



**Doncaster
Council**

**Rotherham
Metropolitan
Borough Council**



Doncaster and Rotherham Local Aggregates Assessment 2022

(Incorporating 2021 Aggregates Monitoring Data)

Aggregate Working Party Ratified December 2022



Executive Summary	2
Introduction	4
The 2019 Aggregates Mineral Survey for England and Wales (published August 2021)	5
2021 Monitoring Information Doncaster and Rotherham Mineral Planning Authorities	5
Table 1. Sand and Gravel Quarries (Doncaster only)	5
Table 2. Limestone Quarries Doncaster and Rotherham 2021	6
Sand and Gravel	6
Table 3. Sand and Gravel Aggregate sales 2011 to 2021 (Mt)	6
Table 4. Reserves and Landbank of Aggregate Sand and Gravel	7
Table 5. South and West Yorkshire sand and gravel landbank	7
New Permissions for Sand and Gravel Extraction 2021	7
Table 6. New Permissions (Sand and Gravel) 2021	7
Wharves and Rail Ports	8
Crushed Rock (Limestone Aggregate)	8
Table 7. Crushed Rock Aggregate Sales 2011 to 2021 (Mt)	8
Table 8. Reserves and Landbank of Crushed Rock for Aggregate Use	9
New Permissions for Quarrying Crushed Rock Aggregate 2021	9
Wharves and Rail Ports	9
Secondary and Recycled Aggregate	9
Table 9. South Yorkshire CD&E waste arisings and management, 2020 (million tonnes)	11
Table 10. As managed CD&E waste forecast by management method up to 2041 (million tonnes per annum)	12
Secondary and Recycled Aggregate Infrastructure	13
Ancillary Minerals Infrastructure	13
Table 11. Asphalt Plants	13
Table 12. Ancillary Minerals Infrastructure	13
Road Network	13
Traffic Issues (Minerals Development)	14
Marine Aggregates	14
Assessment of Future Supply	15
Housing	15
Infrastructure Proposals	15
Are Adequate Resources Available to Meet Development Proposals	15
Local Plan Site Allocations (sand, gravel and limestone)	16
Conclusion	16
Appendix One – Planning Application Summary	i
Appendix Two - Consultation Comments	iii

Executive Summary

The requirement to produce an annual Local Aggregate Assessment (LAA) was introduced through the National Planning Policy Framework (NPPF) in March 2012. The Government then issued further guidance on the Managed Aggregate Supply System (MASS) in October 2012. National Policy requires all Mineral Planning Authorities to provide for a land bank of at least 7 years for sand and gravel and 10 years for crushed rock. This LAA aims to meet the requirements set out in both of these documents.

Sand and Gravel

The sand and gravel reserve for Doncaster in 2021 is 7.0Mt. The landbank based on ten year average sales is 18.5 years. The three year average sale landbank is 12.2 years and the fixed rate local plan annual provision landbank is 16.7 years. This is well above the seven year landbank requirement as set out in national policy, but decreasing annually.

Crushed Rock

The crushed rock (limestone) reserve (shared with Rotherham) for 2021 is 44Mt. The landbank based on ten year average sales is 21.6 years. The three year average landbank is 16.5 years and the fixed rate local plan annual provision landbank is 22 years. This is well above the ten year landbank requirement as set out in national policy, but decreasing annually.

	Performance in 2020 (Mt)	Performance in 2021 (Mt)	In comparison to previous year (Mt)
Land won sand and gravel sales (tonnes) (mostly soft sand)	0.53Mt	0.62Mt	▲
Permitted reserves of sand & gravel (tonnes) (mostly soft sand)	7.8Mt	7.0Mt	▼
Sand and gravel landbank ¹ (years) (based on ten year average sales)	23.8 years	18.5 years	▼
Sand and gravel landbank (years) (based on 3 year average sales)	13.9 years	12.2 years	▼
Sand and gravel landbank (years) (using local provision of 0.42Mt)	18.7 years	16.7 years	▼
Land won crushed rock sales (tonnes)	2.4Mt	3.2Mt	▲
Permitted reserves of crushed rock (tonnes)	48.9Mt	44Mt	▼
Crushed rock landbank ¹ (years) (based on ten year average sales)	26.9 years	21.6 years	▼
Crushed rock landbank (years) (based on 3 year average sales)	21.6 years	16.5 years	▼
Crushed rock landbank (years) (using fixed rate of 2Mt)	24.5 years	22 years	▼

¹ calculated using the previous ten year average sales figures

2021 Planning Application Summary and Status.

A summary table of the mineral planning applications for 2021 can be found in appendix one. One new application was granted for an extension to Wroot Rd Quarry for the extraction of sand and gravel. Maximum production will equate to 50,000 tonnes per year, but this is predominantly for agricultural use not aggregate. There are also four pending mineral applications outstanding from 2021.

No new aggregate mineral applications for Rotherham.

Doncaster Local Plan and Rotherham Core Strategy

Doncaster Council adopted the Local Plan at Full Council on 23 September 2021. Doncaster provides for the crushed rock, sand and gravel minerals in the South Yorkshire sub-region and Rotherham has one crushed rock site with extant permission, but this site is currently inactive. Development proposals in Doncaster including the allocation of two sites and three 'areas of search' can be found in the Doncaster Local Plan. One of the allocated Local Plan mineral sites was granted permission in December 2020. The Doncaster Local Plan allocated two sand and gravel sites, which will provide 1.9Mt² of sand and gravel. No sites are allocated in the 2014 Rotherham Core Strategy.

The 2021 landbanks show there is currently sufficient provision of crushed rock, sand and gravel, but both landbanks are decreasing annually. It should also be noted that Doncaster and Rotherham is, and will remain reliant on imports of sand and gravel from other areas to meet development needs.

Doncaster Local Plan Provision

Sand and gravel local provision = 0.42Mt per annum

Crushed rock local provision = is 2Mt per annum

Executive Summary Addendum

Monitoring returns from operators are increasingly difficult to get, with return rates for the last two years averaging just 54%. This year's Yorkshire and Humber Aggregates Working Party monitoring return and subsequent Local Aggregate Assessment therefore includes a number of estimates collected from a variety of sources including, planning application information, historic monitoring and telephone conversations with operators.

Introduction

1. The Government through the National Planning Policy Framework (February 2019) (NPPF) states 'It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation' (paragraph 203) and accordingly that "Minerals Planning Authorities (MPAs) should plan for a steady and adequate supply of aggregates..." (Paragraph 207).
2. The NPPF also states that MPAs should "so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously" (para. 204 second bullet).
3. The NPPF identifies that MPAs should prepare Mineral Local Plans (MLPs) that make provision and include policies for the extraction of mineral resource of local and national importance, define safeguarding areas, and set out environmental criteria against which planning applications will be assessed. A contribution to this plan making will be the preparation of an annual Local Aggregate Assessment (LAA). The LAA will facilitate the monitoring of supply and demand which will input into the provision needed in MLPs. This provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria. The advice of the National Aggregate Co-ordinating Group to each Aggregate Working Party should be taken into account in preparing mineral plans. Their advice is capable of being a material consideration in making decisions on individual planning applications. There is also a requirement that every Planning Authority produce an LAA, which requires ratification by the relevant Aggregate Working Party.
4. LAAs serve a number of functions, acting as:
 1. Monitoring Reports;
 2. Supporting evidence for preparation or review of Minerals Local Plans;
 3. Supporting evidence for calculation of landbanks
 4. Supporting evidence for planning applications.
5. National guidance states LAAs can be produced independently, jointly or in agreement with other Local Authorities. Doncaster and Rotherham have been identified historically by the Yorkshire and Humber Regional Aggregate Working Party (YHRAWP) as the 'South Yorkshire' sub region, due to minerals being found within the authority boundaries. The two Authorities have also consistently worked together on mineral matters. Doncaster and Rotherham are also regular attendees and contributors to the YHRAWP including the development of annual monitoring reports.
6. The 'Duty to Co-operate' found in the Localism Act, has been reiterated in the National Planning Policy Framework and minerals planning authorities are required to cooperate with neighbouring authorities to co-ordinate for a planned approach to ensure adequate minerals provision. Doncaster's Local Plan 'Statement of Common Ground' covers a wide range of Local Plan matters including minerals and is required to provide

information on the national context of duty to cooperate, strategic matters and priorities, potential impacts, organisations involved, signatories and strategic geography.

7. With regard to minerals, Doncaster’s Statement of Common Ground seeks to address the sustainable use of minerals, recognise the need for monitoring information to determine aggregate need, concerns in relation to resource depletion (specifically sharp sand and gravel / good quality concreting aggregate), sharing advice, monitoring information and cooperating on the development of local plan policies and evidence base.
8. Doncaster and Rotherham’s mineral resources include limestone for aggregate, building stone and industrial limestone. Sand and gravel is only sourced in Doncaster. For a more complete overview on mineral resources in Doncaster, please refer to the [2016 Local Aggregates Assessment](#).

The 2019 Aggregates Mineral Survey for England and Wales (published August 2021)

9. The 2019 [Aggregate Minerals Survey for England and Wales](#) (AMS) was carried out in 2020 during the pandemic and was reliant on mineral operators providing returns on line during a very tight timeframe in very unusual circumstances. Doncaster Council is of the opinion that the South Yorkshire monitoring data is not accurately represented for the year 2019. The data from the 2019 AMS is however provided below for both crushed rock, sand and gravel. AMS Table 9h (sales of primary aggregate by MPA) identifies South Yorkshire (Doncaster Council) land won sand and gravel at 0.04Mt and 1.8Mt for crushed rock. Table 10 (Imports of primary aggregates by sub-region) in 2019 identifies imports of sand and gravel at 0.4Mt and crushed rock at 1.1Mt. AMS Table 11 (Consumption of primary aggregates by sub-region) in 2019 identifies 0.45Mt of sand and gravel and 2.9Mt of crushed rock consumption for South Yorkshire.

2021 Monitoring Information Doncaster and Rotherham Mineral Planning Authorities

10. This section of the report provides an overview of existing extraction operations, aggregate sales, reserves and landbanks for monitoring year 2021.
11. In 2021, the extraction of sand and gravel was taking place at the sites identified in table 1 below.

Table 1. Sand and Gravel Quarries (Doncaster only)

Quarry Name	Owner / Operator	Status (2021)
Austerfield Quarry	Hanson Quarry Products Europe Ltd	Active
Armthorpe Quarry	(Yorkshire Aggregates) - 15/03012/MINA	Active (no return)
Dunsville (Lings) Quarry	Breedon Aggregates)	Active
Blaxton Quarry	Vigo Group	Inactive (no plans for extraction) (material transfer site)
Partridge Hill (High Common Lane, Austerfield)	Misson Sand and Gravel	Active

Quarry Name	Owner / Operator	Status (2021)
58's Road.	North Lincs' Aggregates	Active ³ (no return)
Land On The North Side Of Bank End Road. Finningley	North Lincs' Aggregates	Active (no return)
Old Bawtry Road Finningley	Misson Sand and Gravel	Active
Dale Pit Lakes	John Holt and Sons	Active (no return)
Wroot Road Quarry	Yorkshire Horticultural Ltd	Active (Part time) producing sand for agriculture (no return)

12. In 2021, the extraction of crushed rock (limestone) was taking place at the sites identified in table 1 below.

Table 2. Limestone Quarries Doncaster and Rotherham 2021

Quarry Name	Owner / Operator	Status (2021)
Glen Quarry ⁴ (Stainton)	Marshalls Natural Stone	Active
Holme Hall Quarry (Stainton)	Breedon Aggregates	Active
Barnsdale Bar (Part in Doncaster)	Darrington Quarries	Active until 2028 (North Yorkshire)
Sutton Field Quarry	Darrington Quarries	Awaiting restoration
Harrycroft Quarry (Rotherham)	Tarmac	Inactive (Permission granted until 31 December 2031)
Cadeby Quarry	Owner - Tarmac Leaseholder / Operator (as of 2012) Grants Precast Ltd	Inactive (aggregate) Active (non-aggregate) (no return)
Hazel Lane Quarry	Cat Plant Ltd	Active (no return)
Warmsworth Quarry	Sibelco	Active (Industrial mineral and Aggregate)

Sand and Gravel

13. Table 3, below shows the previous eleven year's sand and gravel production figures for 2011 to 2021. The 2019 data has not been used to calculate the landbank for 2021 due to limited monitoring data received during the Covid pandemic.

Table 3. Sand and Gravel Aggregate sales 2011 to 2021 (Mt)

Year	2011	2012	2013	2014 ⁵	2015	2016	2017	2018	2019 ⁶	2020	2021
Doncaster	0.14	0.14	0.15	0.14	0.4	0.5	0.6	0.6	0.31	0.5	0.6

14. Table 4 overleaf shows landbank levels over the last eleven years. It excludes 2019 data and includes the year 2011. The landbank⁷ is shown based on ten year average sales, three year average sales (to identify short term fluctuations in supply) and the fixed annual provision identified in the adopted Doncaster Local Plan. In all scenarios the landbank for 2021 is well above seven years as required by national policy. See executive summary (page 2 of this document).

³ Worked out and being restored (source of information – site visit)

⁴ Glen Quarry is operational for the production of aggregates, but is exhausted from a reserve perspective. The raw materials for Marshalls' aggregate production comes from the adjacent Holme Hall Quarry.

⁵ Figure comes directly from the '2014 Aggregates Mineral Survey for England and Wales'

⁶ Figure comes directly from the '2019 Aggregates Mineral Survey for England and Wales'

⁷ Ten year average sales = 0.38Mt, three year average sales = 0.57Mt, and Local Plan fixed rate = 0.42Mt

Table 4. Reserves and Landbank of Aggregate Sand and Gravel

Year	Sand and Gravel			Landbank (yrs) based on Local Plan fixed annual provision (0.42Mt)
	Reserve (Mt)	Landbank (yrs) (based on 10 year average sales)	Landbank (yrs) (based on 3 year average sales)	
2011	5.7	10		
2012	5.7	12.8		
2013	4.1	11.5		
2014	2.3	7.6		
2015	4.2	14.5		
2016	8.8	29.3		
2017	5.6	18.1	11.2	13.33
2018	5.6	17	9.8	13.33
2019				
2020	8.1	24.6	14.3	19.3
2021	7	18.47	12.21	16.67

15. The Yorkshire and Humber Aggregate Working Party Annual Monitoring 2019 report identifies reserves of sand and gravel in South Yorkshire are still made up of 80% soft sand deposits. The combined South and West Yorkshire Landbank as identified in the 2019 AWP annual monitoring report is identified below in table 5.

Table 5. South and West Yorkshire sand and gravel landbank

	Landbank as at 31.12.2017	Permitted reserves as at 31.12.2018	3 year average sales	10 year average sales	Landbank as at 31.12.2018
South & West Yorkshire	15.67 years	6.2mt	0.69mt	0.42mt	14.8years

New Permissions for Sand and Gravel Extraction 2021

16. New permissions for sand and gravel extraction are identified in table 6 below. There was no addition to the sand and gravel reserve as a result of the approved applications below.

Table 6. New Permissions (Sand and Gravel) 2021

Application	Site Name	Operator	Detail	Decision
21/00025/MIN	Wroot Rd Quarry	Doncaster Property Trade (Leased to Freeland Horticulture)	Change of use of part of the existing corrugated steel building and erection of a conveyor in connection with the 24 hour operation of a Compost Oversize Processing Plant. (without compliance with condition (18) of planning application 12/00393/MIN granted on 27/03/2013 - (Variation of Condition 18 relating to permission 12/00393/MIN	Approved. 24.03.2021.

Application	Site Name	Operator	Detail	Decision
			(continued 24-hour operation of part of the existing corrugated steel building for use as a Compost Oversize Processing Plant))	
21/01379/MIN	Wroot Rd Quarry	Doncaster Property Trade (Leased to Freeland Horticulture)	The extraction of sand and gravel as an extension to existing quarry (without compliance with condition 4 of planning application 03/0875/P granted on 22.07.2004 -The extraction of minerals)	Approved. 21.10.2021

Wharves and Rail Ports

17. There are no wharves or rail ports associated with sand and gravel production in Doncaster

Crushed Rock (Limestone Aggregate)

18. Magnesian Limestone (Dolomite) is the only aggregate rock type sourced and worked in the Doncaster and Rotherham area. Appropriate quality limestone aggregate (produced at Stainton Quarry) is increasingly being used to replace depleted sharp sand and gravel reserves for concrete products. Table 7 below shows the crushed rock aggregate sales between 2011 and 2021.

Table 7. Crushed Rock Aggregate Sales 2011 to 2021 (Mt)

	2011	2012	2013	2014 ⁸	2015	2016	2017	2018	2019 ⁹	2020	2021
Doncaster and Rotherham	1.0	1.1	1.2	2.1	2.4	2.6	2.0	2.4	2.4	2.4	3.2

19. Table 8 below shows landbank levels over the last eleven years. The 2019 data has not been used to calculate the landbank for 2021 due to limited monitoring data being received during the pandemic. The landbank¹⁰ is shown based on ten year average sales, three year average sales (to identify short term fluctuations in supply) and the fixed annual provision identified in the adopted Doncaster Local Plan. In all scenarios, the landbank for 2021 is well above ten years as required by national policy, but it should be noted the reserve is decreasing over time.

⁸ Figure comes directly from the '2014 Aggregates Mineral Survey for England and Wales'

⁹ Figure comes directly from the '2019 Aggregates Mineral Survey for England and Wales'

¹⁰ Ten year average sales (crushed rock) = 2.0Mt, three year average sales = 2.7Mt, and Local Plan fixed rate = 2.0Mt

Table 8. Reserves and Landbank of Crushed Rock for Aggregate Use

Year	Limestone (Crushed Rock)			Landbank (yrs) based on Local Plan fixed annual provision (2Mt)
	Reserve (Mt)	Landbank (yrs) (based on 10 year average sales)	Landbank (yrs) (based on 3 year average sales)	
2011	61.2	26.7		
2012	60	28.9		
2013	59.5	31.3		
2014	57.6	32.5		
2015	56.6	32.5		
2016	52.1	30.1		
2017	51.7	30.2	22.5	25.85
2018	53.3	31.4	23.2	26.65
2019				
2020	48.9	26.9	21.6	24.5
2021	44.00	21.57	16.5	22

New Permissions for Quarrying Crushed Rock Aggregate 2021

Application	Site Name	Operator	Detail	Decision
No new permissions				

Wharves and Rail Ports

20. No change, please refer to [2016 Local Aggregates Assessment](#) paragraphs 29 to 32 for detail.

Secondary and Recycled Aggregate

21. Recycled Aggregate, which includes inert materials such as concrete, stone, brick and other similar materials, are reprocessed materials previously used for construction purposes and which are often taken from the Construction, Demolition and Excavation (CD&E) waste stream. Secondary aggregates are usually by-products of industrial processes and can include materials such as clay, ash and slag.

22. The use of secondary and recycled materials not only reduces the requirement for new production of primary aggregate, but also reduces the need for disposal to landfill of CD&E waste materials. National Policy recognises the role of secondary and recycled materials as an alternative to primary aggregate.

23. Data on secondary and recycled aggregate production and use is variable and incomplete. The reason being some sites operate under license and can be monitored but much recycling and re-use occurs on individual construction sites and is temporary in nature and does not produce data. The Environment Agencies Waste Data Interrogator is used to identify the amount of CD&E waste produced and handled within each Waste Authority.

24. The [Barnsley, Doncaster and Rotherham Joint Waste Plan](#) (adopted in early 2012) identifies and safeguards a range of waste facilities across three boroughs to maximise recycling, divert waste from landfill and create a range of 'green' jobs. It deals with all varieties of waste including construction, demolition and excavation waste (CDEW).
25. Given the information contained in the 2012 plan is increasingly out of date the South Yorkshire Authorities commissioned an up-to-date Waste Needs Assessment (WNA) covering all four South Yorkshire Authorities.
26. The [2022 South Yorkshire Waste Needs Assessment](#) identifies the South Yorkshire Waste Planning Authorities jointly produce just under 3Mt of various waste types per annum, of this 1.3Mt is Construction, Demolition and Excavation waste (CD&E).
27. CD&E waste refers to waste materials that arise from the construction or demolition of buildings and/or civil engineering infrastructure, including hard construction and demolition waste, and excavation waste (and soils). Hard construction and demolition waste may include concrete, bricks, tiles, bituminous mixtures, railway ballast, and mixtures of the various components. Excavation waste may include clean and contaminated soil, stone, and rocks arising from land levelling, filling, and/or general foundations. The majority of this type of waste is made from inert materials such as concrete, rubble, and soils. A small proportion of CD&E waste is non-inert materials such as wood, metals, and plastic that can be managed via non-hazardous waste treatment facilities. CD&E waste may also include hazardous waste materials such as lead, asbestos, liquid paints, oils, etc. CD&E waste contains a high proportion of recyclable materials.
28. The Waste Needs Assessment identifies a local estimate based on data derived from Environment Agency (EA) databases and Defra 2021 UK statistics. Waste operator returns are available through the EA Waste Data Interrogator (WDI) and Incinerator Returns databases. It is widely acknowledged that a significant proportion of total CD&E waste arisings are reused on site or at exempt sites; this unseen capacity is not captured through the EA databases.
29. Estimated waste arisings derived from EA databases and Defra 2021 were compared in the WNA for the purpose of sensitivity testing. The national CD&E waste arising estimate (Defra 2021) acknowledges that a significant percentage of construction and demolition waste arisings are managed or reused on-site, or at exempt sites, and that this management capacity is unseen; this is also acknowledged in the NPPG . This may go some way to explaining the variance between estimated as managed and total CD&E arisings reported through surveys and the EA databases; with that reported through the EA databases forming the portion managed at permitted waste management facilities and the remainder being the portion managed or reused on-site, or at exempt sites.
30. In the absence of any more accurate local data, the figures derived from the EA databases are taken to form the best available data regarding CD&E waste requiring management at permitted facilities for which South Yorkshire, as WPAs, are responsible for. The Defra 2021 estimates are taken to form the estimated total CD&E waste arisings. The difference between the estimated total CD&E waste arisings and the actual as managed arisings is assumed to make up the unseen arisings managed either on site or at exempt sites; this accounts for, on average, about half of the estimated total CD&E

arisings which is quite high however may also reflect that the national estimates are not made for the purpose of drilling down to WPA level. The method applied reflects that the national CD&E arising estimates are not designed to be drilled-down to a local level and helps to avoid localised inaccuracies.

31. The national **Defra estimates** were extrapolated forward using a growth profile based annual dwelling completions (considered to reflect construction output), and has been taken as the estimated total CD&E waste arisings; producing a figure of **2.308 Mt** for 2020. The figure derived from the **EA database** is taken to form the **as managed portion** in the WNA, at **1.319 Mt for 2020**. This methodology accords with national policy and guidance and is reflective of approaches applied to recent WNAs in surrounding regional and WPA areas. This methodology provides for a consistent approach whilst giving consideration to local circumstances. CD&E waste generated within South Yorkshire and management methods are summarised in the table below.

Table 9. South Yorkshire CD&E waste arisings and management, 2020 (million tonnes)

South Yorkshire - Total		2.308
South Yorkshire - As managed		1.319
Barnsley		0.259 (20%)
Doncaster		0.321 (24%)
Rotherham		0.122 (9%)
Sheffield		0.617 (47%)
Preparation for reuse and recycling	Materials recycling	0.226 (17%)
	Composting	0.001 (<1%)
	Inert recycling	0.234 (18%)
Other treatment and recovery	Treatment and energy recovery	0.023 (2%)
	Soil treatment	0.078 (6%)
	Inert recovery (includes deposit of inert waste associated with the restoration of permitted mineral extraction sites)	0.656 (50%)
Disposal	Disposal to inert landfill	<0.001 (<1%)
	Disposal to non-hazardous landfill (including SNRHW)	0.100 (8%)

32. CD&E waste management is subject to commercial contracts that determine current and future management methods and rates. This information is not available to the council and the ability of the council to directly influence such matters is limited, however a similar range of legislative and market drivers (including the Aggregates Levy) are acting on operators to divert waste from landfill.
33. Targets for CD&E waste are limited to that set out in the Waste Framework Directive (WFD) requiring recovery of at least 70% of C&D wastes by 2020 (excluding naturally occurring material defined in category EWC 170504 – non-hazardous soils and stones), including backfilling operations using waste to substitute other materials. Current as managed arisings indicate that EWC 170504 wastes account for around two-thirds of CD&E waste as managed. Of other CD&E wastes the majority is processed for reuse and recycling or otherwise recovered achieving a total recovery of around 95%; exceeding the WFD target.
34. For the purpose of the South Yorkshire WNA targets for CD&E waste were identified: for EWC 170504 – maintaining current rates of 95% recovery and a maximum 5% disposal to landfill from 2021 onwards; and for other wastes (excluding EWC 170504 wastes) –

increasing to 95% recovery by 2030 with a maximum 5% disposal to landfill, this target builds on the existing WFD target and management rates. The proposed targets are based on overall recovery and disposal rates as this approach is considered to allow for flexibility regarding market demands and commercial contracts.

35. The South Yorkshire WNA made assumptions in preparing the CD&E waste forecasts:

- Growth in CD&E waste is tied to construction and/or demolition projects and so does not continually grow year-on-year.
- Dwelling stock forecasts indicate general construction activity likely to take place and may therefore reflect waste generation.
- Impact of, and recovery from, Covid-19 will see a decrease in construction output (including associated waste arisings), gradually recovering over a period of 5+ years.
- Current recycling and recovery rates will not decrease.
- Application of targets was achieved by applying an even graduation from three-year average rates (2018 to 2020) up to the full target rate (applied at the target year e.g. 2030).
- There is a significant quantity of CD&E waste that is reused on-site or at exempt sites and this will continue to be the case.
- Waste recorded at intermediate facilities (i.e. waste transfer stations) is subsequently managed, and accounted for, at other waste management facilities (e.g. MRF, treatment, landfill, etc.).
- Waste recorded through intermediate facilities identified as transfer/treatment (either in the WDI or permitted by the WPA for transfer and materials recycling), has been captured under materials recycling at a rate of 25% (unless stated otherwise and informed by site-specific information) of the recorded tonnage in order to reflect that the facility involves some form of preparation for reuse and/or recycling.

Table 10. As managed CD&E waste forecast by management method up to 2041 (million tonnes per annum)

South Yorkshire – As managed	2021	2026	2031	2036	2041
Barnsley	0.249	0.360	0.374	0.374	0.374
Doncaster	0.308	0.292	0.303	0.303	0.303
Rotherham	0.117	0.180	0.186	0.186	0.186
Sheffield	0.592	0.698	0.725	0.725	0.725
Waste hierarchy level and broad management method					
Preparation for reuse and recycling					
Materials recycling	0.247	0.299	0.311	0.311	0.311
Inert recycling	0.199	0.243	0.254	0.254	0.254
Composting	<0.001	<0.001	<0.001	<0.001	<0.001
Treatment and other forms of recovery					
Treatment and energy recovery	0.018	0.022	0.023	0.023	0.023
Soil treatment	0.062	0.075	0.079	0.079	0.079
Inert recovery[^]	0.640	0.794	0.842	0.842	0.842
Disposal					
Non-hazardous landfill (including SNRHW)	0.100	0.095	0.078	0.078	0.078

Inert recovery includes deposit of inert waste associated with the restoration of permitted mineral extraction sites.

36. The BDR Waste plan is still the adopted plan for Doncaster and Rotherham. The Key outcomes are:

- The bulk of CDEW will continue to be used close to the point of origin

- Developers and contractors will voluntarily provide a waste management plan setting out how the waste generated from the site will be managed during the construction and lifetime of the project (see WCS7)
- The boroughs have sufficient capacity to deal with any inert CDEW during the life of the plan, and;
- Colliery spoil and minerals waste will be dealt with through individual core strategies

Secondary and Recycled Aggregate Infrastructure

37. All waste management sites (with extant permission) for South Yorkshire are identified in appendix two of the South Yorkshire Waste Needs Assessment.

Ancillary Minerals Infrastructure

38. The quarry industry is supported by a variety of infrastructure. A number of screening, production, processing and handling facilities are located in Doncaster and Rotherham. See tables 11 and 12 below:

Table 11. Asphalt Plants

Name	Owner / Operator	Location	Status	Notes
Express Asphalt	Aggregate Industries	Doncaster	Active	Asphalt sand sourced from Dunsville Quarry
Steelphalt	Harsco	Rotherham	Active	

Table 12. Ancillary Minerals Infrastructure

Company	Location	Type Of Infrastructure
Hanson UK	Auckley	Concrete Production Handling & Processing
	Rossington	Concrete Production
Marshalls plc	Stainton	Concrete Products, Batching & Processing
Tarmac	Kirk Sandall	Concrete Batching
	Wath-upon-Deerne Aston	Cement works (Ready Mix)
Aggregates-R-us (former Tarmac site)	Finningley	Handling & Processing
Aggregate Industries	Kirk Sandall	Handling & Processing
Network Rail	Ten Pound Walk	Rail aggregate recycling handling and transport
Doncaster Council	Carcroft	CDW / aggregate recycling handling and transport
Hope Construction	Canklow	Cement works (Ready Mix)
Cemex	Parkgate	Cement works (Ready Mix)

39. The Doncaster sites in tables 11 and 12 above are safeguarded in the adopted Doncaster Local Plan. The Rotherham sites in tables 11 and 12 above are safeguarded in the adopted Rotherham Sites and Policies document. There is no information available relating to site capacity.

Road Network

40. The major road network used for the transport of minerals in and around Doncaster and Rotherham consists of:

- A1M and A1 (major north – south route) and the M18 leading to the M180 and the M62 (the east – west route)
- M1 – (west and south of Rotherham)

- A614 – Bawtry to Thorne (located in the vicinity of Doncaster’s sand and gravel extraction area links to the A638, and M180 via the A18)
- A638 – Wakefield to Bawtry through Doncaster centre (north –south)
- A19 – Doncaster to Selby
- A630 – Sheffield, Rotherham, Doncaster, to the M18
- A57 – Sheffield to Worksop (through Rotherham)
- A631 – Sheffield to Bawtry
- A629 – Chapletown
- A633 – Barnsley; and
- A6195 – Dearne Valley Parkway.

41. The Doncaster Local Plan states all proposals including minerals will be required to provide a technical assessment of the transport impacts using the most up-to date guidance, policy and best practice. Transport plans will continue to be required and the plans will deal with detailed routing, off-site parking, hours of movement, considerate driving and complaints procedure and will be incorporated into pre-application discussions and/or planning agreements. These requirements are also found in the National Planning Practice Guidance.
42. Rotherham’s Core Strategy 2013-2028 (adopted September 2014) and Sites and Policies document (adopted June 2018) require proposals to make adequate arrangements for sustainable transport infrastructure, and take into account good practice guidance including that relating to transport assessments. They also promote improvements to the freight network and the transfer of freight from road to canal.

Traffic Issues (Minerals Development)

43. Nationally road transport equates for 90% of aggregate mineral movement, with rail representing 9% and waterways only 1%. Quarrying activities result in heavy goods vehicle (HGV) traffic. Exceptions include quarries located near to navigable waterways or rail depots, Cadeby quarry is the only quarry in Doncaster next to a navigable waterway. Nearly all of the South Yorkshire sub region’s minerals are transported by road. HGV traffic can have adverse environmental impacts such as noise, air pollution, vibration, dust and road safety hazards for pedestrians, cyclists and other vehicles. Lorries also produce carbon emissions, which contribute toward global warming. To minimise the impacts associated with HGV traffic the use of rail and water for the transportation of minerals is encouraged in the currently adopted Doncaster Local Plan. It should be noted from the outset that currently the potential for increasing the sustainable transportation of minerals is locally very limited. The Doncaster Local Plan states mineral development proposals will be supported where all impacts are addressed and appropriately mitigated in accordance with policies in the Local Plan, national policy and planning practice guidance.

Marine Aggregates¹¹

44. Marine aggregates are not currently a consideration for Doncaster and Rotherham. On a positive note, both authorities are well connected in terms of navigable waterways as noted in the 2016 Local Aggregates Assessment.

¹¹ A brief summary of the conclusions of the 2014 Marine Aggregates study can be found in paragraph 14 of the 2015 LAA. For reserves and resources see paragraph 50 of the 2016 LAA

Assessment of Future Supply

Housing

45. The Doncaster Local Plan identifies Doncaster will deliver 15,640 new homes over the plan period 2018 – 2035 at an annual rate of 920 net units per annum (Policy 2).
46. Rotherham's adopted Core Strategy Policy CS6 'Meeting the Housing Requirement' identifies a total requirement of 14,371 homes between 2013 and 2028. This includes the provision to address shortfall in delivery between 2008 and 2013 and equates to an annual requirement of 958 homes. Sites to meet this requirement are now allocated in the adopted Sites and Policies document. Following a review, a partial update of the Core Strategy is underway which will include housing policies. However, the update is in its early stages and no new housing target has been set.
47. The combined Doncaster and Rotherham housing requirement is currently identified as 1878 homes per year for both plans.

Infrastructure Proposals

48. It is difficult to quantify what impact infrastructure proposals will have on mineral reserves. Full details of the infrastructure development proposals for Doncaster can be found in the [Doncaster Infrastructure Delivery Plan](#) (updated in 2019). Details of Rotherham's infrastructure requirements are set out in Appendix A of the adopted Rotherham Core Strategy 2014 and the Infrastructure Delivery Study 2020 update. The Doncaster Local Plan¹² contains some 68 housing allocations (47 with permission, 21 without permission) and 3 potential development sites. There are also five employment allocations ranging from 8.5 ha to 69 ha and one potential employment site. Doncaster Local Plan, policy 12 confirms support for infrastructure proposals at 5 locations around the borough, which will impact on mineral requirements. All Local Plan allocations and proposals will have an impact on mineral requirements to a greater or lesser degree and more minerals will be needed to meet additional Local Plan allocations and proposals. Doncaster and Rotherham will continue to be dependent on imports as well as locally produced aggregate to deliver development and infrastructure proposals. Paragraph 14.45 of the Doncaster Local Plan also identifies a 27% uplift on previous levels of mineral extraction will be necessary to meet allocation requirements for South Yorkshire.

Are Adequate Resources Available to Meet Development Proposals

49. The landbanks for crushed rock (shared with Rotherham), sand and gravel are well above that required by national policy. See paragraphs 14 and 19 of this document.
50. The Doncaster Local Plan was adopted by Full Council in September 2021. It identifies a fixed Local Plan annual provision of 0.42Mt per annum for sand and gravel and 2Mt per annum for limestone (crushed rock). To deliver Local Plan proposals South Yorkshire will however, be dependent on these resources and other aggregate resources including sand and gravel imports from Nottinghamshire, Lincolnshire and the East Riding.
51. A separate Local Plan evidence base document 'Forecasting the Demand for Aggregate 2019'¹³ evidences the supply requirements. It identifies that Doncaster produces and exports the aggregate minerals to other authorities within the South and West Yorkshire sub-regions and will continue to do so, should conditions allow. The evidence base

¹² Base date 2018

¹³ A copy of the 'Forecasting the Demand for Aggregate' evidence base document can be obtained by emailing localplan@doncaster.gov.uk

paper identifies (in 2019) South Yorkshire will require approximately 3.7Mt of combined sand, gravel and crushed rock aggregate annually to meet with combined Local Plan proposals. This is approximately 27% more than previous annual consumption. Doncaster also exports aggregate to the West Yorkshire market, which will require approximately 4.4Mt per annum to meet Local Plan proposals. South Yorkshire will continue to be dependent on imports from other areas to meet development proposals set out in Local Plans.

Local Plan Site Allocations (sand, gravel and limestone)

52. The Doncaster Local Plan allocates two sand and gravel sites, which will provide an additional 1.9Mt¹⁴ of sand and gravel. The Local Plan also identifies three sand and gravel 'Areas of Search'¹⁵. These areas are Doncaster's best options to provide the required quality and quantity of aggregate mineral with the least impact on local amenity and environment. These areas contain mineral resources but additional borehole information (provided by mineral operators) will be needed to confirm the level of sharp sand and gravel as part of the planning application process. No additional sites or areas of search have been allocated for Limestone (crushed rock). Please note one Local Plan allocation (MIN17) Bank End Quarry (20/01219/MINA) was granted permission on 08/12/20, with operations to cease 08/12/29 and restoration to be finalised in 2031.
53. Rotherham's Core Strategy does not allocate any mineral sites.

Conclusion

54. The NPPF requires that all planning authorities calculate their own landbanks and apportionments (local need) and ensure full use is made of recycled materials where appropriate. It goes on to say the Local Aggregate Assessment is to be based on 10 year average sales and other relevant information. Doncaster and Rotherham will continue to do this as part of the requirement to undertake an annual review and produce a Local Aggregate Assessment. The LAA will also identify a comparable landbank based on 'local provision' as identified in the Doncaster Local Plan. It should be noted that other relevant information including the level of reserve and evidence identifying a depleted sharp sand and gravel resource are also important factors when considering Doncaster's ability to continue to provide mineral long term.
55. National policy requires that a landbank of at least seven years for sand and gravel and ten years for crushed rock should be maintained. The landbank in Doncaster has been calculated on ten year average sales, three year average sales and on a fixed rate of 0.42Mt for sand and gravel and 2Mt for crushed rock. The landbanks identified in tables 4 and 8 show in all scenarios the aggregate landbank for 2021 is well above that required by national policy, but reserves are declining annually.
56. In terms of Local Plan requirements, (Local Need) Doncaster can provide for 8Mt of sand and gravel during the Doncaster Local Plan period. This is derived from a 5.6Mt existing reserve, 1.9Mt of allocations in the Local Plan. This equates to an average output of 0.42Mt of sand and gravel until the end of the plan period 2035. In terms of crushed rock the Doncaster Local Plan requirement will equate to approximately 2Mt per annum.
57. Rotherham Council's Cabinet approved commencement of a partial update of the Local Plan Core Strategy in July 2019. An updated Local Development Scheme setting out the timetable for the partial update was approved by the Council's Cabinet in December

¹⁴ 335,000 tonnes – Johnson Field; 1,550,000 tonnes – Land at Grange Farm

¹⁵ identified using BGS data and mineral assessment reports

2019. The scope will include a consideration of housing and employment land requirements. In respect of minerals, it will also include consideration of moving towards a net zero carbon approach, recognising the continuing challenges of climate change, and reducing reliance on fossil fuels.

58. For further information please contact either:

Authority	Contact Name	Telephone No.
Doncaster Council	Helen McCluskie	01302 734874
Rotherham Council	Andy Duncan	01709 823830

Appendix One – Planning Application Summary

Name	Operator	Application Number	Details	Note
Wroot Rd Quarry	Doncaster Property Trade ((owner) site leased to Freeland Horticulture))	21/00025/MIN	Change of use of part of the existing corrugated steel building and erection of a conveyor in connection with the 24 hour operation of a Compost Oversize Processing Plant. (without compliance with condition (18) of planning application 12/00393/MIN granted on 27/03/2013 - (Variation of Condition 18 relating to permission 12/00393/MIN (continued 24-hour operation of part of the existing corrugated steel building for use as a Compost Oversize Processing Plant))	Granted 24.03.2021.
Holme Hall Quarry	Breedon Southern Ltd - FAO Mr Ben Ayres	21/00433/MIN	Review of old mineral permissions (including an environmental impact assessment and proposed conditions) for the extraction of limestone and subsequent restoration to a mixture of woodland, grassland, agriculture and waterbodies with footpaths and bridleways (Being variation of conditions 1, 2 and 38 of 16/01220/REVA granted on 28.05.2018 to include proposals for a new restoration scheme and a new end date of 11th June 2035 for mineral extraction, processing and dispatch operations).	Pending
Dale Pit Quarry	John Holt - Dale Pitt Aggregates	21/00534/MIN	Application for the extraction of sand and gravel and the restoration of the land to a landform suitable for nature conservation and ancillary activities together with	Pending

Name	Operator	Application Number	Details	Note
			the consolidation of Planning Permission 18/01656/MIN.	
Wroot Rd Quarry	Doncaster Property Trade	21/01379/MIN	The extraction of sand and gravel as an extension to existing quarry (without compliance with condition 4 of planning application 03/0875/P granted on 22.07.2004 - The extraction of minerals)	Granted - 21.10.2021
Wroot Rd Quarry	Doncaster Property Trade	21/01380/MIN	Application for determination of conditions for mineral site/mining site in respect of planning permission ref N/20/15 for sand and gravel extraction and erection of washing plant under the requirements of The Environment Act 1995 (Being variation of condition 7 of planning application 97/1156/P granted on 09.10.1997	WDN... see app above.
Great North Rd, Rossington	Robinson And Rowley Ltd	21/02493/MIN	Formation of new access to Bawtry Road for extraction of grit, sand and gravel - DRAFT	Pending.
North Of Holme Hall Quarry Holme Hall Lane Stainton Doncaster DN12 1QB	Breedon Southern Ltd	21/00398/MINA	Proposed northerly extension of the quarry workings into around 31.6ha of land to include mineral extraction; in-pit primary processing and transfer of mineral to plant site.	Pending.

Appendix Two - Consultation Comments

Consultation comment	Response
<p>Hi Helen Thanks for the opportunity to comment on the Doncaster and Rotherham LAA draft. The only comment I would make on behalf of Marshalls is in relation to Glen Quarry. It might be worth clarifying in the document that whilst Glen Quarry is operational from a production of aggregate perspective, it is exhausted from a reserve perspective. As you are aware, the raw materials for Marshalls' aggregate production comes from Breedon's adjacent Holme Hall Quarry. Many Thanks. Kind Regards Lee Weatherall</p>	<p>Clarified in footnote 4.</p>
<p>Hi Helen, We have the following comments to make regarding the Doncaster and Rotherham LAA: In the addendum to the Executive Summary, the LAA discusses the difficulties MPAs are experiencing in monitoring returns from minerals operators. With this issue having regularly been raised in meetings of the Yorkshire and Humber and Aggregates Working Party, we agree with this position. In Paragraph 51 of the LAA, the LAA mentions that Doncaster exports aggregate minerals to West Yorkshire. The most recent West Yorkshire LAA notes this and we agree with the assessment. It may also be worth noting that based on the 2014 and 2019 AM Surveys, the West Yorkshire LAA indicates that the tonnage of sand and gravel produced in Doncaster and then consumed in West Yorkshire has increased from 3,861 tonnes to 25,630 tonnes. In the same period, the percentage has increased from 0.55% to 5.5% which indicates that West Yorkshire has become more dependent on aggregates produced in Doncaster.</p> <p>Best wishes, Nick Reeves BA (Hons) MA MSc MRTPI Planner Planning Policy & Strategy Economy & Infrastructure - Planning & Development Kirklees Council</p>	<p>Having looked through the 2021 West Yorkshire LAA at paragraphs 4.1.11, 4.1.12 and table TAB16, much like yourself I am cautious of putting these indicative figures in the Doncaster and Rotherham LAA. The figures are not only a 'snapshot' in time, but estimates derived from a source not intended to be broken down to this level of detail. It may be the case that West Yorkshire is more dependent on sand and gravel derived from Doncaster, but to determine this better monitoring is required, which as you know needs mineral operators to provide us with improved and accurate monitoring.</p>

Consultation comment	Response
<p>Hi Helen and Frances,</p> <p>Hope you're well, thanks for the draft version.</p> <p>The only comment that I would make would be a reference to the 'need/quality' information submitted as part of planning application 21/00398/MINA at Holme Hall.</p> <p>I understand that LAA's tend to follow very similar formats/templates to provide a broad indicator of landbanks, supply and demand, but it is beneficial to take account of quality and productive capacity in ensuring a steady and adequate supply to accord with the NPPF.</p> <p>Thank you, Kris Furness Regional Land & Mineral Resources Manager Breedon Northern</p>	<p>The pending application is noted in the Appendix One of this document.</p> <p>The need/quality information I requested for application 21/00398/MINA contains sensitive information which you asked to be redacted before publishing. I have emailed the Planning Officer to check on progress. In the mean time I'll look at where to add a note on the importance of good quality aggregates in the LAA. It won't be specific to your application though.</p> <p>Kind regards Helen</p>
<p>No comments from a North Lincs perspective. Regards, James</p>	<p>No response required</p>