longwater Industrial Area, William Frost Way, Costessey,	615589 311300	Longwater Gravel Company Ltd	CoE	RA	05.10.22		Pending	Not specified	

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
	NRS OJS (LDC/2022/0004)									
	Anglian Business Centre, West Carr Road, Attleborough (FUL/2020/0043)	603225 294906	Anglian Demolition & Asbestos Ltd	E, C o U	RA	14.08.20	30.09.22	Permitted (Committee)	0.075mt	
	Bittering Quarry (Plant Site), Reed Lane, Bittering, Dereham, NR19 2QS (FUL/2021/0051)	593642 317238	McLeod Aggregates Ltd	VC, ET	RA	28.09.21	16.02.22	Permitted (Committee)	N/A	
	Welcome Pit, Butt Lane, Burgh Castle, Great Yarmouth (FUL/2021/0010)	648219, 304286	Folkes Plant & Aggregate Ltd	ET	S	31.08.21	15.09.22	Permitted (Committee)	N/A	
	Attlebridge Quarry, Reephams Road, Attlebridge (C/5/2018/5004)	614621 316718	Breedon Southern Limited (BSL)	N	S/G	01.08.18	22.03.22	Withdrawn	(0.545mt)	N/A
	Park Farm, Wormegay, Kings Lynn, PE33 0SH (FUL/2021/0014)	567883 312811	Middleton Aggregates Ltd	VC, ET	S/G	20.04.21	24.05.22	Withdrawn	(0.25Mt)	N/A
	Pentney Quarry, Pentney, King's Lynn (FUL/2020/0107)	569204 312531	Middleton Aggregates Ltd	E	S/G	08.01.21	31.05.22	Permitted (Delegated)	0.24mt	31.12.28

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
	Pentney Quarry, Pentney, King's Lynn (FUL/2020/0109)	568372 313115	Middleton Aggregates Ltd	VC, ET	S/G	26.01.21	31.05.22	Permitted (Delegated)	N/A	31.12.28
	Welcome Pit, Burgh Castle (FUL/2019/0040)	648561 304338	Folkes Plant	E	S/G	06.09.19	15.09.22	Permitted (Committee)	0.189mt	31.12.36
	Earsham Quarry, land off Pheasants Walk, Earsham, Bungay (FUL/2022/0030)	631545 289270	Earsham Gravels Ltd	VC	S/G	07.07.22	20.10.22	Permitted (Delegated)	N/A	01.03.26
	Punch Farm Quarry, Litcham Road, Beeston with Bittering, King's Lynn (FUL/2022/0036)	590046 316787	EAS (Plant Hire) Limited	VC	S/G	25.08.22	22.11.22	Permitted (Delegated)	N/A	08.07.32
	Former Morningthorpe Quarry, Bungay Road, Morningthorpe, NR15 2LJ (FUL/2022/0040)	621879 294503	Richardson Recycling Ltd	VC, ET	RA	21.09.22	(31.03.23)	Pending (Permitted in 2023)	N/A	18.03.28
	Spixworth Quarry, Church Lane, Spixworth, Norwich, NR10 3PR (FUL/2020/0080)	623615 315966	Tarmac Trading Limited	VC, ET	S/G	26.10.20	N/A	Pending but resolution to approve subject to a s106 agreement (committee 23.09.22)	N/A	N/A

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
	Spixworth Quarry, Church Lane, Spixworth, Norwich, NR10 3PR (FUL/2020/0079)	623618 315965	Tarmac Trading Limited	VC, ET	S/G	26.10.20	N/A	Pending but resolution to approve subject to a s106 agreement (committee 23.09.22)	N/A	N/A
	Land south of Rawhall Lane, Beetley, Dereham, NR20 (FUL/2022/0021)	595455 318130	Longwater Gravel Company Ltd	N	S/G	14.07.22	N/A	Pending	(1.551mt)	N/A
	Oak Field, Watlington Road, Tottenhill (FUL/2021/0007)	563522 311539	Mick George Ltd	E	S/G, Clay	11.06.21	N/A	Pending	(0.75mt)	N/A
	Carbrooke Quarry, Summer Lane, Carbrooke, Thetford IP25 6TJ (FUL/2022/0011)	595407 301021	Mick George Ltd	VC, ET	S/G	13.04.22	(17.05.23)	Pending (Permitted in 2023)	N/A	09.08.27
	Larkshall Mill, Thetford Road, East Wretham, Thetford IP24 1QY (FUL/2021/0072)	592025 289124	OCO Technology Ltd	CoU	SA	01.02.22	30/09/2022	Permitted (Committee)	0.058mt	N/A (permanent)
	Cavenham Quarry	574789 271383	Allen Newport	E	S&G	16.12.2021		Pending	(2.2mt)	2046

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision / Status (as at 31 December 2022)	Tonnage	Planning permission end date
Suffolk	Barham Quarry	612116 251410	Brett Aggregates	E	S&G	11.02.2021	14.01.2022	Permitted	0.7mt	Dec-34
	Barnham Quarry	584122 279248	Mick George	E	S&G	20.10.2020	01.02.2023 (refused)	Pending	(0.4mt)	
	Belstead Quarry, Brockley Wood	611738 240311	Brockley Wood Ventures Ltd	N (allocation)	S&G	25.10.2022		Pending	(3.1mt)	
<p>Notes: Type: N – New; E – Extension; ET – extension of time; G – Greenfield; B – Borrow Pit; R – Renewal; C – Conditions pursuant; C of E – Certificate of Lawfulness; C o U – Change of Use; PD – Permitted Development; WP – Installation of water pipe; VC – variation of Condition. MINERAL: S/G Sand and Gravel; G Gravel; S Sand; B/S Building Sand; L Limestone; C/R Crushed Rock; SA Secondary Aggregates; RA Recycled Aggregates. C = confidential figure.</p>										

Local Aggregate Assessments

- 4.45 With the publication of the NPPF and MASS Guidance in 2012²⁹, DCLG (as it was then) introduced the requirement for mineral planning authorities, either individually or with other mineral planning authorities, to produce an annual local aggregates assessment. The Planning Practice Guidance now provides that the LAA should contain three elements:
- a forecast of the demand for aggregates based on both the rolling average of 10-years' sales data and other relevant local information;
 - an analysis of all aggregate supply options, as indicated by landbanks, mineral plan allocations and capacity data e.g. marine licences for marine aggregate extraction, recycled aggregates and the potential throughputs from wharves. This analysis should be informed by planning information, the aggregate industry and other bodies such as local enterprise partnerships; and
 - an assessment of the balance between demand and supply, and the economic and environmental opportunities and constraints that might influence the situation. It should conclude if there is a shortage or a surplus of supply and, if the former, how this is being addressed.
- 4.46 LAAs must also consider other relevant local information in addition to the 10-year rolling supply, which seeks to look ahead at possible future demand, rather than rely solely on past sales. Such information may include, for example, levels of planned construction and housebuilding in their area and throughout the country. Mineral planning authorities should also look at average sales over the last three years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply. This baseline assessment, together with an assessment of all supply options (including marine dredged, secondary and recycled sources), should help mineral planning authorities plan for a steady and adequate supply of aggregates.
- 4.47 In respect of the 10-year period covering the years 2013-2022, three draft LAAs have been submitted to EEAWP for consideration (by Greater Essex, Cambridgeshire and Peterborough and Hertfordshire) and comments on these have been invited from EEAWP members.
- 4.48 Table 10 summarises the position in respect of the region's LAAs covering the period 2013-2022 and shows the calculation method for the LAA rate (or 'LAA figure') for each of crushed rock and sand and gravel. Note that whilst the NPPF and PPG do not specifically use the term 'LAA rate', it is a term which is widely used in LAAs to describe the forecasted annual rate of future demand. Equivalent terminology may also describe this as the '*annual provision rate*' or '*aggregate provision rate*'. The PPG provides that: 'Aggregate landbanks should be recalculated each year. The length of the aggregate landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, divided by the annual rate of future demand based on the latest annual Local Aggregate Assessment.'

²⁹ Note that the MASS Guidance was withdrawn in March 2014 and replaced by the Planning Practice Guidance.

Table 10: Local Aggregate Assessments

Mineral Planning Authority	LAA Figure for Sand and Gravel	LAA Figure for Crushed Rock	Calculation Method
Bedford, Central Bedfordshire and Luton	1.453mtpa	C	10 year sales average
Cambridgeshire and Peterborough	2.6mtpa	C	MLP policy rates
Essex, Southend-on-Sea and Thurrock	4.45mtpa	n/a	MLP policy rates (sub-national apportionment figure)
Hertfordshire	1.16mtpa	n/a	10 year sales average (since 2021)
Norfolk	1.554mtpa	C	10 year sales average plus 10% ³⁰
Suffolk	1.077mtpa	n/a	10 year sales average

Summary

- 4.49 Sales for both sand and gravel and crushed rock are below the levels of provision anticipated within the sub-national apportionment figures (11.29mt (actual 2022 sand and gravel sales) versus 14.75 mtpa (Guideline figure) and 0.17mt (actual 2022 crushed rock sales) versus 0.5 mtpa (Guideline figure)). It remains important to consider the context of continued sales against the backdrop of a general downward trend in reserves. The Mineral Products Association, in its 10th Annual Mineral Planning Survey Report (AMPS 2022), has revealed that as of the end of 2021, the rolling 10-year average for replenishment of sand and gravel reserves was 63% whilst, for crushed rock reserves, the replenishment rate was just 52%. This position is clearly unsustainable in the long run. Caution should, therefore, continue to be exercised when assessing the position against 10 year sales figures and individual mineral planning authorities are encouraged to give careful consideration to their annual aggregate provision rates when preparing their Local Aggregate Assessments and particularly when reviewing their development plans.
- 4.50 At the end of 2022, reserves of land-won sand and gravel in the East of England stood at 116.304mt. Applying the NPPF methodology based on a rolling average of 10 year sales indicates a landbank of

³⁰ NB Assumes a 10 year sales average of 1.413mt. This is at slight variance with the 10 year sales average reported in this document owing to a disparity in reported figures for 2019 where this document relies on BGS data whilst Norfolk's LAA uses locally obtained figures.

10.2 years at the end of 2022 (116.304/11.435) down from the (corrected) landbank figure of 10.6 years recorded in 2021. Using the 10 year average sales figure methodology as set out in the NPPF indicates that all mineral planning authorities within the East of England except Hertfordshire could demonstrate sand and gravel landbanks in excess of the seven year threshold as at the end of 2022 although some authorities are drawing quite close to the 7 year minimum. Hertfordshire's sand and gravel landbank at the end of 2022 was just 4.9 years.

- 4.51 By comparison, reserves of crushed rock at the end of 2022 stood at 4.438mt continuing a fairly level trajectory of reserves recorded since 2013 with a range over the 10 year period of just 1.315mt (5.61mt in 2013 (highest figure) – 4.295mt in 2018 (lowest figure)). In terms of the overall landbank of crushed rock in the East of England, based on the rolling average of 10 year sales, a landbank of 14.4 years can be demonstrated in 2022 compared with 14.5 years in 2021.
- 4.52 New planning permissions in the East of England were granted in respect of a total of 8.9mt of aggregate (sand and gravel) in 2022. As at the year end, the collective authorities had undetermined applications proposing a total of over 25mt of additional reserves. Of these, one in Hertfordshire for 3.52mt and two in Greater Essex³¹ with a combined potential reserve of 1.58mt have resolutions to approve, subject to a section 106 agreement, whilst one in Suffolk (for 0.4mt) was refused at the start of 2023.
- 4.53 It should also be noted that the East of England is heavily dependent on imports of both sand and gravel and crushed rock, with the AMS 2019 recording that 2.3mt of sand and gravel and 8.8mt of crushed rock were imported in 2019.

5. CONCLUSIONS

- 5.1 One of the roles of the Aggregate Working Party, as set out in the PPG, is to “provide an assessment on the position of overall demand and supply for the Aggregate Working Party area, including whether, in its view, the area is making a full contribution towards meeting both national and local aggregate needs” (PPG ID: 27-073-2014-0306). The AWP does this through the preparation of a regional annual monitoring report (this document).
- 5.2 Historically, the National and Sub-National Guidelines allocated apportionments to each region to ensure that adequate aggregate supply was being provided, and the AWP's were then able to measure their aggregate supply contribution against the apportioned figures in the guidelines. However, the guidelines are now out of date. In the absence of these guidelines, beyond establishing whether the necessary landbank exists as required by the NPPF, it is difficult, particularly at a national level, to assess whether a full contribution is being met to aggregate supply, or to ensure that mechanisms are in place to ensure that additional provision is being made in a timely manner and in the right locations.
- 5.3 From the data available in the East of England, it can be established that there are a number of large-scale schemes in the pipeline that will require significant quantities of aggregates. However, it is not currently possible to establish the likely total demand for minerals required for these large scale

³¹ Greater Essex comprises three individual authorities, namely Essex, Thurrock and Southend-on-Sea.

projects, either from a lack of estimate of demand from those within the region, or in the absence of a comprehensive list of projects outside the region.

- 5.4 Accordingly, in the absence of up to date guidelines and without clear visibility on future demand, the EEAWP considers that it is presently unable to advise the NACG and DLUHC that the authorities comprising the East of England are currently making a full contribution to both local and national aggregate needs.

Appendix 1: Table showing EEAWP meeting dates in 2022, link to minutes and summary of matters discussed

Meeting date	Matters discussed	Link to minutes
25 January 2022	<ul style="list-style-type: none"> • Discussion regarding how to assess quantities of recycled and secondary aggregates; • Delays in EA permitting; • Update from DLUHC including reference to National Guidelines and AMRI and collation of data from submitted annual reports; • Feedback from annual report for 2021; • Discussion concerning status of LAAs; • Updates from MPA and BAA; • Mineral Local Plan Updates. 	https://davidjarvis.biz/east-of-england-awp/
21 June 2022	<ul style="list-style-type: none"> • Discussion concerning LAA rate and requirement to revisit this each year; • Update from DLUHC to include introduction of LURB and proposal to bring in national development management policies; • Update on 2021 data received; • Updates from MPA and BAA including publication of 'A 50 year success story for quarries and nature' and raising awareness 	https://davidjarvis.biz/east-of-england-awp/

Meeting date	Matters discussed	Link to minutes
	<p>of impending 2042 end date;</p> <ul style="list-style-type: none"> • Minerals Local Plan update and update from Crown Estate; • Reference to increasing pressure on food security. 	
15 November 2022	<ul style="list-style-type: none"> • RG on extended sick leave; • Update from DLUHC - LURB then at report stage; • First meeting of NACG in July; • Review of draft annual monitoring report; • Discussion regarding survey response rates; • Updates from MPA and BAA; • Minerals Local Plan updates; • Update from The Crown Estate. 	https://davidjarvis.biz/east-of-england-awp/

Appendix 2: Primary Aggregate Sites in 2022 (including quarries, rail depots and wharves) in the East of England

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Bedford, Central Bedfordshire and Luton	Broom South	1	Quarry	Tarmac	517298 241720	Aggregate	Active	Nov-40
	Bryants Lane / Reach Lane	2	Quarry	LB Silica Sand	492901 228365	Aggregate and silica sand	Active	Dec-41
	Cainhoe Quarry, Clophill	3	Quarry	Thomas Bros	510273 237130	Aggregate	Active	Dec-29
	Fox Corner	4	Quarry	DB Standing and Sons	492753 229125	Aggregate sand	Active	Feb-42
	Grovebury	5	Quarry	Aggregate Industries	492218 223240	Aggregate and silica sand	Active	Mineral extraction to cease by 31.07.26. Restoration to be completed by 31.07.27
	Land either side of Willington Lock	6	Quarry	Breedon Group	511527 251163	Aggregate	Active	21-Jun-24
	Eastern Way Quarry Complex (previously known as Munday's Hill, Nine Acres Quarry, Double Arches Quarry, Churchways, Checkleywood and Riddys Quarries)	7	Quarry	Aggregate Industries	494240 228383	Aggregate and silica sand	Active	Dec-31
	Potton (Myers Farm)	8	Quarry	Breedon Group	521806 250364	Aggregate	Active	Mineral extraction to cease by 25.09.24. Restoration by 25.09.25
	Sandy Heath	9	Quarry	Tarmac	520083 249225	Aggregate	Active	Dec-29
	Simpsonhill Plantation, Bedford Rd, Clophill	10	Quarry	Forterra	507923 237222	Aggregate	Active	Feb-42
	Elstow rail depot	11	Rail depot	Tarmac Trading Ltd	504108 245715	Crushed rock	Active	No end date

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Crescent Road, Luton	12	Rail depot	Cemex	509635 221448	No return provided	No return provided	No end date
	Legrave Road rail depot	13	Rail depot	Breedon Group	507621 222855	Sand	Active	No end date
Cambridgeshire and Peterborough	Little Paxton, Cambs	14	Quarry - SG	Aggregate Industries UK Ltd	519774 264521	Sand and Gravel	Active	31/12/2029
	Pode Hole Quarry, Peterborough	15	Quarry - SG	Aggregate Industries UK Ltd	526035 303142	Sand and Gravel	Active	31/12/2026 (est.)
	Thornhaugh IIB, Peterborough	16	Quarry - CR	Bullimores	505663 299479	Crushed Rock	Active	31/12/2027 (est.)
	Dimmock's Cote Quarry, Cambs	17	Quarry - CR	LKAB (previously Francis Flower Ltd)	554567 272479	Crushed Rock	Active	31/12/2035
	Must Farm Quarry (Cambridgeshire & Peterborough - cross boundary)	18	Quarry - SG	Forterra	522786 296882	Sand and Gravel	Active	31/12/2036
	Block Fen Quarry, Cambs	19	Quarry - SG	Hanson Aggregates	543591 284399	Sand and Gravel	Inactive	31/03/2016
	Needingworth Quarry, Cambs	20	Quarry - SG	Hanson UK	537792 272953	Sand and Gravel	Active	31/12/2030
	Marsh Lane, Cambs	21	Quarry - SG	Land Logical	529717 269388	Sand and Gravel	Active	21/02/2042
	Pasture House Farm, Peterborough	22	Quarry - SG	Land Logical	525114 303295	Sand and Gravel	Active	31/12/2035 (est.)
	Bridge Farm Reservoir, Holme Fen Drove, Cambs	23	Quarry - SG	Mick George Ltd	539800 276895	Sand and Gravel	Inactive	18/07/2021
	Chesterton Sidings, Cambs	24	Rail Depot - CR	Frimstone (Mick George)	547545 261160	Crushed Rock	Active	N/A

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Cook's Hole, Peterborough	25	Quarry - CR	Augean	505217 299768	Crushed Rock	Active	21/02/2042
	Coopers Farm, Langwood Fen Drove, Cambs	26	Quarry - SG	Mick George Ltd	545062 285192	Sand and Gravel	Not yet worked	31.12.27 (est)
	Kennett, Cambs	27	Quarry - SG	Mick George Ltd	569000 268760	Sand and Gravel	Inactive	30/09/2023
	Mepal Reservoirs, Cambs (ne Sutton Gault)	28	Quarry - SG	Frimstone (Mick George Ltd)	541682 282087	Sand and Gravel	Active	31/12/2024
	Mitchell Hill Farm North, Waterbeach, Cambs	29	Quarry - SG	Mick George Ltd	548163 270459	Sand and Gravel	Active	31/10/2035
	Willow Hall Farm, Haddenham	30	Quarry - SG	Mick George Ltd	525532 301929	Sand and Gravel	Not Yet Worked	None
	Witcham Meadlands Quarry, Block Fen	31	Quarry - SG	Mick George Ltd	543856 283518	Sand and Gravel	Active	31/12/2027 (est)
	Willow Hall Farm, Peterborough	32	Quarry - SG	PJ Thory	525532 301929	Sand and Gravel	Active	31/12/2037 (est).
	Block Fen Quarry II, Cambs	33	Quarry - SG	Tarmac	542500 284000	Sand and Gravel	Active	31/12/2031 & 31/12/2036
	Chesterton Sidings, Cambs	34	Rail Depot - CR	Tarmac	547545 261160	Crushed Rock	Inactive	N/A
	Maxey Quarry, Peterborough	35	Quarry - SG	Tarmac Ltd	513122 307113	Sand and Gravel	Active	None
	Ely (Railhead), Cambs	36	Rail Depot	Tillicoultry Quarries	555960 280975	Crushed Rock	Unknown	N/A
	Alresford Creek, Alresford	37	Quarry	Brett Aggregates	607182 218682	Sand & Gravel	Active	2042
	Asheldham Quarry, Southminster	38	Quarry	G&B Finch Ltd	597439 201505	Sand & Gravel	Active	2029
	Birch Quarry, Birch	39	Quarry	Hanson Aggregates	592700 219300	Sand & Gravel	Active	5 years from date of permission not yet issued

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex, Southend on Sea and Thurrock	Blackley Quarry, Great Leighs	40	Quarry	Frank Lyons Plant Services Ltd	572800 219100	Sand & Gravel	Active	2045
	Bradwell Quarry, Silver End	41	Quarry	Blackwater Aggregates	581900 221700	Sand & Gravel	Active	2022
	Brightlingsea Quarry, Essex	42	Quarry	SRC Ltd	607000 218800	Sand & Gravel	Active	2026
	Bulls Lodge Quarry, Boreham	43	Quarry	Hanson Aggregates	574600 210800	Sand & Gravel	Active	2030
	Colchester Quarry (aka Stanway Quarry)	44	Quarry	Tarmac Ltd	595400 222700	Sand & Gravel	Active	2042
	Colemans Quarry	45	Quarry	Brice Aggregates	583327 215613	Sand & Gravel	Active	2036
	Crown Quarry, Ardleigh	46	Quarry	SRC Ltd	602761 229470	Sand & Gravel	Active	2028
	Crumps Farm, Great Canfield	47	Quarry	Edviron Ltd	558400 221100	Sand & Gravel	Active	2031
	Curry Farm, Bradwell-on-Sea	48	Quarry	Dewicks	599365 205812	Sand & Gravel	Active	2023
	Elmstead Hall (aka Elmstead Reservoir)	49	Quarry	RW Mitchell & Sons	605763 225810	Sand & Gravel	Not yet commenced	Nov-24
	Fingringhoe Quarry, Fingringhoe	50	Quarry	JJ Prior Ltd	604321 221003	Sand & Gravel	Not active. Exports from stockpiles	2042. Extraction has ceased on site; exporting from stockpiled material
	Highwood Quarry, Little Easton	51	Quarry	SRC Ltd	559800 222400	Sand & Gravel	Active	2026
	Lufkins Farm, Thorrington Road	52	Quarry	Brett Aggregates	609700 222100	Sand & Gravel	Active	2024

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Martells Quarry, Ardleigh	53	Quarry	SRC Ltd	605027 228324	Sand & Gravel / Silica Sand	Active	2026
	Rayne Quarry, Essex	54	Quarry	Ingrebourne Valley	571100 222900	Sand & Gravel	Not yet commenced	Commencement required within 3 years from the approval date of ESS/19/17/BTE (by Aug 2022), cessation of extraction 13 years after commencement. Not yet commenced as at Dec 2022
	Royal Oak, Danbury	55	Quarry	Danbury Aggregates	580300 205200	Sand & Gravel	Active	2029
	Salts Green Quarry, Chalk End	56	Quarry	HR Philpot & Son	563032 209943	Sand & Gravel	Not yet commenced	Commencement required by March 2025; cessation of extraction 6 years after commencement with 2 years thereafter for restoration
	Sheepcotes, Essex	57	Quarry	SRC Ltd	571700 213700	Sand & Gravel		May-27
	St Cleres Pit, Danbury	58	Quarry	Danbury Aggregates	576355 205866	Sand & Gravel	Active	2029
	Wivenhoe Quarry (Sunnymead Extension) Wivenhoe	59	Quarry	Tarmac Ltd	605794 222627	Sand & Gravel	Not yet commenced	Commencement required within 3 years from the approval date of ESS/17/18/TEN (18 Dec 2020); cessation of extraction 19 years after commencement, with an additional 2 years for the

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
								restoration of the site. Not yet commenced as at Dec 2022
	Orsett Quarry, Stanford Le Hope, Thurrock	60	Quarry	Ingrebourne Valley	567223 180614	Sand & Gravel (Thanet Sand)	Mothballed	2042
	Dansand Quarry, Orsett, Thurrock	61	Quarry	Rio Aggregates	565158 181035	Sand & Gravel	Active	2026
	Medina Farm, Thurrock	62	Quarry	Ingrebourne Valley	557842 183968	Sand & Gravel	Active	2026
	Ballast Quay, Fingringhoe	63	Quarry/Wharf	JJ Prior Ltd	604300 221000	Sand & Gravel	Quarry Inactive. Wharf exporting until stockpiles exhausted	2042
	Port of Harwich, Parkeston	64	Wharf	Hutchinson Ports	623348 232590	Sand & Gravel	Inactive	Listed as a potential site in the MLP, not active and without end date
	Chelmsford Rail Depot	65	Rail depot	Aggregate Industries	571273 207450	Crushed rock	Active	Permanent
	Harlow Rail Depot	66	Rail depot	Aggregate Industries	547000 212200	Crushed rock	Active	Permanent
	Harlow Rail Depot	67	Rail depot	Tarmac	547000 212200	Crushed rock	Active	Permanent

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Marks Tey Rail Depot	68	Rail depot	Tarmac	591800 224000	Crushed rock	Active	Permanent
	Purfleet Rail Depot, Jurgens Road, Purfleet	69	Rail depot	Aggregate Industries	556551 177167	Crushed rock and others	Active	Permanent
	Port of Tilbury, Bulk Rail Terminal (former Freightliner terminal), Tilbury Dock, Tilbury	70	Rail depot	FM Conway	562593 176996	Marine imported sea dredged crushed rock exported by rail. Secondary aggregate	Active	Permanent
	Port of Tilbury, Berth 34	71	Rail depot	S Walsh & Sons	563178 175178	Crushed rock	Not yet active	Permanent
	CMAT rail facility, Tilbury 2, Fort Road, Tilbury	72	Rail depot	Tarmac	566186 175858	Various aggregates imported and exported by rail	Active	Permanent
	DP World, Thurrock	73	Marine wharf	Aggregate Industries	572093 181395	Aggregate	Active	Permanent
	Thurrock Marine Terminal, Oliver Close, West Thurrock	74	Marine wharf	Tarmac	557417 176960	Aggregate	Active	Permanent
	Purfleet Wharf, West Thurrock	75	Marine wharf	Hanson	557092 176953	Aggregate	Not active	Permanent
	Berth 1, Tilbury Docks, Tilbury	76	Marine wharf	Stema Shipping Ltd	563226 175637	Crushed rock and aggregate	Active	Permanent
	Berth 34, Tilbury Docks, Tilbury	77	Marine wharf	Walsh & Sons	563178 175178	Aggregate	Active	Permanent

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Tilbury 2, Fort Road, Tilbury	78	Marine wharf	Tarmac	566166 175634	Aggregate imported and exported	Active	Permanent
Hertfordshire	Thorley Hall Farm Quarry	79	Quarry	Ingrebourne Valley Ltd	548257 218294	Sand & Gravel	Active	Reservoir construction and restoration works due for completion by 30.10.24
	Tyttenhanger Quarry	80	Quarry	Tarmac Ltd	519954 203231	Sand & Gravel	Active	31.12.2032 (excluding aftercare)
	Hatfield Quarry - Symondshyde	81	Quarry	Cemex UK Ltd	520450 210500	Sand & Gravel	Active	31.12.2023
	Furze Field (extension to Hatfield Quarry)	82	Quarry	Cemex UK Ltd	520450 210500	Sand & Gravel	Not yet active	31.12.2023
	Land adjoining Coopers Green Lane (extension to Hatfield Quarry)	83	Quarry	Cemex UK Ltd	520450 210500	Sand & Gravel	Not yet active - awaiting s106	14 years after commencement
	Westmill Landfill	84	Former quarry	Biffa Waste Services Ltd	533929 215923	Sand & Gravel	Under restoration	31.12.2027
	Panshanger	85	Former quarry	Tarmac Ltd / BP Mitchell Haulage Ltd	527970 212043	Sand & Gravel	Under restoration	Within 10 years of commencement of infill: so by 28.01.2029
	Braziers	86	Former quarry	Frank Lyons Plant Services Group	534000 215300	Sand & Gravel	Under restoration	21.02.2042
	Harper Lane Rail Loop	87	Rail depot	Tarmac	515980 201590	Asphalt, readymix	Active	n/a
	Hitchin Rail Depot	88	Rail depot	Aggregate Industries UK Ltd	519600 229600	Imports limestone (mostly for SUDS) and sand & gravel (used for	Active	n/a

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
						concrete mixing)		
	Orphanage Road Rail Depot	89	Rail depot	London Concrete Ltd / Aggregate Industries UK Ltd	511060 197660	Concrete batching	Active	n/a
	Rye House Rail Depot	90	Rail depot	Tarmac	538940 209190	Crushed rock	Not active	n/a
	Langley Sidings Rail Depot	91	Rail depot	Tarmac	523980 222890	Crushed rock, asphalt, readymix	Not active	n/a
Norfolk	Holt Quarry, Ducks Hole Farm House, Hunworth Road, Holt	92	Quarry	Breedon Group	607291 337108	Sand & Gravel	Active	31/12/2030
	Punch Farm Quarry, Litcham	93	Quarry	East Anglian Stone Ltd	589988 316647	Sand & Gravel	Active	08/07/2032
	Crimplesham Quarry, Ashcraft Farm, Main Road, Crimblesham	94	Quarry	Mick George Ltd	566314 303624	Sand & Gravel	Active	30/04/2024 (northern site) and 31/12/2027 (southern site)
	Watlington Quarry Watlington Road, Tottenhill	95	Quarry	Mick George Ltd	563519 311950	Sand & Gravel	Active	31/12/2023
	Pentney Quarry, Abbey Road, Pentney, Nr King's Lynn	96	Quarry	Middleton Aggregates Ltd	568330 313119	Sand & Gravel	Active	31/12/2028
	West of Mill Drove, Blackborough End, King's Lynn	97	Quarry	Middleton Aggregates Ltd	567340 315050	carstone	Active	17/10/2026
	East of Mill Drove, Blackborough End, King's Lynn	98	Quarry	Middleton Aggregates Ltd	567340 314690	Sand & Gravel Carstone	Active	31/12/2025 & 23/01/2023

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Earsham Quarry, land off Hall Road and Pheasants Walk, Earsham	99	Quarry	Earsham Gravels Ltd	631592 288996	Sand & Gravel	Active	09/11/2040
	Kirby Cane Quarry, Yarmouth Road, Kirby Cane, Bungay	100	Quarry	The Lyndon Pallett Group Ltd	638067 292915	Sand & Gravel	Active	31/12/2025
	Carbrooke Quarry, Mill Lane, Carbrooke	101	Quarry	Mick George Ltd	594929 301229	Sand & Gravel	Active	09/08/2027
	Feltwell Quarry, Lodge Road, Feltwell, Thetford	102	Quarry	L P Pallett Quarry (Feltwell) Ltd	573885 292018	Sand & Gravel	Active	22/02/2042
	Welcome Pit, Burgh Castle, Great Yarmouth	103	Quarry	Folkes Plant & Aggregates Ltd	648454 304197	Sand, Sand & Gravel	Active	31/12/2036
	Wymondham Quarry, Stanfield Road, Wymondham	104	Quarry	Longwater Gravel Co Ltd	613715 300326	Sand & Gravel	Active	30/03/2026
	Norton Subcourse Quarry, Loddon Road, Hales	105	Quarry	Breedon Group	640107 299357	Sand & Gravel	Active	20/02/2036
	East Bilney Quarry, Rawhall Lane, East Bilney, Nr Dereham	106	Quarry	Middleton Aggregates Ltd	595090 318640	Sand & Gravel	Active	31/12/2029
	Coxford Abbey Quarry, Docking Road, Syderstone, Fakenham	107	Quarry	Longwater Gravel Co Ltd	582905 331039	Sand & Gravel	Active	20/05/2027
	Land off Mill Drove, Blackborough End, King's Lynn	108	Quarry	William George Sand and Gravel Ltd	567551 314462	Sand & Gravel	Active	31/12/2024
	Horstead Quarry, Buxton Road, Horstead	109	Quarry	Longwater Gravel Co Ltd	625223 320179	Sand & Gravel	Active	01/06/2036

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Buxton (Mayton Wood), Little Hautbois, Coltishall	110	Quarry	Mick George Ltd	624150 321444	Sand & Gravel	Inactive in 2022	31/12/2035
	Briton's Lane, Beeston Regis, Sheringham	111	Quarry	Norfolk Gravel Limited	616978 341383	Sand & Gravel	Active	31/12/2032
	Park Farm, Wormegay, King's Lynn	112	Quarry	Middleton Aggregates Ltd	567800 312900	Sand & Gravel	Inactive	13/12/2022
	Stanninghall Quarry, Norwich Road, Horstead	113	Quarry	Tarmac Trading Limited	625788 318232	Sand & Gravel	Active	31/12/2038
	Briston Stody Estate, Breck Farm, Stody	114	Quarry	Mick George Ltd	607641 333963	Sand & Gravel	Active	31/03/2026
	Bitteringham / Longham Quarry, Reed Lane, Longham, Dereham	115	Quarry	McLeod Aggregates Ltd	593264 317049	Sand & Gravel	Active	31/12/2032
	East Beckham Quarry, Holt Road, Upper Sheringham	116	Quarry	Gresham Gravel Limited	615431 340751	Sand & Gravel	Active	31/12/2031
	Snettisham Quarry, Norton Hill, Snettisham	117	Quarry	Mick George Ltd	568348 334963	Carstone	Active	04/09/2028
	Trowse Railhead, Norwich	118	Rail Heads/Depots	Tarmac Trading Ltd	624477 307236	Crushed rock	Active	N/A
	Norwich Riverside Rail Depot	119	Rail Heads/Depots	Network Rail	624304 308010	Crushed rock (limestone)	Inactive during 2022	N/A
	Brandon Rail Depot, Mundford Road, Brandon	120	Rail Heads/Depots	R J Holbrook Ltd	578509 287298	Crushed rock (limestone)	Active	N/A
	Snetterton Railhead	121	Rail Heads/Depots	Mick George Ltd (Frimstone)	601500 290130	Crushed rock (limestone)	Active	N/A
	Yeoman Wharf, Great Yarmouth	122	Marine Wharfs	Silverton Aggregates Ltd	652409 306344	Unknown	Active depot, but inactive as a wharf	N/A

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Great Yarmouth Port, Outer Harbour, South Denes Road, Great Yarmouth	123	Marine Wharfs	Stema Shipping UK Ltd	653333 304132	Crushed rock	Active	N/A
Suffolk	Cavenham Quarry	124	Quarry	Allen Newport LTD	576014 271871	Sand and gravel	Active	01.12.2053
	Worlington Quarry	125	Quarry	Mick George	569545 271732	Sand and gravel	Active	30.10.2025
	Barham Quarry	126	Quarry	Brett Aggregates Limited	613366 251572	Sand and gravel	Active	31.12.2034
	Pannington Hall	127	Quarry	Brett Aggregates Limited	614548 240173	Sand and gravel	Active	2030
	Waldringfield Quarry	128	Quarry	Brett Aggregates Limited	622886 244590	Sand and gravel	Inactive	N/A
	Layham	129	Quarry	Brett Aggregates Limited	601417 240220	Sand and gravel	Inactive	N/A
	Shrublands Quarry	130	Quarry	Brett Aggregates Limited	611890 253730	Sand and gravel	Active	31.12.2030
	Westbank Marine Wharf	131	Marine wharf	Brett Aggregates Limited	616779 243159	Sand and gravel	Inactive	N/A
	Barham Broomfield Depot	132	Rail depot / processing site	Tarmac Limited	613366 251572	Sand and gravel	Active	Indefinite, extraction finished – processing site only
	Bucklesham Quarry	133	Quarry	Tarmac Limited	625531 240494	Sand and gravel	Active	31.10.2031
	Tattingstone	134	Quarry	Shotley Holdings Ltd	612313 236423	Sand and gravel	Active	31.03.2030
Henham Quarry	135	Quarry	The Lyndon Pallett Group	645248 279063	Sand and gravel	Active	21.10.2029	

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Wangford Quarry	136	Quarry	Breedon Aggregates	647044 277524	Sand and gravel	Active	31.03.2024
	Flixton Quarry	137	Quarry	Breedon Aggregates	629629 286223	Sand and gravel	Active	30.09.2027
	Lawn Farm Quarry	138	Quarry	Aggmax	599445 262427	Sand and gravel	Active	30.09.2040
	Blood Hill	139	Quarry	JT Few	611379 248419		Inactive	n/a
	Wetherden Lawn Farm Quarry	140	Quarry	AggMax	599445 262427	Sand and gravel	Active	30.09.2040
	Hadleigh	141	Quarry	JT Few	602216 244414	Sand and gravel	Active	21.02.2042
	Barham Railhead	142	Railhead / depot	Tarmac	611888 251403	Crushed rock	Active	n/a
	Bury St Edmunds Railhead	143	Railhead / depot	Tarmac	585115 265164	n/a	Decommissioned	n/a
	Gazeley Railhead (Kentford/Higham)	144	Railhead / depot	Tarmac	571872 266987	Crushed rock	Active	n/a
	West Bank Terminal, Ipswich	145	Rail depot	Brett Aggregates	616735 243191	Marine sand and gravel	Active	n/a
	Cliff Quay, Ipswich	146	Marine wharf	Port Authority	616786 242631	Crushed rock	Active	n/a
	Hamilton Dock, Lowestoft	147	Marine wharf	Port Authority	655297 293024	Crushed rock	Decommissioned	n/a
	North Quay, Lowestoft	148	Marine wharf	Port Authority	653603 292906	Crushed rock	Inactive	n/a
	West Bank Terminal, Ipswich	149	Marine wharf	Brett Aggregates	616627 242800	Marine sand and gravel	Active	n/a

Notes:

C = Confidential figure

Status: O = Operational; NO = Non Operational, D = Dormant, C = Closed, R = Restored/Redeveloped

Appendix 3: Secondary Aggregate Sites in the East of England

Mineral Planning Authority	Site Name	Cross Reference to Figure 4	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Bedford, Central Bedfordshire and Luton	None						
Cambridgeshire and Peterborough	National Track Recycling Centre	1	Network Rail	541423, 298698	Recycled and secondary aggregate	Active	n/a
Essex, Southend-on-Sea and Thurrock	Port of Tilbury, Bulk Rail Terminal (former freightliner terminal), Tilbury Dock. Tilbury	2	FM Conway	562593, 176996	Marine imported sea dredged crushed rock exported by rail. Secondary aggregate	Inactive	Permanent
Hertfordshire	Harper Lane (Rail Loop)	3	Tarmac	515980, 201590	Recycling of demolition waste, glass and rail ballast to produce secondary aggregates	Active	n/a
Norfolk	Larkshall Mill, East Wretham	4	OCO Technology Ltd	592000 289100	Secondary aggregates produced from Air Pollution Control residue, cement, sand and CO2	Active	Permanent
Suffolk	Broomfield Pit	5	Tarmac	612200, 251500	Secondary aggregates and recycling		

Mineral Planning Authority	Site Name	Cross Reference to Figure 4	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Gazeley Secondary Aggregate Production	6	Tarmac	571889, 267193	Secondary aggregates and recycling		
	Old Chicory Factory	7	Murfitts Industries	572492, 286426	Secondary aggregates and recycling		
	Sole Bay Recycling	8	Murray Graham	649862, 276551	Secondary aggregates and recycling		
	Causeway Pit, Lakenheath	9	Sutton Services	570700, 282200	Secondary aggregates and recycling		
	Somersham Road	10	Swift Recycling	611100, 248200	Secondary aggregates and recycling		

Appendix 4: Recycled Aggregate Sites in the East of England

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Bedford, Central Bedfordshire and Luton	Blunham Recycling Facility, Land North of Barford Rd, Blunham	1	Acorn Transport and Plant Hire Ltd	513961 251625	Aggregate Recycling (plus wood, metals & soils)	Active	N/A
	Cainhoe Quarry, Ampthill Rd, Clophill	2	Thomas Bros Excavations (Luton) Ltd	510185 237562	Inert waste recycling	Active	31.12.2036
	Land adjacent Ampthill Road (A507), Beadlow	3	Winton Haulage Ltd	510293 237724	Aggregate Recycling	Active	N/A
	Unit 16, Harmill Industrial Estate, Grovebury Rd, Leighton Buzzard	4	M O'Brien Plant Hire	492251 224022	Aggregate Recycling	Active	N/A
	Heron's Farm, Mancroft Rd, Aley Green, Caddington	5	Mini One Plant Hire Ltd	506324 218662	Aggregate Recycling	Active	N/A
	Blackburn Road, Townsend Ind Est, Houghton Regis	6	Holywell Haulage Ltd	501673 223164	Materials Recycling Facility	Active	N/A
	Old Sand Quarry, Haynes West End	7	SC Bradshaw Haulage	507050 240505	Inert waste recycling	Active	N/A
	1 Covent Garden Close, Luton	8	Cawleys Waste Management	506904 223063	Materials Recycling Facility	Active	N/A
	Goosey Lodge Ind Est, Wymington, Rushden	9	Wykes Engineering	496200 263930	Waste Mgmt & Aggregate Recycling	Active	N/A
	Keysoe Road, Thurleigh	10	C Jackson and Sons	505757 259771	Transfer & Treatment	Active	N/A
	Fox Corner, Woburn Rd, Heath & Reach	11	DB Standing and Sons	492754 229163	Inert waste recycling	Active	6.3.2030 or when mineral extraction ceases
	Chiltern Green Road, East Hyde	12	Holywell Haulage Ltd	512407 218158	Aggregate Recycling & Transfer	Active	N/A

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Unit 1 Kempston Court, Manor Rd, Kempston Hardwick	13	Paul Riches Skips	503257 244202	Waste Recycling Facility & Skip Hire	Active	N/A
	G Moore Haulage, Manor Road, Kempston Hardwick	14	G Moore Haulage Ltd	503201 244292	Transfer & Recycling	Active	N/A
	Cow Close, Langford Rd, Biggleswade	15	F D O'Dell and Sons Ltd	519221 243428	Waste Transfer & Aggregate Recycling	Active	N/A
	Unit G Faldo Road, Barton Ind Est, Barton-le-Clay	16	Barton Skips	507115 231762	Waste Transfer & Treatment	Active	N/A
	Four Winds Industrial Estate	17	Wilstead Skips	507172 239910	Aggregate Recycling & Transfer	Active	N/A
	Unit 2, 250 Toddington Road	18	Three Shires Waste Recycling Ltd	504667 224998	Aggregate Recycling & Transfer	Active	N/A
	Compound A, Unit 4 Cauldwell Walk Ind Est, Bedford	19	ABSS Skips (Budget Skips)	504367 248683	Transfer & Treatment	Active	N/A
	Land South of Bedford, Cople	20	G Moore Haulage Ltd	509779 248996	Soils & Aggregates Recycling Facility	Yet to commence	N/A
Cambridgeshire and Peterborough	A11 Worsted Lodge, Cambs	21	Dockerill Groundworks Limited	552747, 251521	Recycled / secondary aggregate	Active	N/A
	Buckden Material Recycling Facility	22	Acorn Transport and Plant Hire Limited	520496, 268903	Recycled / secondary aggregate	Active	N/A
	Fengate Waste Treatment Facility	23	Mick George Limited	520287, 302329	Recycled / secondary aggregate	Active	N/A
	F C C Dogsthorpe, Peterborough	24	Construction & Environmental Services Limited	521064, 302061	Recycled / secondary aggregate	Active	N/A
	First Furlong Drove, Chatteris, Cambs	25	S R Harradine Haulage Limited	537925, 285107	Recycled / secondary aggregate	Active	N/A
	Little Paxton, Cambs	26	Eaton Tractors, Pitt Farm	518688, 263319	Recycled / secondary aggregate	Active	N/A
	St Ives Aggregates Facility, St. Ives, Cambs	27	Midland Quarry Products Limited	532125, 270772	Recycled / secondary aggregate	Active	N/A
	Mepal Soil And Aggregate Treatment Facility	28	Mick George Limited	544677, 284081	Recycled / secondary aggregate	Active	N/A

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	National Track Materials Recycling Centre	29	Network Rail Infrastructure Limited	541210, 298840	Recycled / secondary aggregate	Active	N/A
	Plantation Farm	30	D Haird & Company Limited	568281, 268710	Recycled / secondary aggregate	Active	N/A
	Rose Plant Hire Transfer Station	31	Rose Aggregates Limited	521064, 299138	Recycled / secondary aggregate	Active	N/A
	Saxon Brickworks	32	Johnsons Aggregates and Recycling Limited	525050, 297320	Recycled / secondary aggregate	Active	N/A
	St Ives Transfer Station EPR/MP3139FY	33	Mick George Limited	532120, 270780	Recycled / secondary aggregate	Active	N/A
	Dawson Recycling Facility, Swavesey, Cambs	34	Mick George Limited	536071, 296260	Recycled / secondary aggregate	Active	N/A
	Unit 2 Vicarage Farm Road, Waterbeach, Cambs	35	Bourne Skip Hire and Recycling	521181, 299348	Recycled / secondary aggregate	Active	N/A
	White Walls, Coates, Cambs	36	AmeyCespa / Frimstone	548700, 268700	Recycled / secondary aggregate	Active	N/A
	Land At Pasture House Farm	37	P J Thory Limited	531854, 298453	Recycled / secondary aggregate	Active	N/A
		38	Universal Exports 2021 Limited	525123, 303272	Recycled / secondary aggregate	Active	N/A
	Archers Fields, SS13 1DH	39	Clearaway Recycling Ltd	573638 190273	Inert/C+D	Active	Permanent
	Benfleet Scrap, SS13 1QJ	40	Benfleet Scrap Co Ltd	573852 190525	Inert/C+D	Active	Permanent
	Blunts Wall Farm, CM12 9SA	41	Littmoden Plant Hire Ltd	565725 194087	Inert/C+D	Active	Permanent
	Bob's Skips, SS13 1DG	42	Robert Michael Walker & Victoria Kathleen Walker	618706 218031	Inert/C+D	Active	Permanent
	Cohart Asbestos Disposal Limited, SS13 1DH	43	Cohart Asbestos Disposal Ltd	573647 190522	Inert/C+D	Active	Permanent
	Hovefields Court, SS13 1EB	44	T L M Management Ltd	572881 190533	Inert/C+D	Active	Permanent
	J. K. Farms, SS15 4AZ	45	J K Farms Ltd	570231 190963	Inert/C+D	Active	
	Leigh Skips Transfer Station, SS13 1DG	46	Stone - Alan M	573731 190304	Inert/C+D	Active	Unknown – not ECC Permission
	JAC YARD-BONVILLE FARM, SS12 9JQ	47	J.A.C Groundwork & Civil Engineering Ltd	577030 190350	Inert/C+D	Active	Unknown – not ECC Permission

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex, Southend on Sea and Thurrock	Neil Sullivan & Sons Recycling Centre Tennis Courts, SS12 9JQ	48	Neil Sullivan & Sons Ltd	577135 190495	Inert/C+D	Active	Unknown – not ECC Permission
	Pitsea RCHW, SS14 4UH	49	Essex County Council	573676 187079	Inert/C+D	Active	Permanent
	Terminus Drive. SS16 4UH	50	Mr James Heard & Mrs MarieHeard	573637 187574	Inert/C+D	Active	Permanent
	All Clear Skip Hire, CM7 8DL	51	W J Hedger, M W R Hedger & P W J Hedger	578036 221776	Inert/C+D	Active	Permanent
	Batemans Farm, CM3 1PU	52	G & B Finch Limited	574510 218424	Inert/C+D	Active	Permanent
	Braintree Recycling Centre for Household Waste, CM7 2YN	53	Essex County Council	574665 224359	Inert/C+D	Active	Permanent
	T & K Weavers Demolition, CO8 5DL	54	T & K Weavers Demolition Ltd	589462 234062	Inert/C+D	Active	Permanent
	Bushcade Ltd, CM4 9AY	55	Bushcade Ltd	563628 197934	Inert/C+D	Active	Unknown – not ECC Permission
	G J Bowmer (Waste Disposal) Ltd, CM13 3DT	56	G J Bowmer	559999 190415	Inert/C+D	Active	Permanent
	Unit A	57	Ferns Surfacing Ltd	559234 188583	Inert/C+D	Active	Unknown – not ECC Permission
	Heatherland Ltd, CM5 9RB	58	Heatherland Ltd, Stondon Massey	556243 201888	Inert/C+D	Active	
	Wotton Green Works, CM14 5SU	59	Skippy Grabs & Groundworks Ltd	552936 195053	Inert/C+D	Active	Unknown – not ECC Permission
	Brentwood RCHW, CM14 5PN	60	Essex County Council	557379 195593	Inert/C+D	Active	Permanent
	A A Quicksips, SS7 4PS	61	Wallace Brian	577756 189193	Inert/C+D	Active	Unknown – not ECC Permission
	Benfleet Scrap Co Ltd	62	Benfleet Scrap Co Ltd, SS7 4PS	577756 189202	Inert/C+D	Active	
	D C Donovan Group Limited, SS7 3NH	63	D C Donovan Group Ltd	578251 190340	Inert/C+D	Active	Unknown – not ECC Permission
	Essex County Skips Ltd, SS7 4PY	64	Essex County Skips Ltd	577748 189475	Inert/C+D	Active	Permanent
	PR Bates Services	65	PR Bates Services, SS7 3NH	578204 190360	Inert/C+D	Active	
Waste Transfer Station, SS8 0PQ	66	A Team Services Ltd	577550 183400	Inert/C+D	Active		

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Chelmsford Transfer & Recycling Facility, CM3 3AW	67	Biffa Waste Services Ltd	575951 210632	Inert/C+D	Active	Permanent
	Dunmow Skips Ltd, CM3 3PZ	68	Dunmow Skips Ltd	571805 211243	Inert/C+D	Active	Unknown – not ECC Permission
	S B Skip Hire, CM2 8LP	69	T D Buttlng & P J Cars & Plant Ltd	570735 200688	Inert/C+D	Active	Permanent
	Chelmsford RCHW, CM2 5PP	70	Essex County Council	573646 209121	Inert/C+D	Active	Permanent
	Sandon Quarry Recycling Facility, CM2 7RP	71	Brett Aggregates Ltd	574641 204041	Inert/C+D	Active	
	Cooks Skip Hire, CO5 7HY	72	Foster Peter	602390 221501	Inert/C+D	Active	Unknown – not ECC Permission
	Core Fusion Limited, CO2 8HT	73	Core Fusion Ltd	602250 223457	Inert/C+D	Active	Unknown – not ECC Permission
	Mason Trucking Company, CO6 1HU	74	Mason Trucking Co Ltd	588699 223065	Inert/C+D	Active	Unknown – not ECC Permission
	Tin Bins, CO4 5QY	75	Trevor John Watling, Josephine Carol Watling & Matthew John Watling	600021 231312	Inert/C+D	Active	Permanent
	Colchester RCHW, CO3 4RN	76	Essex County Council	596757 223105	Inert/C+D	Active	Permanent
	Colchester Recycling, CO3 0NN	77	Tarmac Trading Ltd	594952 222484	Inert/C+D	Active	
	Evans Thornwood, CM16 6LU	78	John Evans, Timothy Evans, Terry Evans	546824 204903	Inert/C+D	Active	Permanent
	UK Crushing & Development Ltd, CM4 0LN	79	UK Crushing & Development Ltd	558916 204601	Inert/C+D	Active	
	J & R Haulage, EN9 2RJ	80	J & R Haulage Ltd	539969 206865	Inert/C+D	Active	Unknown – not ECC Permission
	David Brown Skip Hire and Recycling, CM20 2DY	81	Brown David Romanus	546938 212401	Inert/C+D	Active	Permanent
	G B N Services Ltd, CM20 2DP	82	G B N Services Ltd	546653 212634	Inert/C+D	Active	Permanent
	Mead Park Depot, Harlow, CM20 2SE	83	H T S (Property and Environment) Ltd	545579 211896	Inert/C+D	Active	Permanent
	Roydon Lea Farm, CM19 5DU	84	R B Whitbread (Plant Hire) Ltd	542308 210614	Inert/C+D	Active	Unknown – not ECC Permission

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Harlow RCHW, CM20 2DY	85	Essex County Council	546952 212467	Inert/C+D	Active	Permanent
	Asheldham Quarry, CM0 7DZ	86	G & B Finch Ltd	597451 201569	Inert/C+D	Active	31/12/2029
	Buck Rogers Car Breakers, CM3 6EG	87	Simon John Rogers & Jeanne Melvina Rogers	592553 201714	Inert/C+D	Active	Permanent
	Park Farm	88	Clive Peter Morley, CM9 8HB	591963 215539	Inert/C+D	Active	
	Promenade Park Depot, CM9 5UR	89	Maldon District Council	586050 206200	Inert/C+D	Active	Permanent
	Green Recycling Limited, CM9 5FA	90	Green Recycling Ltd	585758 207538	Inert/C+D	Active	Permanent
	Maldon RCHW, CM9 5U	91	Essex County Council	586280 206186	Inert/C+D	Active	Permanent
	Brickfields Way Transfer Station, SS4 1NB	92	James Waste Management Llp	588227 190181	Inert/C+D	Active	Permanent
	Cottis Yard Recycling Facility, SS4 1LB	93	D D Recycling Ltd	588478 190172	Inert/C+D	Active	Permanent
	Ecologic Yard, SS4 1LA	94	G. B. N. Services Ltd	588341 190248	Inert/C+D	Active	Permanent
	Franklin Hire, SS6 9RL	95	Franklin Hire Ltd	579600 192401	Inert/C+D	Active	Assumed Permanent
	J K S Construction, SS4 1LZ	96	J K S Group Ltd	588095 189893	Inert/C+D	Active	Permanent
	Rayleigh RCHW, SS6 7QF	97	Essex County Council	580666 190186	Inert/C+D	Active	Permanent
	T J Cottis Transport, SS6 9RL	98	T J Cottis Transport Ltd	579617 192171	Inert/C+D	Active	Permanent

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Clacton Civic Amenity Site, CO16 7AD	99	Essex County Council	615596 214892	Inert/C+D	Active	Permanent
	Collect - A – Way, CO15 4LR	100	Barnett Ian Justin	618582 217925	Inert/C+D	Active	Permanent
	Collins Skip Hire, CO7 7RU	101	Shotley Holdings Ltd	604781 228216	Inert/C+D	Active	Permanent
	Crown Quarry, CO7 7QR	102	Sewells Reservoir Construction Ltd	602688 229533	Inert/C+D	Active	2028
	Eastern Waste Disposal Ltd, CO7 OSD	103	Eastern Waste Disposal Ltd	608650 218080	Inert/C+D	Active	Permanent
	Martells Quarry, CO7 7RU	104	Sewells Reservoir Construction Ltd	605060 228150	Inert/C+D	Active	2026 – subject to application determination
	Martells Yard, CO7 7RU	105	Sewells Reservoir Construction Ltd	605094 228278	Inert/C+D	Active	Permanent
	The Works - South Strand, CO11 1UP	106	Andrew William Mapes	610038 232233	Inert/C+D	Active	Permanent
	Wright Skips Environmental Ltd	107	Wright Skips, CO7 8HD	610632 218643	Inert/C+D	Active	
	Gowers Farm. CM6 1NL	108	Prince Recycling Ltd	560516 218077	Inert/C+D	Active	Permanent
	Haigh Recycling, CM6 2NN	109	Haigh Russell	559526 229161	Inert/C+D	Active	Permanent
	Home Farm, CM22 6DR	110	Essex Waste Ltd	555140 225614	Inert/C+D	Active	
	Mawkinherds Farm, CM6 1ND	111	Eco Plan Environmental Ltd	563997 218783	Inert/C+D	Active	Unknown – not ECC Permission
	Saffron Walden Recycling Centre for Household Waste, CB10 2UR	112	Essex County Council	555219 237298	Inert/C+D	Active	Permanent
	Widdington Pit, CB11 3SL	113	Widdington Recycling Ltd	552918 231094	Inert/C+D	Active	01/01/2023

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	Berth 34, RM18 7EH	114	S Walsh & Son Ltd	562967 175388	Inert/C+D	Active	
	Benfleet Scrap, RM17 6ST	115	Benfleet Scrap Co Ltd	562387, 177921	Inert/C+D	Active	Permanent
	Botany Quarry, Purfleet, RM16 0AA	116	Killoughery Waste Management Ltd	555795, 178278	Inert/C+D	Active	Subject to redevelopment of Purfleet centre
	Buckingham Hill Civic Amenity Site, SS17 OPP	117	Thurrock Council	567061 181274	Inert/C+D	Active	Permanent
	Burrows Farm Transfer Station - EPR/WP3831JT, RM14 3TL	118	Sims Environmental & Recycling Services Ltd	564510 185080	Inert/C+D	Active	n/a
	East Tilbury Quarry, RM18 8PH	119	S Walsh & Son Ltd	568688 177751	Inert/C+D	Active	Site currently in restoration
	Rainbow Shaw Treatment, SS17 OPJ	120	Clearserve Ltd	566748 180366	Inert/C+D	Active	2025
	Recycled In Orsett, RM16 3BB	121	Recycled In Orsett Ltd	565171 181136	Inert/C+D	Active	2024/25
	Seales Road Haulage Ltd, RM15 4YD	122	Seales Road Haulage Ltd	554775 179720	Inert/C+D	Active	n/a
	Unit 5 Bennett's Industrial Estate, RM16 4LR	123	Henderson & Taylor Public Works Ltd	565340 178135	Inert/C+D	Active	n/a
	Units 15/16 Juliet Way, RM15 4YA	124	Modern Skips 2014 Ltd	554622 179857	Inert/C+D	Active	Permanent
	West Thurrock Recycling and Transfer Station, RM20 3EE	125	P F Ahern (London) Ltd	557637 177043	Inert/C+D	Active	Permanent
	Leigh Marsh Civic Amenity Site, SS9 2ET	126	Veolia Environmental Services UK Ltd	583069 185668	Inert/C+D	Active	Permanent
	Plot 9, SS2 5QF	127	Hadleigh Salvage (Recycling) Ltd	587886 187715	Inert/C+D	Active	Permanent
	Stock Road Recycling Centre, SS2 5QF	128	Veolia E S (UK) Ltd	588040 187650	Inert/C+D	Active	Permanent
	Stock Road Recycling Facility, SS2 5QG	129	W & H (Roads) Ltd	587780 188107	Inert/C+D	Active	
	Land off Birchall Lane	130	BP Mitchell	527030 211480	Hard demolition	Active	n/a
	Burnside (site 1)	131	BP Mitchell	526100 210360	Builders waste and concrete batching	Active	n/a

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Hertfordshire	Burnside (site 2)	132	Peter Brother Ltd	526100 210360	Builders waste	Active	n/a
	50-52 Burrowfield	133	Ground Waste Recycling Ltd	523600 211510	Recycled hardcore	Active	n/a
	Etteridge Farm Depot	134	AH Nicholls & Sons Ltd	532533 206738	Recycled aggregates from inert waste	Active	Permanent
	The Geddings	135	Advanced Demolition Limited	538159 209204	Recycled aggregates	Active	unknown
	Envirowaste Recycling Centre (Land adjacent to B197)	136	Stevenage Skip Hire Ltd	523420 229200	Crushed concrete	Active	n/a
	Skinners Yard	137	Aggregate Industries UK Ltd t/a Express Asphalt	529825 209792	Recycled asphalt and recycled asphalt planings	Active	n/a
	Westmill II Waste Management Facility	138	Biffa Waste Services Limited	533590 215826	Recycled aggregate	Active	31/12/2027
	Winters House	139	USKIP Hire Limited	519437 231134	Recycled aggregate	Active	Permanent
	Eco Waste and Recycling Ltd	140	Eco Waste and Recycling Limited	524738 236900	Recycled aggregate	Active	Permanent
	Buttermilk Hall Farm	141	Park 'N' Load Metal Recycling Limited	534236 229423	Recycled aggregate	Active	Permanent
	Chesham Road, Wiggington	142	A G Evans Limited	494904 208273	Recycled aggregate	Active	Permanent
	Cranbourne Road Ind Estate, Potters Bar	143	Coley Limited	524343 202176	Recycled aggregate	Active	Permanent
	Holywell Hemel Hempstead	144	Holywell Haulage Limited	508103 208646	Recycled aggregate	Active	Permanent
	Kerville Properties Ltd	145	Kerville Properties Limited	511632 199258	Recycled aggregate	Active	Permanent
	Aylsham Industrial Estate, Aylsham	146	Aylsham Plant Hire Ltd	620100, 327760	Recycled aggregates	Active	Permanent
	Townlands, Harfrey's Road, Great Yarmouth	147	EE Green & Son	652049, 306153	Recycled aggregates	Active	Permanent
	Welcome Pit, Butt Lane, Burgh Castle, Great Yarmouth	148	Folkes Plant & Aggregates Limited	648143, 304273	Recycled aggregates	Active	Permanent
	Six Acres, Stone Road, Hockering, Dereham	149	Norfolk Recycling Ltd	608086, 315134	Recycled aggregates	Active	Permanent
	Rosfield, Reepham Road, Horsford, Norwich	150	Green Planet Environmental Recycling	618282, 314991	Recycled aggregates	Active	Permanent

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Norfolk	Frans Green Industrial Estate, Sandy Lane, East Tuddenham	151	Norman Wenn Ltd	609303, 313953	Recycled aggregates	Active	Permanent
	Frans Green Industrial Estate, Sandy Lane, East Tuddenham	152	Pips Skips (PL Hyde)	609475, 314001	Recycled aggregates	Active	Permanent
	Land South Of B1110, North Tuddenham, Dereham	153	Martyn J Green Ltd	604882, 313735	Recycled aggregates	Active	Permanent
	William Frost Way, Longwater Business Park, Costessey	154	Longwater Gravel Co Ltd	615815, 310706	Recycled aggregates	Active	Permanent
	William Frost Way, Longwater Business Park, Costessey	155	N R Asphalt Limited	615616, 311298	Recycled aggregates	Active	Permanent
	Harfreys Industrial Estate, Great Yarmouth	156	East Coast Waste Ltd	651855, 305611	Recycled aggregates	Active	Permanent
	East Beckham Quarry, Holt Road, Sheringham	157	Gresham Gravel Limited	615522, 340754	Recycled aggregates	Active	31.12.2031
	Browston sand pit, Cherry Lane, Browston, Great Yarmouth	158	E E Green & Son Limited	649456, 301745	Recycled aggregates	Active	Permanent
	Boundary Pit, Sandy Hills Lane, North Walsham	159	Carl Bird Limited	629064, 328265	Recycled aggregates	Active	Permanent
	Lodge Farm, Breckles, Attleborough	160	Lodge Farm Recycling Ltd	594649, 295238	Recycled aggregates	Active	Permanent
	Walnut Tree Farm, Silver Street, Besthorpe, Attleborough	161	Baldwin Skip Hire	607236, 296353	Recycled aggregates	Active	Permanent
	Lyngate Industrial Estate, North Walsham	162	Drury's Environmental Services Ltd	628047, 331347	Recycled aggregates	Active	Permanent
	Blackwater Pit, Helhoughton Road, Hempton, Fakenham	163	R N Gamble	590470, 328427	Recycled aggregates	Active	Permanent
	Snettisham Quarry, Norton Hill, King's Lynn	164	Mick George Ltd (Frimstone)	568348, 334963	Recycled aggregates	Active	04.09.2028
	Carbrooke Quarry, Summer Lane, Carbrooke	165	Mick George Ltd (Frimstone)	594929, 301229	Recycled aggregates	Active	11.02.2025
	Crimplesham Quarry, Main Road, Crimplesham	166	Mick George Ltd (Frimstone)	566314, 303624	Recycled aggregates	Active	31.12.2027
	Coxford Abbey Quarry, Docking Road, Syderstone	167	Longwater Gravel Co Ltd	582905, 331039	Recycled aggregates	Active	20.05.2027
	East Winch Quarry, East Winch Road, East Winch, King's Lynn	168	Middleton Aggregates Ltd	568412, 315288	Recycled aggregates	Active	23.01.2033

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	Ketteringham Quarry, Hethersett Road, Ketteringham	169	Middleton Aggregates Ltd	617358, 302654	Recycled aggregates	Active	31.05.2029
	East Bilney Quarry, Rawhall Lane, East Bilney	170	Middleton Aggregates Ltd	595090, 318640	Recycled aggregates	Active	31.12.2029
	Bitteringham / Longham Quarry, Reed Lane, Longham, Dereham	171	McLeod Aggregates Ltd	593264, 317049	Recycled aggregates	Active	31.12.2032
	Kirby Cane Quarry, Yarmouth Road, Kirby Cane, Bungay	172	The Lyndon Pallett Group Ltd	638067, 292915	Recycled aggregates	Active	31.12.2025
	Feltwell Quarry, Lodge Road, Feltwell, Thetford	173	L P Pallett Quarry (Feltwell) Ltd	573885, 292018	Recycled aggregates	Active	22.02.2042
	Ernest Gage Avenue, Longwater Industrial Estate, Costessey	174	R G Carter Ltd	615646, 311185	Recycled aggregates	Inactive	Permanent
	Ash Tree Farm, Acle New Road, Great Yarmouth	175	Pattisons (Anglia) Ltd	650444, 309264	Recycled aggregates	Active	Permanent
	Beeston Regis Quarry, Briton's Lane, Beeston Regis, Sheringham	176	Carter Concrete Ltd	616861, 641438	Recycled aggregates	Active	31.12.2032
	Land off Marriott Way, Melton Constable Industrial Estate, Briston	177	Morrissey Builders Ltd	604636, 332817	Recycled aggregates	Active	Permanent
	Holt Quarry, Hunworth Road, Holt	178	Breedon Trading Ltd	607237 337002	Recycled aggregates	Active	31.12.2030
	Former Morningthorpe Quarry, Bungay Road, Morningthorpe, NR15 2LJ	179	Paul Richardson Recycling Ltd	621690, 294419	Recycled aggregates	Active	18/03/2028
	Mayton Wood Quarry, Little Hautbois, Coltishall, Norwich	180	Frimstone Ltd	624150, 321444	Recycled aggregates	Inactive	31.12.2035
	Bolton Brothers Recycling Centre (MRF)	181	Bolton Brothers	612153 249700	Paper	Active	
	Shrubland Park	182	Brett Aggregates	612000 253700	Inerts.	Active	
	Sheepdrift Farm (Waldringfield)	183	Brett Aggregates	626000 244800	Not operational	Site restored	
	Sinks Pit	184	Cemex	621498 245495	CD&E	Active	
	Flixton Quarry (Site A)	185	Cemex	629800 286500	Inerts	Active	

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Suffolk	D J Spall Recycling Ltd	186	D J Spall Recycling	626551 255006	CD&E		
	Former Brickworks and Piperwork's site (Lowestoft)	187	EE Green & Son	652400 288500	CD&E		
	Malting Farm	188	HF and JT Few	611257 251806	Material reclamation facilities		
	Broomfield Pit	189	Tarmac	612200 251500	Secondary Aggregates and recycling		
	Gazeley Secondary Agg Production	190	Tarmac	571889 267193	Secondary aggregates and recycling		
	Worlington Quarry	191	M Dickerson	569410 271743	Inerts		
	Marston's Quarry	192	Middleton Aggregates	575925 271485	Inerts		
	Old Chicory Factory	193	Murfitts Industries	572492 286426	Secondary aggregates and recycling		
	Sole Bay Recycling	194	Murray Graham	649862 276551	Secondary aggregates and recycling		
	Newmarket Open Door Recycling Centre	195	Newmarket Open Door	563526 264698	Potentially closed.	Possibly closed	
	S Sacker (Claydon) Ltd	196	Sackers Recycling	612299 250377	CD&E		
	Causeway Pit, Lakenheath	197	Sutton Services	570700 282200	Secondary aggregates and recycling		
	Somersham Road	198	Swift Recycling	611100 248200	Secondary aggregates and recycling		
	Harpers Hill Farm	199	T D & A M Bugg	596400 234900	CD&E		
	Beccles Civic Amenity Site	200	Radical Waste	645143 288605			
	Chilton Grove Works	201	Wiles Contractors Limited	587917 243351			
	Lakenheath Recycling Centre, Brandon Road	202	Elveden Farms	573383 279879	CD&E		
	Claydon Skips Ltd, Masons Landfill	203	Claydon Skips	611604 250142	CD&E		
	Elrough Waste Transfer Station	204	V C Cooke	644051 288533	CD&E		
	Barton Mills Chalk Quarry	205	Needham Calks (HAM)	571059 272238	Inerts		

Mineral Planning Authority	Site Name	Cross Reference to Figure 5	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
	Falconer Road, Haverhill	206	McFitch Waste Management	568045 244553			
	Lawn Farm, Wetherden	207	Aggamx	599309 262979	Inerts		
	Chilton Concrete Recycling Facility, Chilton Airfield	208	T & K Weavers Demolition	587917 243351	CD&E		
	Holywell Row Waste Recovery Site	209	A & S Topsoils	570672 278265			
	R & D Construction Depot, Summer Road, Walsham le Willows	210	R & D Construction	599362 272131			
	Solar Farm, Gisleham	211	Ley Plant	652488 288370			
	The Control Tower (Recycling) Bentwaters	212	John Kemble	634136 252681			