

Suffolk Local Aggregates Assessment (2018 data)

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Contact

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For more information about our minerals and waste planning policy go to: <u>https://www.suffolk.gov.uk/planning-waste-and-environment/planning-applications/minerals-and-waste-policy/</u>

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1. **EXECUTIVE SUMMARY**

- 1.1 The National Planning Policy Framework (NPPF) requires that Minerals Planning Authorities, including Suffolk County Council, should plan for a steady and adequate supply of aggregates
- 1.2 Besides indigenous land-won sand and gravel, the supply of aggregates to Suffolk is made up from sand & gravel imported from surrounding counties, imported crushed rock, marine dredged sand & gravel, and indigenous and imported recycled construction, demolition & excavation waste (C, D & E waste).
- 1.3 Aggregates are vital for continued economic growth including house building. Aggregates are sold loose in an as-raised form or processed into different grades of fine and coarse aggregate, or they may be used to make concrete, mortar and asphalt or other products.
- 1.4 The issues to be taken into account in the provision of aggregates are set out in the NPPF and the Planning Practice Guidance website (PPG). This includes the preparation of a Local Aggregates Assessment (LAA) based upon a rolling average of ten years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources).
- 1.5 The draft LAA (2018 data) sets out in more detail how the demand for construction aggregates is met within Suffolk though the Submission Draft Suffolk Minerals & Waste Local Plan.

Sand & gravel summary table			
Average of last ten years sand & gravel sales	1.094 Mt	Down	
Sand & gravel landbank on 31 December 2018	10.690 Mt / 9.7 years	Down	
Shortfall in provision to 2036	9.003 Mt	Down	
Provision made in Submission Draft Plan	14.770 Mt	Same	
Likely to be worked during Plan period	12.180 Mt	Same	
Remaining safety margin	31%	Same	
Average of last three years sand & gravel sales	1.234 Mt	Up	

2. INTRODUCTION

- 2.1 PPG describes LAAs as having in summary 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, and;
 - an assessment of the balance between demand and supply.

- 2.2 The following document addresses these requirements although not in the same order.
- 2.3 Further information on the movements of aggregates based on the 2014 national collation can be viewed in the LAA (2014 & 2015 data).

3. **DEMAND & SUPPLY OVERVIEW**

- 3.1 Recycling is making an important contribution although potential further growth in use is limited by available C, D & E waste and limitations imposed by the quality of the recycled aggregates.
- 3.2 Imported crushed rock is also making an important contribution although further growth in use is uncertain due to constrains on the productive capacity of existing resources in the East Midlands, the capacity of transport infrastructure in the South West, the unfavourable currency exchange rate of resources in Europe, and the considerable demand for aggregates from projects such as HS2 and Hinkley Point C Nuclear Power Station.
- 3.3 Although there are large permitted reserves of marine dredged sand and gravel off the coast of East Anglia market forces dictate that the vast majority of this is landed in London or landed elsewhere and transported by rail to London.
- 3.4 The long-term trend is that less land-won sand and gravel is being extracted due to diminishing resources of higher quality material, planning constraints, less intensive use of aggregates in construction.
- 3.5 The general location of sand & gravel resources can be seen on the Submission Draft Suffolk Minerals & Waste Local Plan (the "Plan") Proposals map (see link below) and then look under the previous consultations tab.

https://www.suffolk.gov.uk/council-and-democracy/consultations-petitions-andelections/consultations/minerals-and-waste-local-plan-issues-and-optionsconsultation/

- 3.6 The general location of the major statutory landscape and ecological constraints is on shown on the Minerals & Waste Key Diagram of the Plan.
- 3.7 House building is often used as a proxy for forecasting the future demand for aggregates. However, housing completion rates continue to be significantly lower than Adopted Local Plan projections let alone ambitious future house building projections. Based on local authority figures, housing delivery across Suffolk is averaging at 2,228 each year. The total number of homes required to be delivered each year is around 3,000. Therefore, in order to achieve the planned number of homes, the current rate of delivery needs to increase by 35%.
- 3.8 Further information is included in a report about Local Plans that went Suffolk County Council Cabinet on the 10 October 2017 which can be viewed by following the link and then look under the evidence base tab.

https://www.suffolk.gov.uk/council-and-democracy/consultations-petitions-andelections/consultations/minerals-and-waste-local-plan-issues-and-optionsconsultation/

- 3.9 There are also number of significant infrastructure projects planned in Suffolk. However, how much aggregate will be required from local sources is unclear. Major road schemes for have in the past relied upon imported crushed rock rather than sand and gravel from local quarries or borrow pits.
- 3.10 The Sizewell C project has just undertaken a third stage of pre-application consultation. From the information provided it appears that much of the fill material would be sourced from within the main site itself. Additional quantities of fill would most likely be sourced from the Suffolk or surrounding Counties. High quality aggregates such as limestone for use on the power station and or granite for roads are not found in Suffolk and would be supplied by road, rail or indirectly by sea. Some concreting aggregates would also most likely be sourced from Suffolk and the surrounding Counties.
- 3.11 The level of detail provided in respect the amount, type and source of aggregates required is unspecific and therefore it is not possible to draw any reliable conclusions as to ability of local, regional and national reserves to supply the project. There is also still a question mark at the time of writing as to whether it will be built.
- 3.12 The Minerals & Waste Plan does not preclude non-designated sites from gaining planning permission. An early review of the Plan could be undertaken if necessary if a significant number of new sites are required within Suffolk to supply Sizewell C.
- 3.13 Further information on Nationally Significant Infrastructure Projects (NSIP) can be found by following the link provided.

https://www.suffolk.gov.uk/planning-waste-and-environment/majorinfrastructure-projects/

3.14 Having considered the methodology for forecasting the demand for aggregates based on both the rolling average of 10 years sales data and other relevant local information, especially the difficulty of assessing other local information in terms of specific demand numbers for specific projects, as well as the potential future problems that might arise that prevent one or more of the proposed sites from being developed. The approach taken has been to build in some flexibility into future provision to be made in the Plan.

4. **RECYCLED AGGREGATES**

4.1 Over the last twenty years since the introduction of the Landfill Tax there has been a marked increase in the levels of recycled aggregates being produced, mainly from Construction, Demolition & Excavation waste (CD&E).

4.2 The recently published Suffolk Waste Study 2018 (SWS) sets out in detail the levels of waste management activity within Suffolk. This can be accessed by following the link below and then looking under the evidence base tab.

https://www.suffolk.gov.uk/council-and-democracy/consultations-petitions-andelections/consultations/minerals-and-waste-local-plan-issues-and-optionsconsultation/

- 4.3 In 2015 for example the SWS indicates that there were 0.529 Mt of C, D&E waste managed within Suffolk of which over 91.4% would be recycled, giving a total figure of 0.484 Mt of recycled aggregates per annum.
- 4.4 In addition, the energy from waste facility at Gt Blakenham recycles 0.060 Mt of bottom ash from Local Authority Collected Waste (LACW) into aggregates per annum.
- 4.5 The types of facilities where recycled aggregates are produced vary from purpose built fixed installations to temporary operations on construction sites. The latter does not require planning permission separately from the County Council. Although the SWS does not indicate a specific capacity gap for aggregates recycling facilities in Suffolk, a proposal for such a facility is included at in the Plan at Cavenham Quarry.
- 4.6 If, in the future proposals for aggregates recycling facilities requiring planning permission are made, then there are criteria-based policies included within the existing and proposed minerals and waste development plan documents.
- 4.7 All permitted recycled aggregates facilities are safeguarded within the existing and proposed development plan documents from other forms of competing development.
- 4.8 The locations of recycling facilities are set out in Appendix 1.

6. **IMPORTATION OF CRUSHED ROCK**

- 6.1 Suffolk has no indigenous resources of crushed rock and therefore relies on supplies imported by road, rail or sea. Crushed rock is used primarily in the production of asphalt for road maintenance and construction due to its strength and roughness.
- 6.2 There are a number of railheads located along the A14 and wharves at Ipswich and Lowestoft used for the importation of crushed rock. There is also a wharf at Lowestoft that is used for the importation of armour stone for use in sea defence works.
- 6.3 Although it is not possible to reveal the precise tonnages of crushed rock imported due to commercial confidentiality, it is significant.
- 6.4 Generally speaking planning permission is not required for wharves or railheads handling crushed rock except where significant infrastructure is required.

- 6.5 All railheads and wharves handling crushed rock are safeguarded within the existing and proposed development plan documents from other forms of competing development.
- 6.6 The locations of aggregates rail facilities are set out in Appendix 2.

7. LANDING OF MARINE DREDGED SAND & GRAVEL

- 7.1 In terms of the so-called "Regions" along Suffolk coast there are licences for the dredging of up to 7.93 Mt of sand & gravel within the "East Coast Region" and a further 3.8 Mt within the "Thames Estuary Region" on an annual basis. Although a significant proportion of this total is dredged, the vast majority of this is landed in London, or sent to London by rail having been landed elsewhere. This is due to the lack of indigenous supplies of aggregates in London.
- 7.2 Although it is not possible to reveal the precise tonnages of marine dredged sand and gravel sold in Suffolk due to commercial confidentiality, it is not very significant compared to the overall level of licenced resources.
- 7.3 Generally speaking planning permission is not required for wharves or railheads handling sand and gravel except where significant infrastructure is required.
- 7.4 All aggregates railheads and wharves handling marine dredged sand & gravel are safeguarded within the existing and proposed development plan documents from other forms of competing development.
- 7.5 The locations of aggregates wharves are set out in Appendix 3.

8. **PROVISION OF LAND WON SAND & GRAVEL**

- 8.1 Historically sand & gravel workings have exploited good quality river terrace reserves within river valleys. The gradual exhaustion of some of these reserves coupled with increasing environmental protection has encouraged companies to exploit glacial deposits outside of the river valleys.
- 8.2 In Suffolk the sand & gravel deposits are generally sand rich so that there is a shortage of stone. Ironically the most stone rich deposits are constrained by the highest order of statutory landscape and ecological designations.
- 8.3 Suffolk has always sought to meet the sub-regional apportionment, and national guidelines in past Plans. However future provision will be based upon an average of the last ten years' sales within the Suffolk Minerals & Waste Local Plan for the following reasons:
 - a) even though the sub-regional apportionment has been progressively reduced from 2.43Mt to 1.73Mt to 1.62Mt at no time in the past ten years have sales been close to the revised national guidelines of 1.62Mt/year;

- b) the ten year average of sand and gravel sales has reduced slightly even though the average of the last three years sales has increased slightly indicating that sales have never recovered to pre-banking crisis levels;
- c) the existing National Guidelines run out in 2020 and are out of date and there is no schedule for their replacement at the time of writing;
- d) house building as a proxy has fallen dramatically short of the levels projected in Local Plans.
- e) the call on indigenous resources from existing infrastructure projects has been less than might have been expected due to the importation of crushed rock and the future call on indigenous resources is also unclear;
- f) other sources of aggregates are of varying importance in their contributions towards meeting demand and there is no dramatic change in the relevant importance anticipated at the time of writing;
- g) considerable flexibility in terms of the amount of sand and gravel resources proposed in the proposed sites is included within the Plan, and;
- h) the Plan does not preclude sites that are not proposed in the Plan being granted planning permission.
- 8.4 The average sales of sand and gravel in Suffolk for the ten years to the 31 December 2018 was 1.094 Mt. Appendix 6 shows the individual sales for the last ten years. The average of the last three years is slightly higher at 1.234 Mt.
- 8.5 The landbank of permitted sand and gravel reserves on the 31 December 2018 was 10.69 Mt.
- 8.6 If the landbank of permitted reserves is divided by the average of the last ten years' sales, this would be equivalent to 9.7 years' sales, so that in theory if the average of sales was projected forwards then all of the presently permitted reserves of sand and gravel would run out in August 2028.
- 8.7 The Plan period ends on the 31 December 2036. Therefore, the shortfall in permitted reserves is equivalent to 8.2 years or 9.003 Mt based on the 10-year average of 1.094 Mt.
- 8.8 Plan Policy MP1 states that the County Council will allocate sites containing 9.300 Mt of sand and gravel. Analysis of the submitted information in the relevant Site Assessment Reports indicates that these sites in total contain 14.770 Mt.
- 8.9 However, taking into account the proposed start dates and levels of production at new sites, it is estimated that at least 1.87 Mt of the 14.770 Mt will still remain to be worked which reduces the resources likely to be worked within the plan period to 12.900 Mt.

- 8.10 This would leave a safety margin of 31% which is not considered excessive when considering the difficulty of assessing other local information in terms of specific demand numbers for specific projects and the potential future problems that might arise that prevent one or more of the proposed sites from being developed.
- 8.11 A further reduction to the potential resources is likely due to planning constraints introduced by the Plan. This mainly relates to the requirement to safeguarding existing field boundaries within sites because of the landscape and ecological importance.
- 8.12 The Plan allocates ten sites, all but one are extensions to existing workings.
- 8.13 Planning permission is required for sand and gravel extraction. All sand & gravel workings are safeguarded within the existing and proposed development plan documents from other forms of competing development.
- 8.14 The locations of existing quarries are set out in Appendix 4.

8. **VALUE ADDED PLANTS**

- 9.1 Value added plants include concrete batching plants and asphalt plants. A large proportion of sand & gravel is used in the production of ready mixed concrete typically in the ratio of 4 parts gravel, 2 parts sand, and 1 part cement. The sand and gravel is mostly supplied by local land won sources although marine dredged sand and gravel can supplement the supply.
- 9.2 The aggregate used in asphalt is different in that the coarse aggregate is crushed rock imported by road, rail or sea.
- 9.3 Planning permission for concrete and asphalt plants is generally required although the determining authority could be either the County Council or a District Council depending on whether the plant is linked to a quarry or aggregates wharf of railhead in which case it would be the former.
- 9.4 The locations of existing concrete and asphalt plants are set out in Appendix 5.

9. **PROPOSED MONITORING OF MINERALS & WASTE PLAN**

10.1 Appendix 2 of the Submission Draft Suffolk Minerals & Waste Local Plan sets out the proposed monitoring arrangements once the Plan has been adopted. See following link and look under the previous consultations tab.

https://www.suffolk.gov.uk/council-and-democracy/consultations-petitions-andelections/consultations/minerals-and-waste-local-plan-issues-and-optionsconsultation/

10. DUTY TO COOPERATE

11.1 The duty to cooperate was created in the Localism Act 2011 and amends the Planning and Compulsory Purchase Act 2004. It places a legal duty on local

planning authorities, county councils in England and public bodies to engage constructively, actively and on an ongoing basis to maximise the effectiveness of Local Plan preparation in the context of strategic cross boundary matters.

- 11.2 Suffolk County Council as Minerals and Waste Planning Authority continues to sit on both the East of England Aggregates Working Party and the East of England Waste Technical Advisory Body. In both case the statistical basis for the provision of aggregates and the management of waste in Suffolk has been scrutinised by both bodies.
- 11.3 The statistical basis for aggregates provision within Suffolk is updated by this document. The statistical basis for waste management provision is updated by the Suffolk Waste Study 2018 which can be found by following the link provided below and looking under the evidence base tab.

https://www.suffolk.gov.uk/council-and-democracy/consultations-petitions-andelections/consultations/minerals-and-waste-local-plan-issues-and-optionsconsultation/

11.4 In addition consultation upon the Suffolk Minerals & Waste Local Plan Preferred Options took place between October and December 2017. This included with bodies subject to the duty to cooperate. Their comments have where appropriate been used to amend the proposed policies in the Submission Draft Suffolk Minerals & Waste Local Plan. Further information of the details of how these consultation responses were considered is included in the Suffolk Minerals & Waste Local Plan Preferred Options Responses to Representations document which can be found by following the link provided below.

https://www.suffolk.gov.uk/council-and-democracy/consultations-petitions-andelections/consultations/minerals-and-waste-local-plan-issues-and-optionsconsultation/

RECYCLED AGGREGATES IN SUFFOLK

Recycled aggregates facilities					
Site Number	e Number Site Name Operator		Number Site Name	Grid	d Ref
	Site Name	Operator	Easting	Northing	
1	Bolton Brothers Recycling Centre (MRF)	Bolton Brothers	612153	249700	
2	Shrubland Park	Brett Aggregates	612000	253700	
3	Sheepdrift Farm (Waldringfield)	Brett Aggregates	626000	244800	
4	Sinks Pit	Cemex & Tippers R Us	621498	245495	
5	Flixton Quarry (Site A)	Cemex	629800	286500	
6	D J Spall Recycling Ltd	D J Spall Recycling	626551	255006	
7	Former Brickworks and Pipework's site (Lowestoft)	EE Green & Son	652400	288500	
8	Malting Farm	HF and JT Few	611257	251806	
9	Broomfield Pit	Tarmac	612200	251500	
10	Gazeley Secondary Agg. Production	Tarmac	571889	267193	
11	Bay Farm Quarry, Worlington	Mick George	569410	271743	
12	Marston's Quarry	Middleton Aggregates	575925	271485	
13	Old Chicory Factory	Murfitts Industries	572492	286426	
14	Sole Bay Recycling	Murray Graham	649862	276551	

15	Newmarket Open Door Recycling Centre	Newmarket Open Door	563526	264698
16	S Sacker (Claydon) Ltd	Sackers Recycling	612299	250377
17	Causeway Pit, Lakenheath	Sutton Services	570700	282200
18	Somersham Road	Swift Recycling	611100	248200
19	Harpers Hill Farm	T D & A M Bugg	596400	234900
20	Beccles Civic Amenity Site	Radical Waste	645143	288605
21	Chilton Grove Works	Wiles Contractors Limited	587917	243351
22	Lakenheath Recycling Centre, Brandon Road	Elveden Farms	573383	279879
23	Claydon Skips Ltd, Masons Landfill	Claydon Skips	611604	250142
24	Ellough Waste Transfer Station	V C Cooke	644051	288533
25	Barton Mills Chalk Quarry	Needham Chalks (HAM)	571059	272238
26	Falconer Road, Haverhill	McFitch Waste Management	568045	244553
27	Lawn Farm, Wetherden	Aggmax	599309	262979
28	Chilton Concrete Recycling Facility, Chilton Airfield	T & K Weavers Demolition	587917	243351
29	Holywell Row Waste Recovery Site	A & S Topsoils	570672	278265

30	R & D Construction Depot, Summer Road, Walsham le Willows	R & D Construction	599362	272131
31	Solar Farm, Church Road, Gisleham	Ley Plant	652488	288370
32	The Control Tower (Recycling) Bentwaters	John Kemble	634136	252681



AGGREGATES RAILHEADS IN SUFFOLK

Railheads				
Site	Site Name	Operator	Grid Ref	
Number	Site Name		Easting	Northing
1	Barham Railhead	Tarmac	611888	251403
2	Bury St Edmunds Railhead	Tarmac	585115	265164
3	Gazeley Railhead (Kentford/Higham)	Tarmac	571872	266987
4	West Bank Terminal, Ipswich	Brett Aggregates	616735	243191



AGGREGATES WHARVES IN SUFFOLK

	Wharves					
Site	Site Name	Operator -	Grid	d Ref		
Number	One Maine		Easting	Northing		
1	Cliff Quay, Ipswich	Tarmac	616786	242631		
2	Hamilton Dock, Lowestoft	Port Authority	655297	293024		
3	North Quay, Lowestoft	Dudmans	653603	292906		
4	West Bank Terminal, Ipswich	Brett Aggregates	616627	242800		



QUARRIES IN SUFFOLK

	Sand and gravel quarries				
Site	Site Name	Operator	Gric	l Ref	
Number	One Name	operator	Easting	Northing	
1	Barham	Brett Aggregates	612116	251410	
2	Barnham	Mick George	584122	279248	
3	Cavenham	Allen Newport	574789	271383	
4	Layham	Brett Aggregates	601392	240221	
5	Tattingstone	Shotley Holdings	612162	236274	
6	Wetherden	Aggmax	599309	262979	
7	Wherstead	Brett Aggregates	613629	239761	
8	Worlington	Frimstone	569860	271290	
9	Wangford	Cemex	646395	279695	
10	Shrubland Quarry	Brett Aggregates	612000	253700	
11	Henham Quarry	The Lyndon Pallet Group	645303	279091	
12	Flixton Quarry	Cemex	629925	286424	
13	Gallows Hill Quarry	Tarmac	610470	253714	
14	Red House Farm Quarry, Bucklesham	Tarmac	625495	240481	
15	Peyton Hall Quarry	Buffalo Crow	602216	244414	

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16	Sheepdrift Farm (Waldringfield)	Brett Aggregates	626000	244800
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Chalk quarries						
Site	Site Site Name Operator Grid Ref					
Number	One Maine	Operator	Easting	Northing		
17	Barton Mills Chalk Quarry	Needham Chalks	571100	272000		



ASPHALT & CONCRETE PLANTS IN SUFFOLK

	Asphalt Plants					
Site	Site Name	Operator	Grid	l Ref		
Number	Site Name	Operator	Easting	Northing		
1	Cavenham Asphalt Plant	Breedon	574789	271383		
2	Cliff Quay, Ipswich	Tarmac	616886	241942		
3	Foxhall Asphalt Plant	Eurovia	624397	243721		
4	Gazeley Asphalt Plant (Kentford/Higham)	Tarmac	571872	266987		

	Concrete Batching Plants				
Site	Site Name	Oracratar	Grid Ref		
Number	Site Maille	Operator	Easting	Northing	
1	Beccles	C&H Quickmix	644745	288790	
2	Shrublands Quarry	Brett Aggregates	612000	253700	
3	Waldringfield Quarry	Brett Aggregates	625760	244830	
4	Flixton Quarry	Cemex	629925	286424	
5	Sir Alf Ramsey Way, Ipswich	Cemex	615288	244329	
6	Kesgrave Sinks Pit	Cemex	621498	245495	
7	Saxmundham	Cemex	641328	264363	
8	Sudbury	Cemex	588560	241494	
9	Bury St Edmunds	Eastern Concrete	583952	268693	
10	Hadleigh Road, Ipswich	Euromix	614487	245041	
11	Worlington Quarry	Hanson Heidelberg Concrete	569860	271290	
12	Hanson Concrete, Ipswich	Hanson Heidelberg Concrete	613441	256753	
13	Lawn Farm, Wetherden	Aggmax	599445	262427	



APPENDIX 6 LAST TEN YEARS SALES OF SAND & GRAVEL IN SUFFOLK



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