



Local Aggregate Assessment for Shropshire

**Prepared by Shropshire Council and Telford & Wrekin
Council**

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Contents

Executive Summary	3
Overview	3
Future Demand	3
Future Supply	5
Balance Between Demand and Supply	5
Other Mineral Working in Shropshire.....	7
Mineral Transport and Handling Facilities	7
 1. Introduction.....	 8
Minerals and Mineral Resources	8
Mineral Production	8
Minerals, Mineral Resources and Mineral Production in Shropshire.....	8
National Policy and Guidance	9
Planning for Minerals in Shropshire.....	9
Shropshire	9
Telford & Wrekin.....	10
Collaborative Working	11
 2. Purpose of this Document.....	 12
Monitoring the Supply of Minerals in Shropshire.....	12
The Shropshire Local Aggregate Assessment	12
 3. The Supply of Aggregates in Shropshire	 14
Safeguarding Mineral Supply	14
Summary: Production of Aggregates in Shropshire.....	15
 4. Consumption of Aggregates in Shropshire	 18
 5. Forecasting Future Demand for Aggregates in Shropshire	 20
National Methodology	20
Shropshire Methodology	20
The Primary Forecast of Future Demand – Using 10-Year Average Sales Data	21
The Secondary Forecast of Future Demand – Using 3-Year Average Sales Data.....	23
Consideration of Other Factors.....	25
Consideration of Sub-Regional Apportionment Figures	26
Consideration of Levels of Imports and Exports of Aggregates.....	26

Consideration of Development Activity: Past Trends and Future Plans	27
Consideration of Strategic Projects	33
Consideration of the Identified Supply	35
Constraints to and Levels of Existing Permitted Reserves	35
Mineral Permissions.....	36
Potential Future ‘Reserves’	37
Transport of Aggregates	38
Other Sources of Supply: Secondary, Recycled and Marine Aggregates	38
Conclusion.....	41
6. Demand and Supply at January 2024.....	43
7. Demand and Supply: Next Local Plan For Shropshire	44
8. Demand and Supply: Draft Telford & Wrekin Local Plan.....	48
9. Analysis of Aggregate Supply.....	52
Sand & Gravel	52
Crushed Rock	56
10. Other Mineral Working in Shropshire	60
Building Stone	60
Brick and Fire Clays	60
Coal and Hydrocarbon Resources	61
11. Mineral Transport and Handling Facilities.....	62
Appendices	
Appendix 1: Sand & Gravel Aggregate Quarries in Shropshire	63
Appendix 2: Crushed Rock Aggregate Quarries in Shropshire	65
Appendix 3: Other Quarries in Shropshire.....	66

Executive Summary








Overview

- ES.1. Shropshire Council and Telford & Wrekin Council are the Mineral Planning Authorities for Shropshire. Mineral Planning Authorities are responsible for planning for the safeguarding and sustainable 'working' of minerals in their administrative areas. To support this process, Mineral Planning Authorities are required to produce a Local Aggregate Assessment.
- ES.2. A Local Aggregate Assessment provides:
- A forecast of future demand for aggregates.
 - An analysis of local aggregate supply.
 - An assessment of the balance between demand and supply of aggregates.
- ES.3. Paragraph 226(a) of the National Planning Policy Framework (NPPF) specifies that forecasts of future demand for aggregates should be *"based on a rolling average of 10 years' sales data and other relevant local information"*. Furthermore, it specifies that the analysis of local aggregate supply should consider *"all supply options (including marine dredged, secondary and recycled sources)"*.
- ES.4. To ensure a robust supply of aggregates, the NPPF specifies in Paragraph 226(f) that Mineral Planning Authorities should maintain *"landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock..."*

Future Demand

- ES.5. Table ES.1 summarises the 'primary' forecast of future demand for aggregates in Shropshire, based on 10-year average sales data. Specifically it details the 10-year average sales (at 1st January 2024) for sand & gravel and crushed rock aggregates in Shropshire and a forecast of future demand for these aggregates, based on the 10-year sales average.

Table ES.1: 'Primary' Forecast of Future Demand for Aggregates in Shropshire

	Sand & Gravel	Change from 2022	Crushed Rock	Change from 2022
10-Year Average Sales (at 1 st January 2024)	0.88mt		2.98mt	
Landbank Required (mt) Based on 10-Year Average Sales (at 1 st January 2024)	6.15mt		29.79mt	
Key:  Up from the previous year;  Down from the previous year;  Same as previous year				

ES.6. Consistent with paragraph 226(a) of the NPPF and the West Midlands Aggregate Working Party methodology, a series of other indicators are considered to inform the decision as to whether an adjustment to the 'primary' forecast is required. This is summarised in Table ES.2.

Table ES.2: Consideration of Need for Adjustments






Indicator	Summary
Secondary forecast, based on 3-year average sales data	<p>Forecast annual demand for sand & gravel aggregate based on 3-year average sales data is some 1.17mt, around 33% higher than when based on 10-year average sales data. Forecast annual demand for crushed rock aggregate based on 3-year average sales data is some 2.73mt, around 7.5% lower when than when based on 10-year average sales data.</p> <p>Generally a longer-term trend would be more reflective of past demand cycles and therefore be more reflective of likely future cycles.</p> <p>The NPPF specifically advocates use of a 10-year sales data trend when forecasting future demand and the West Midlands Aggregate Working Party has agreed the use of the 10-year sales data trend as the principal indicator.</p> <p>Therefore, whilst variation exists between the primary and secondary forecasts, it is considered the primary forecast is appropriately responsive to and informed by past fluctuations in aggregate demand.</p>
Sub-regional apportionments	<p>Most recent sub-regional apportionments covered the period from 2005 to 2020. For comparison, in Shropshire annual apportionments were 0.82mt of sand & gravel and 2.66mt of crushed rock. These are comparable to, but less than, the annual demand resulting from the 10-year sales data trend.</p> <p>This does not suggest the need for an upward adjustment to the primary forecast of demand.</p>
Imports and exports of aggregates	<p>Latest published data (2019 calendar year) indicates around 70% of sand & gravel aggregate and crushed rock aggregate consumption in Shropshire was met by production at quarries in Shropshire, demonstrating significant 'self-reliance'.</p> <p>Furthermore, sufficient sand & gravel and crushed rock aggregates were produced in Shropshire to meet consumption that occurred in Shropshire.</p> <p>This level of 'self-reliance' had increased from the previous published data (2014 calendar year) whilst the trend of production exceeding consumption continued.</p> <p>This does not suggest the need for an upward adjustment to the primary forecast of demand.</p>
Past and future housing and employment development activity	<p>Average annual housing completions for Shropshire over the 10-year period that informed the primary forecast (2,752 dwellings) are:</p> <ul style="list-style-type: none"> -Greater than combined annual average housing requirements in adopted Development Plans. -Whilst somewhat less than local housing need, not dissimilar. -Around 9% lower than latest housing growth expectations. <p>Average annual employment land completions over the 10-year period that informed the primary forecast (17.74ha) are:</p> <ul style="list-style-type: none"> -Less than, but not dissimilar to, combined annual average employment requirements in adopted Development Plans. -Whilst some 12% lower than annual average employment need and growth expectations, these inevitably include a level of aspiration. <p>On balance it is considered the primary forecast is appropriately responsive to future growth aspirations. However monitoring is required to understand any impact of development on production capacity and permitted reserves of sand & gravel and crushed rock aggregates.</p>
Strategic projects	<p>One significant known local infrastructure project with potential to increase demand for aggregates - the North West Relief Road at Shrewsbury. However, the Council have now officially paused all work on this project.</p> <p>Given the project has officially paused and uncertainty regarding the level of demand for primary aggregates if it was pursued, there is insufficient justification for an upward adjustment to the primary forecast of demand.</p>

ES.7. Having considered these indicators, Shropshire Council and Telford & Wrekin Council consider the primary forecast of future demand for sand & gravel and crushed rock aggregates (based on 10-year average sales data) represents a robust dataset upon which to plan for the future demand for these aggregates and no adjustments are required.

Future Supply

ES.8. Table ES.3 summarises the calculation of the 'reserves' (supply) of sand & gravel and crushed rock aggregates. These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. They do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.

Table ES.3: Committed Aggregate Reserves Shropshire

	Sand & Gravel	Change from 2022	Crushed Rock	Change from 2022
Reserves (mt) (as at 1st January 2024)	20.07mt		77.67mt	
Key:  Up from the previous year;  Down from the previous year;  Same as previous year				
<p>Sand & Gravel Aggregate Informatives: Reserves have decreased (from 21.47m in 2023, primarily due to 'working' that occurred over the year) and the required landbank has increased (from 5.70mt in 2023). Reserves are distributed across active sites (57% of total reserves) and currently inactive sites (43% of total reserves), including the recent commitment at the Former Ironbridge Power Station Site. It is considered that a significant proportion of the reserves on inactive sites are unlikely to be worked in the short term, however this provides some certainty about the longer term supply of sand & gravel aggregate. There are further 'reserves' associated with allocated sites, these reserves are also considered unlikely to be worked in the short term, but again provide further certainty about the longer term supply of sand & gravel aggregate.</p> <p>Crushed Rock Aggregate Informatives: Reserves have decreased (from 83.05 in 2023 due to a combination of 'working' that occurred and re-allocation of some reserves from aggregate to other purposes). The reserves which contribute to this landbank are distributed across active sites (84.5% of total reserves) and currently inactive sites (15.5%). It is considered there is a robust level of reserves that are 'workable' in the short term.</p>				

Balance Between Demand and Supply

ES.9. Table ES.4 brings together the forecast of future aggregate demand (based on 10-year average sales data) and committed aggregate 'reserves' in Shropshire.

ES.10. Table ES.4 demonstrates sufficient committed reserves of sand & gravel and crushed rock aggregates exist in Shropshire (at 1st January 2024) to achieve required landbanks to service future demand (based on 10-year average sales data).

Table ES.4: Future Aggregate Demand & Committed Reserves in Shropshire

	Sand & Gravel	Change from 2022	Crushed Rock	Change from 2022
Required Landbank (years)	7 years		10 years	
10-Year Average Sales (at 1 st January 2024)	0.88mt	↑	2.98mt	↓
Landbank Required (mt) Based on 10-Year Average Sales (at 1 st January 2024)	6.15mt	↑	29.79mt	↓
Reserves (mt) (as at 1st January 2024)	20.07mt	↓	77.67mt	↓
Actual Landbank (years) Based on 10-Year Average Sales at 1st January 2024	22.84 years	↓	26.07 years	↑
Key: ↑ Up from the previous year; ↓ Down from the previous year; ↔ Same as previous year				

ES.11. Figures ES.1 and ES.2 illustrate changes to sand & gravel and crushed rock aggregate reserves and landbanks.

Figure ES.1: Sand & Gravel Reserves and Landbanks in Shropshire

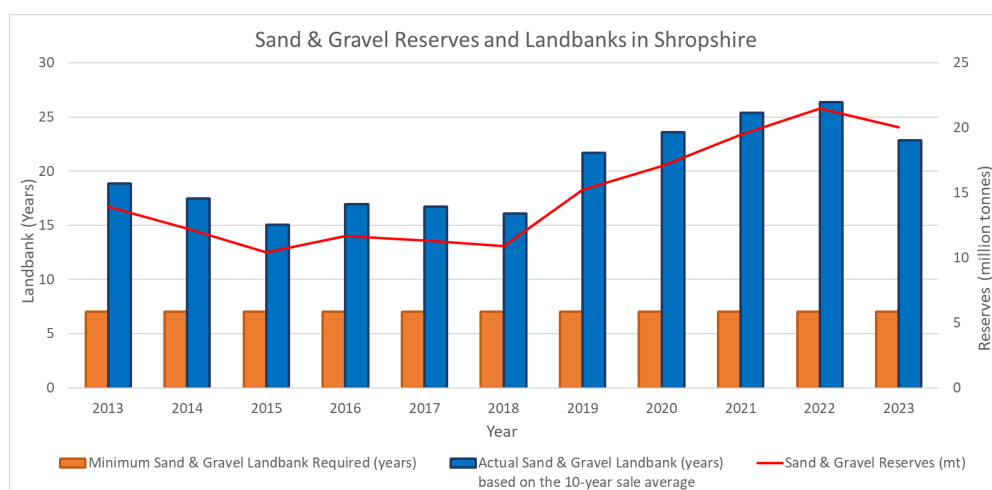
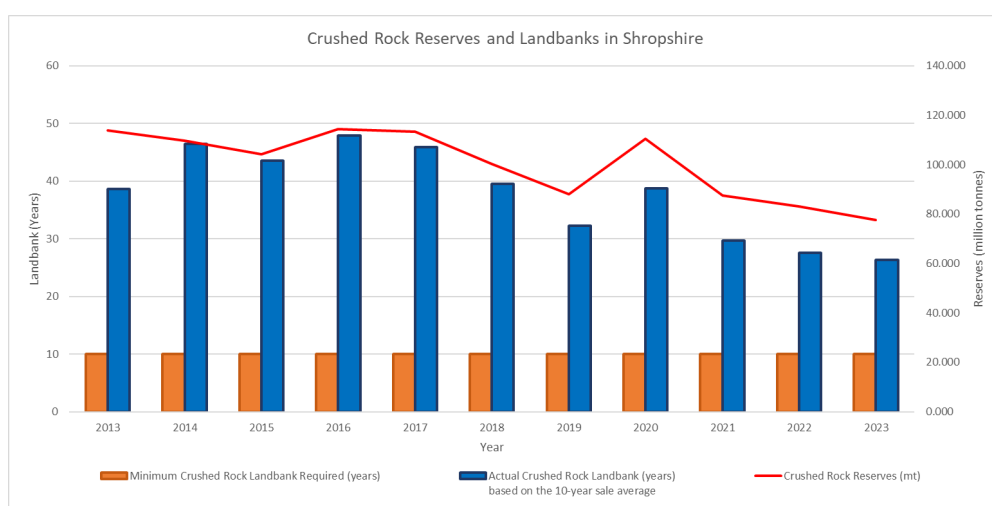


Figure ES.2: Crushed Rock Reserves and Landbanks in Shropshire



Other Mineral Working in Shropshire

- ES.12. During 2023, 1 building stone quarry was operational in Shropshire, producing local building stone and dimension stone (Grinshill Quarry in Shropshire Council's administrative area).
- ES.13. During 2023, there were two operational quarries producing brick clay in Shropshire. These were New Hadley Quarry (in Telford & Wrekin Council's administrative area) and Knowle Sands Quarry (in Shropshire Council's administrative area).
- ES.14. There has been both surface and deep mining of coal in Shropshire in the past and coal reserves do remain in some areas. However, much of this coal reserve is at depths which mean it is not currently considered commercially viable to 'work'. As a result, coal production has currently ceased in Shropshire.
- ES.15. Whilst exploratory drilling for coalbed methane extraction has taken place in two areas in the past, this has not resulted in active working of these resources. Furthermore, whilst some licence areas for unconventional hydrocarbons do fall within Shropshire, none of the licences concerned have been taken up.

Mineral Transport and Handling Facilities

- ES.16. Mineral aggregates produced in Shropshire are moved exclusively by road. Reflecting this importance of road infrastructure for the transportation of aggregates.

1. Introduction

Minerals and Mineral Resources

- 1.1. Minerals are substances naturally formed in the Earth. They are typically solid, inorganic, have a crystal structure and are formed through geological processes.
- 1.2. Mineral resources are natural concentrations of minerals (or bodies of rock/sediment in the case of aggregates) that either are or may become of economic interest.

Mineral Production

- 1.3. Mineral production is the process of generating minerals for use, primarily within the construction industry. Minerals produced from mineral 'working' at quarries are termed 'primary' mineral resources. Another source of 'primary' mineral is marine 'working'.
- 1.4. Primary mineral resources are complemented by secondary and recycled mineral resources, produced by either utilising bi-products of industrial processes or recycling waste from the construction, demolition and excavation processes respectively.

Minerals, Mineral Resources and Mineral Production in Shropshire

- 1.5. Shropshire has a diverse geology, resulting in a vast array of minerals and mineral resources being present.
- 1.6. Shropshire is also a significant 'primary' mineral producer. Mineral resources currently or recently 'worked' in Shropshire are aggregates (sand & gravel and crushed rock), building stone, brick clay, fire clay, and coal. Of these mineral resources, in terms of quantity, aggregates represent the most significant actively 'worked' mineral resource in Shropshire.
- 1.7. The mineral resources 'worked' in Shropshire primarily supply local markets within Shropshire and the immediate surrounding area (including parts of the West Midlands, Cheshire and North Wales). However, some materials are supplied to national markets, particularly crushed rock and fire clay.
- 1.8. Shropshire also contains a range of facilities where construction, demolition and excavation waste is recycled to produce recycled aggregates. It is expected that these resources also serve primarily local markets.

National Policy and Guidance

- 1.9. Government provides national policy on minerals in the National Planning Policy Framework (NPPF). Supporting guidance is provided in National Planning Practice Guidance (NPPG).
- 1.10. Chapter 17 of the NPPF specifically addresses the safeguarding and sustainable use of mineral resources.
- 1.11. Paragraph 222 of the NPPF explains that *"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**."* (my emphasis).
- 1.12. Paragraph 223 of the NPPF then explains the role and purpose of local planning policies prepared by Mineral Planning Authorities in achieving these objectives.
- 1.13. Paragraphs 226 and 227 of the NPPF specifically address the role of Mineral Planning Authorities in planning for the steady and adequate supply of aggregates and industrial minerals at a local level.
- 1.14. The NPPG on Minerals (ID27) supplements the minerals planning aspect of NPPF, providing further detail on how to effectively plan for the safeguarding and sustainable use of minerals.

Planning for Minerals in Shropshire

- 1.15. Local policies and guidance on the sustainable use of minerals are provided by Mineral Planning Authorities.
- 1.16. The Minerals Planning Authorities for Shropshire are Shropshire Council and Telford & Wrekin Council, with each responsible for mineral planning within their respective administrative areas.
- 1.17. The majority of aggregate 'working' takes place in the area administered by Shropshire Council. Both areas contain facilities where construction, demolition and excavation waste is recycled to produce recycled aggregates.

Shropshire

- 1.18. Within the Shropshire Council administrative area, the adopted Development Plan provides the policy framework to safeguard mineral resources and support the sustainable 'working' of minerals.
- 1.19. The adopted Development Plan for Shropshire consists of the Core Strategy (2011), Site Allocations and Management of Development (SAMDev) Plan (2015) and 'made' formal Neighbourhood Plans.

- 1.20. Policy CS20: Strategic Planning for Minerals of the Core Strategy; and Policies MD16: Mineral Safeguarding and MD17: Managing the Development and Operation of Mineral Sites of the SAMDev Plan, specifically address minerals. However, other policies such as those related to the historic and natural environment are also of relevance. The adopted Development Plan is intended to be read and applied as a whole.
- 1.21. The Core Strategy and SAMDev Plan documents are available on the Shropshire Council website at:
<https://shropshire.gov.uk/planning-policy/local-planning/core-strategy-2006-2026/>
<https://shropshire.gov.uk/planning-policy/local-planning/samdev-plan-2006-2026/>
- 1.22. Further information on Neighbourhood Planning in Shropshire is available via: <https://shropshire.gov.uk/planning-policy/neighbourhood-and-community-led-plans/>
- 1.23. Shropshire Council is intending to begin work on the next Local Plan under the revised plan-making system, which is expected to be brought into force in Autumn 2025.
- 1.24. This next Local Plan will continue to positively safeguard mineral resources and support the sustainable 'working' of minerals.

Telford & Wrekin

- 1.25. Within the Telford & Wrekin administrative area, the adopted Development Plan provides the policy framework to safeguard mineral resources and support the sustainable 'working' of minerals.
- 1.26. The adopted Development Plan for Telford & Wrekin consists of the Telford & Wrekin Local Plan (2018) and 'made' formal Neighbourhood Plans.
- 1.27. Policies ER2: Mineral Safeguarding; ER3: Maintaining Supplies of Crushed Rock; ER4: Sand and Gravel Resources; ER5: Maintaining Supplies of Brick Clay; and ER6: Mineral Development, specifically address minerals. However, other policies such as those related to the historic and natural environment are of relevance. The adopted Development Plan is intended to be read and applied as a whole.
- 1.28. The Telford & Wrekin Local Plan is available to view on the Telford & Wrekin Council website at:
https://apps.telford.gov.uk/downloads/localplan/Telford_and_Wrekin_Local_Plan_2011_2031_adopted_Jan_2018.pdf
- 1.29. Telford & Wrekin Council are currently undertaking a review of their Local Plan. It is intended that the resultant new Local Plan document will address the period 2020-2040 and continue to positively

safeguard mineral resources and support the sustainable 'working' of minerals.

- 1.30. Draft policies ML1: Mineral Safeguarding; ML2: Maintaining Aggregate Supplies; ML3: Mineral Development; and ML4: Land Stability. However, other policies such as those related to the historic and natural environment are of relevance. The draft Plan once adopted will be read and applied as a whole.
- 1.31. Further information on the Telford & Wrekin Council Local Plan Review is available on the Council's website at:
<https://telfordandwrekinlocalplan.co.uk/site/index.php>
- 1.32. The transitional arrangements within the NPPF would not require a further review under the new plan-making system to commence in 2025.

Collaborative Working

- 1.33. In order to effectively plan for the safeguarding and sustainable 'working' of minerals, Mineral Planning Authorities are required by the NPPF (paragraph 226) to work collaboratively. This is achieved through a number of mechanisms, particularly participation in Aggregate Working Parties (AWP's).
- 1.34. AWP's consist of Mineral Planning Authorities and representatives of the minerals industry that come together in order to collect data and monitor the production and supply of aggregate minerals, the reserves of aggregate minerals, and provide technical advice on the supply and demand for aggregates.
- 1.35. The West Midlands Aggregate Working Party (WMAWP) is one of nine similar working parties throughout England and Wales established in the 1970's. It covers Herefordshire; Worcestershire; Shropshire; Staffordshire; Warwickshire; and the West Midlands Conurbation (consisting of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall, and Wolverhampton).
- 1.36. Shropshire Council and Telford & Wrekin Council are active participants in the WMAWP.

2. Purpose of this Document

Monitoring the Supply of Minerals in Shropshire

- 2.1. In addition to planning for the safeguarding and sustainable 'working' of minerals, each Mineral Planning Authority is required to produce a Local Aggregate Assessment (LAA).
- 2.2. Specifically, paragraph 226 of the NPPF requires Mineral Planning Authorities (MPAs) to prepare "*an annual Local Aggregate Assessment [LAA] based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources)*".
- 2.3. Further guidance on the purpose of LAA's is provided within paragraphs 061-071 of the NPPG on Minerals (ID27) and the 'Practice Guidance on the Production and Use of Local Aggregate Assessments' prepared by the Planning Officers' Society and the Mineral Products Association.
- 2.4. In effect, a LAA is intended to provide:
 - a. A forecast of future demand for aggregates.
 - b. An analysis of local aggregate supply.
 - c. An assessment of the balance between demand and supply of aggregates.

The Shropshire Local Aggregate Assessment

- 2.5. The LAA for Shropshire covers the supply of and demand for aggregates in the areas administered by both Shropshire Council and Telford & Wrekin Council.
- 2.6. It has been prepared by Shropshire Council on behalf of Shropshire Council and Telford & Wrekin Council. All references to Shropshire in this document relate to the area administered by both Councils.
- 2.7. **The base date for this assessment is 1st January 2024.**
- 2.8. Latest data referenced is for the 2023 calendar year, which has been sourced from a survey of sales and reserves data for undertaken as part of the National Mineral Aggregates Survey – supported by Shropshire Council, Telford & Wrekin Council and the WMAWP.
- 2.9. However, it is also intended to provide relevant data for past years not previously reported within a LAA. This data is based on monitoring undertaken by Shropshire Council and Telford & Wrekin Council as part and on behalf of the WMAWP.

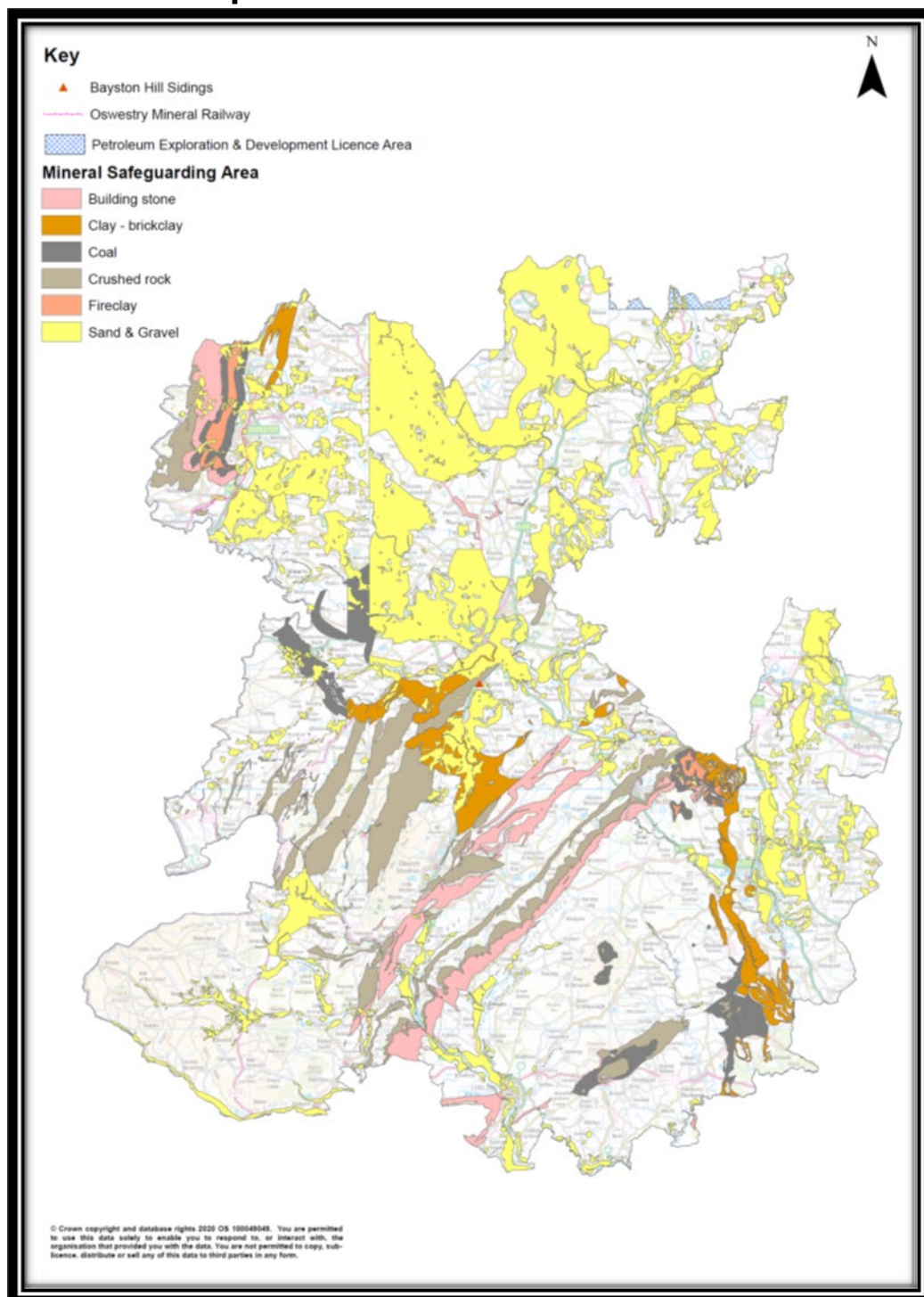
- 2.10. The report also refers to the capacity available to produce secondary and recycled aggregate within Shropshire, informed by Environment Agency data.
- 2.11. The information found in this report is used in monitoring the mineral policies within the:
- a. The adopted Development Plan for Shropshire; and
 - b. The adopted Development Plan for Telford & Wrekin.
- 2.12. This information also informs the development and monitoring of policies within the emerging Local Plans for Shropshire and Telford & Wrekin.
- 2.13. This LAA has been directly informed by proactive engagement with the WMAWP. Comments received through this engagement were carefully considered in finalising this document.

3. The Supply of Aggregates in Shropshire

Safeguarding Mineral Supply

- 3.1. Shropshire has a diverse geology, resulting in a vast array of minerals being present. Figure 3.1 and Figure 3.2 illustrate the areas subject to mineral safeguarding within relevant policies of the adopted Development Plans for the Shropshire and Telford & Wrekin administrative areas respectively.

**Figure 3.1 Map of Mineral Safeguarding Areas:
Shropshire Council Administrative Area**
















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There is an active mineral industry in Cheshire, particularly with

3.2. There is an active mineral industry in Shropshire, particularly with regard to the 'working' of aggregates, these primarily being sand & gravel and crushed rock. The majority of the sand & gravel aggregate produced from this 'working' is used to supply the construction industry with building sand, concrete and concrete product. Crushed rock aggregate produced from this 'working' is mainly used as engineering fill, roadstone and asphalt in road construction and maintenance.







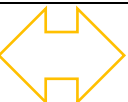
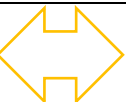





3.3. Table 3.1 provides a summary of the actual levels of production and changes to the levels of production of sand & gravel and crushed rock primary aggregates through 'working' in Shropshire over the past five years.

Table 3.1: Summary of the Production of Aggregates in Shropshire

Year:	2019		2020		2021		2022		2023	
	Production	Change	Production	Change	Production	Change	Production	Change	Production	Change
Sand & Gravel	0.96mt		0.90mt		1.08mt		1.13mt		1.30mt	
Crushed Rock	3.62mt		3.29mt		2.55mt		3.19mt		2.45mt	
Key:	 Up from the previous year;  Down from the previous year;  Same as previous year									

- 3.4. Table 3.2 provides a succinct summary of:
- Production through 'working' in Shropshire in 2023.
 - 3 and 10 year production averages at 1st January 2024
 - Active quarries in Shropshire during 2023.
 - Committed reserves at 1st January 2024.

Table 3.2: Summary of the Production of Aggregates in Shropshire

		Sand & Gravel	Change from 2022	Crushed Rock	Change from 2022
Production	2023 Sales	1.30mt		2.45mt	
	3-Year Average Sales (at 1 st January 2024)	1.17mt		2.73mt	
	10-Year Average Sales (at 1 st January 2024)	0.88mt		2.98mt	
	Number of Active Quarries in 2023	8		5	
Reserves (mt) (at 1 st January 2024)		20.07mt		77.67mt	
Key:  Up from the previous year;  Down from the previous year;  Same as previous year					

Sand & Gravel Aggregate Informatives: Reserves are distributed across active sites (57% of total reserves) and currently inactive sites (43% of total reserves), this includes the recent commitment at the Former Ironbridge Power Station Site). It is considered that a significant proportion of the reserves on inactive sites are unlikely to be worked in the short term, however this provides some certainty about the longer term supply of sand & gravel aggregate. There are further 'reserves' associated with allocated sites, these reserves are also considered unlikely to be worked in the short term, but again provide further certainty about the longer term supply of sand & gravel aggregate.

Crushed Rock Aggregate Informatives: Reserves are distributed across active sites (84.5% of total reserves) and currently inactive sites (15.5%). It is considered there is a robust level of reserves that are 'workable' in the short term.

- 3.5. Please Note: Within Table 3.2 existing 'reserves' to meet future needs consist of aggregates committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
- 3.6. The 'working' of sand & gravel and crushed rock addressed within Table 3.2 represent 'primary' aggregates, this being aggregates directly 'worked' from quarries in Shropshire.
- 3.7. This 'working' is complemented by the production of secondary and recycled aggregates. Unfortunately, a recurring theme of previous LAA reports is the difficulty of monitoring the quantity of secondary and recycled aggregates generated at a Mineral Planning Authority level. Therefore, it is not possible to establish the levels of production of secondary and recycled aggregates in Shropshire.
- 3.8. Further information on primary, secondary and recycled aggregate production in Shropshire is provided within Sections 5 and 6 of this document.

4. Consumption of Aggregates in Shropshire

- 4.1. Best information on primary aggregate 'consumption' (or use of primary aggregates) within a Mineral Planning Authority area, is provided in the Aggregate Minerals Surveys for England and Wales, which are undertaken periodically. The last published assessment has a 1st January 2020 base date (utilising data from the 2019 calendar year), although a update utilising 2023 data is expected imminently.
- 4.2. The Aggregate Minerals Survey for England and Wales (1st January 2020 base date) calculated that some 2.87 million tonnes of primary aggregates were 'consumed' in Shropshire in 2019. The breakdown of this consumption and a comparison to that from the previous survey (1st January 2015 base date, undertaken using 2014 calendar year data) and to consumption in the West Midlands Region / England is provided within Table 4.1.

Table 4.1: Consumption of Primary Aggregates in Shropshire

		Shropshire	West Midlands	England
Sand & Gravel Aggregates (tonnes)	2014	343,000	5,753,000	51,259,000
	2019	341,000	5,849,000	48,999,000
Crushed Rock Aggregates (tonnes)	2014	2,025,000	6,289,000	76,230,000
	2019	2,530,000	7,957,000	89,714,000
Total Aggregates (tonnes)	2014	2,368,000	12,043,000	127,489,000
	2019	2,871,000	13,806,000	138,712,000

- 4.3. For Shropshire, the latest Aggregate Minerals Survey for England and Wales (1st January 2020 base date) also indicated that:
- Around 70% of primary sand & gravel aggregate consumed in Shropshire was met by production at quarries in Shropshire.
 - In 2023 sufficient sand & gravel aggregate was produced in Shropshire to meet consumption in Shropshire.
 - Around 70% of the primary crushed rock aggregates consumed in Shropshire was met by production at quarries in Shropshire.
 - In 2023 sufficient crushed rock aggregate was produced in Shropshire to meet consumption in Shropshire.
 - Shropshire is a net exporter of both sand & gravel and crushed rock primary aggregates.
- 4.4. The fact that the entirety of sand & gravel and crushed rock consumption occurring in Shropshire was not met by sand & gravel and crushed rock production in Shropshire, despite sufficient production occurring, demonstrates the impact of **market forces** and/or **demand for specific 'grades' of aggregate materials**.
- 4.5. Unfortunately, as with the production of secondary and recycled aggregates, a recurring theme of previous LAA reports is the difficulty

of monitoring the quantity of secondary and recycled materials 'consumed' as aggregates at a Mineral Planning Authority level. Therefore, it is not possible to establish the levels of consumption of secondary and recycled aggregates in Shropshire.

5. Forecasting Future Demand for Aggregates in Shropshire

National Methodology

- 5.1. Paragraph 226(a) of the NPPF specifies that a forecast of future demand for aggregates should be *"based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources)."*
- 5.2. The NPPG on Minerals (ID27) provides further guidance for undertaking a forecast of future demand. Paragraph 64 states: *"Local Aggregate Assessments 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 3 years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply."*
- 5.3. Paragraph 226(f) of the NPPF then explains that based on the forecast of future demand, Mineral Planning Authorities are expected to maintain minimum *"landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised"*.

Shropshire Methodology

- 5.4. The methodology utilised to forecast future demand for aggregates in Shropshire is consistent with that outlined in the NPPF and associated NPPG on Minerals (ID27). It has also been informed by proactive discussions within the WMAWP.
- 5.5. **Specifically, the 'primary' forecast of future demand for aggregates is based on 10-year average sales data (at 1st January 2024).**
- 5.6. Alongside this 'primary' forecast, a 'secondary' forecast of future demand for aggregates is prepared, to allow for comparison and to inform the decision as to whether there is a need to make adjustments to the 'primary' forecast. This 'secondary' forecast is based on the 3-year average sales data (at 1st January 2024).
- 5.7. Furthermore, consistent with national policy and guidance, a series of other factors are considered to inform the decision as to whether there is a need to make adjustments to the 'primary' forecast.

- 5.8. The factors considered were informed by national policy and guidance. They were also informed by discussions undertaken within the WMAWP, within which a series of additional indicators were agreed.
- 5.9. As such, the factors considered to inform the decision as to whether there is a need to make adjustments to the primary forecast include:
- a. The 3-year average sales and associated secondary forecast.
 - b. Sub-regional apportionment figures¹.
 - c. Levels of imports and exports of aggregates².
 - d. Past levels of housing development and levels of planned housing development in the future.
 - e. Past levels of employment development and levels of planned employment development in the future³.
 - f. Known strategic infrastructure projects which may have demands for aggregates.
 - g. Consideration of the identified supply.

The Primary Forecast of Future Demand – Using 10-Year Average Sales Data

- 5.10. Table 5.1 provides a succinct summary of the 'primary' forecast of future demand for aggregates in Shropshire, based on 10-year average sales data.
- 5.11. Specifically, it summarises:
- a. The national minimum 'landbank' or committed supply of sand & gravel and crushed rock aggregates in 'years'. This is based on paragraph 226(f) of the NPPF which states that Mineral Planning Authorities should maintain "*landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock...*"
 - b. The calculated 10-year average sales (at 1st January 2024) for sand & gravel and crushed rock aggregates in Shropshire.
 - c. A forecast of the future demand for aggregates over the minimum 'landbanks' identified, based on the calculated 10-year average sales (which is responsive to the methodology within the NPPF).












¹ In co-operation with Mineral Planning Authorities that are members of the WMAWP, it was agreed to consider whether there are relevant sub-regional apportionment figures when forecasting demand for aggregates, to ensure a consistent approach to the preparation of Local Aggregate Assessments across the region.

² In co-operation with Mineral Planning Authorities that are members of the WMAWP, it was agreed to consider aggregate import and export data when forecasting demand for aggregates, to ensure a consistent approach to the preparation of Local Aggregate Assessments across the region.

³ Housing completions are typically utilised as the indicator for development activity. However, in co-operation with Mineral Planning Authorities that are members of the WMAWP, it was agreed to also consider levels of employment development and its influence on demand for aggregates, to ensure a consistent approach to the preparation of Local Aggregate Assessments across the region.

- d. A calculation of the actual landbank available, based on the 'reserves' of sand & gravel and crushed rock aggregates available in Shropshire and the 10-year average sales (at 1st January 2024). These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. They do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.

Table 5.1: Primary Forecast of Future Demand for Aggregates in Shropshire

	Sand & Gravel	Change from 2022	Crushed Rock	Change from 2022
Required Landbank (years)	7 years		10 years	
10-Year Average Sales (at 1 st January 2024)	0.88mt		2.98mt	
Landbank Required (mt) Based on 10-Year Average Sales (at 1 st January 2024)	6.15mt		29.79mt	
Reserves (mt) (as at 1st January 2024)	20.07mt		77.67mt	
Actual Landbank (years) Based on 10-Year Average Sales at 1st January 2024	22.84 years		26.07 years	
Key:  Up from the previous year;  Down from the previous year;  Same as previous year				
<p>Sand & Gravel Aggregate Informatives: Reserves have decreased (from 21.47m in 2023, primarily due to 'working' that occurred over the year) and the required landbank has increased (from 5.70mt in 2023). However, the identified landbank remains well in excess of the 7 year minimum requirement. The reserves which contribute to this landbank are distributed across active sites (57% of total reserves) and currently inactive sites (43% of total reserves), including the recent commitment at the Former Ironbridge Power Station Site.</p> <p>It is considered that a significant proportion of the reserves on inactive sites are unlikely to be worked in the short term, however this provides some certainty about the longer term supply of sand & gravel aggregate. There are further 'reserves' associated with allocated sites, these reserves are also considered unlikely to be worked in the short term, but again provide further certainty about the longer term supply of sand & gravel aggregate.</p> <p>Crushed Rock Aggregate Informatives: Reserves have decreased (from 83.05 in 2023 due to a combination of 'working' that occurred and re-allocation of some reserves from aggregate to other purposes) but so has the required landbank (from 30.13mt 2023). This has resulted in an increase to the actual landbank, which is well in excess of the 10 year minimum requirement. The reserves which contribute to this landbank are distributed across active sites (84.5% of total reserves) and currently inactive sites (15.5%). It is considered there is a robust level of reserves that are 'workable' in the short term.</p>				









5.12. Table 5.1 demonstrates sufficient reserves of sand & gravel and crushed rock aggregates exist in Shropshire (at 1st January 2024) to achieve required landbanks to service future demand, if the forecast of future demand is based on 10-year average sales data (at 1st January 2024).



The Secondary Forecast of Future Demand – Using 3-Year Average Sales Data

5.13. Table 5.2 provides a succinct summary of the 'secondary' forecast of future demand for aggregates in Shropshire, based on the 3-year average sales data. This is provided to allow for comparison with the 'primary' forecast and to inform the decision as to whether there is a need to make adjustments to the 'primary' forecast.

5.14. It is important to note that although this indicator may give figures for most recent sales, it may include unnatural fluctuations or major anomalies.

Table 5.2: Alternative Forecast of Future Demand for Aggregates in Shropshire

	Sand & Gravel	Change from 2022	Crushed Rock	Change from 2022
Required Landbank (years)	7 years		10 years	
3-Year Average Sales (at 1 st January 2024)	1.17mt		2.73mt	
Landbank Required (mt) Based on 3-Year Average Sales at 1 st January 2024	8.18mt		27.31mt	
Reserves (mt) (at 1st January 2024)	20.07mt		77.67mt	
Actual Landbank (years) Based on 3-Year Average Sales at 1 st January 2024	17.17 years		28.44 years	

Key:  Up from the previous year;  Down from the previous year;  Same as previous year

Sand & Gravel Aggregate Informatives: Reserves have decreased (from 21.47m in 2023) and the required landbank has increased (from 7.23mt in 2023). However, the identified landbank remains well in excess of the 7 year minimum requirement.

The reserves which contribute to this landbank are distributed across active sites (57% of total reserves) and currently inactive sites (43% of total reserves), including the recent commitment at the Former Ironbridge Power Station Site.

It is considered that a significant proportion of the reserves on inactive sites are unlikely to be worked in the short term, however this provides some certainty about the longer term supply of sand & gravel aggregate. There are further 'reserves' associated with allocated sites, these reserves are also considered unlikely to be worked in the short term, but again provide further certainty about the longer term supply of sand & gravel aggregate.

Crushed Rock Aggregate Informatives: Reserves have decreased (from 83.05 in 2023 due to a combination of 'working' that occurred and re-allocation of some reserves from aggregate to other purposes) but so has the required landbank (from in 30.13mt 2023). This has resulted in an increase to the actual landbank, which is well in excess of the 10 year minimum requirement.

The reserves which contribute to this landbank are distributed across active sites (84.5% of total reserves) and currently inactive sites (15.5%). It is considered there is a robust level of reserves that are 'workable' in the short term.

5.15. Table 5.2 summarises:

- a. The national minimum 'landbank' or committed supply of sand & gravel and crushed rock aggregates in 'years'. This is based on paragraph 226(f) of the NPPF which states that Mineral Planning Authorities should maintain "*landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock...*"
- b. The calculated 3-year average sales for sand & gravel and crushed rock aggregates in Shropshire (at 1st January 2024).
- c. A forecast of the future demand for aggregates over the minimum 'landbanks' identified, based on the calculated 3-year average sales (for comparison with the 'primary' forecast and to inform the decision as to whether there is a need to make adjustments to the 'primary' forecast).
- d. A calculation of the actual landbank available, based on the 'reserves' of sand & gravel and crushed rock aggregates available in Shropshire and the 3-year average sales (at 1st January 2024). These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.

5.16. It is apparent from Table 5.2 that sufficient reserves of sand & gravel and crushed rock aggregates exist in Shropshire (at 1st January 2024) to achieve the required landbanks to service future demand (at 1st January 2024), if the forecast of future demand was based on the 3-year average sales data.

5.17. With regard to sand & gravel aggregate, it is apparent when comparing the primary (Table 5.1, 10-year average sales data) and secondary (Table 5.2, 3-year average sales data) forecasts, that they diverge, resulting in differing levels of future annual demand and therefore required landbanks.

5.18. Specifically, the forecast of annual demand and the required landbank is around 33% higher when based on 3-year average sales data than when based on 10-year average sales data.

5.19. Development activity is the main driver for aggregate production and sales. This activity is subject to cycles, influenced by a range of local, regional, national and international factors.

5.20. As such, generally a longer-term trend would be expected to be more responsive to these cycles and therefore more reflective of likely future cycles. Conversely, a shorter-term trend would be expected to be more influenced by the recent component of the wider

development cycle, and as such may not reflect future cycles in development activity.

- 5.21. However, there is also a need to consider whether these timeframes 'captured' irregular activity in the market which is unlikely to be repeated and may have either suppressed or enhanced development activity and thereby demand for aggregates.
- 5.22. As such, this divergence requires further consideration, to determine if development activity in the last 3-years is more reflective of likely future development activity than development activity over the last 10-years.
- 5.23. **Ultimately, it is considered that this divergence in and of itself is insufficient robust evidence to justify an adjustment to the primary forecast of future demand for sand & gravel aggregate (based on 10-year average sales data). However, it will be further considered in the context of planned future development activity.**
- 5.24. With regard to crushed rock aggregate, it is apparent when comparing the primary (Table 5.1, 10-year average sales data) and secondary (Table 5.2, 3-year average sales data) forecasts, that they result in generally comparable levels of future annual demand and therefore required landbanks.
- 5.25. Specifically, the forecasts of annual demand and the required landbank in the primary and secondary forecasts are within 7.5% of each other. Furthermore, it is apparent that it is the primary forecast results in the higher annual demand and therefore required landbank.
- 5.26. This demonstrates that crushed rock sales have been relatively stable over recent years and as such provides a high level of confidence in the accuracy of the primary forecast of future demand (based on 10-years average sales data).
- 5.27. **As such, it is considered that this data supports the conclusion that there is no justification for an adjustment to the primary forecast of future demand for crushed rock aggregate (based on 10-year average sales data).**

Consideration of Other Factors

- 5.28. A series of other factors were identified to inform the decision as to whether there is a need to make adjustments to the primary forecast of future demand, based on 10-year average sales data. The consideration of each of these factors is summarised in turn.

Consideration of Sub-Regional Apportionment Figures

- 5.29. The most recent guidelines for aggregate production in England were published in 2009 and cover the period from 2005 to 2020. No up-to-date guidelines have been published that should be considered in determining local provision of sand & gravel or crushed rock aggregates.
- 5.30. For the purpose of comparison, the annual sub-regional apportionment attributed to Shropshire within the most recent guidelines were 0.820mt of sand & gravel and 2.662mt of crushed rock.
- 5.31. Annual production rates for sand & gravel and crushed rock aggregates resulting from the primary forecast (based on 10-year average sales data) are comparable to, but higher than the last sub-regional apportionments.
- 5.32. **This perhaps provides some endorsement for the validity of the primary forecast of future demand for sand & gravel and crushed rock aggregates (based on 10-year average sales data).**

Consideration of Levels of Imports and Exports of Aggregates

- 5.33. The Aggregate Minerals Survey for England and Wales provides the most up-to-date assessment of imports and exports of aggregates by Mineral Planning Authorities.
- 5.34. According to the most recent survey undertaken (2019 calendar year data), around 70% of sand & gravel aggregate and crushed rock aggregate consumption in Shropshire was met by production at quarries in Shropshire, demonstrating significant levels of 'self-reliance'.
- 5.35. Interestingly, in the same year, sufficient sand & gravel and crushed rock aggregates were produced in Shropshire to meet the entirety of the consumption that occurred in Shropshire. This demonstrates the impact of **market forces** and/or **demand for specific 'grades' of aggregate materials**.
- 5.36. For comparison, the previous survey undertaken (2014 calendar year data) indicated that around 70% of sand & gravel aggregate and around 60% crushed rock aggregate consumption in Shropshire was met by production at quarries in Shropshire.
- 5.37. It also indicated that sufficient sand & gravel and crushed rock aggregates were produced in Shropshire to meet the entirety of the consumption that occurred in Shropshire. This also demonstrates the impact of market forces and/or the demand for specific sand & gravel / crushed rock aggregates.

- 5.38. It is apparent that between 2019 and 2014 the proportion of sand & gravel and crushed rock aggregates consumed in Shropshire from imports remained relatively stable.
- 5.39. The high quantities of sand & gravel and crushed rock aggregate 'consumed' from local production, changes to rates of 'consumption' from local production (consistent for sand & gravel aggregate and increasing for crushed rock aggregate), and the fact that sand & gravel and crushed rock aggregate production in Shropshire exceeded consumption in Shropshire in both 2019 and 2014, does not suggest under-production of sand & gravel or crushed rock aggregates in Shropshire.
- 5.40. **As such, this does not suggest the need for an upward adjustment to the primary forecast of future demand for sand & gravel or crushed rock aggregates (based on 10-year average sales data).**

Consideration of Development Activity: Past Trends and Future Plans

- 5.41. Comparison of past development activity trends with future development activity proposals provide an indication of how the demand for sand & gravel and crushed rock aggregates may change in the future.
- 5.42. As such, it can inform decisions as to whether there is a need to make adjustments to the primary 10-year average sales forecast. This is because the majority of sand & gravel and crushed rock aggregate 'produced' is to service the construction industry.
- 5.43. Paragraph 3.5 of the Planning Officers Society (POS) and Mineral Products Association (MPA) Practice Guidance on the Production and Use of Local Aggregate Assessments advises that: *"Where possible, planned levels of growth e.g. housing provision, should be compared to actual growth e.g. completions, over the previous ten years, to provide an indication of relative scale and therefore of potential implications for aggregates demand and supply, especially if provision higher than the 10 year average is being considered."*
- 5.44. Housing completions are often considered the best indicator of changes to levels of development. However, in co-operation with Mineral Planning Authorities that are members of the WMAWP, it was agreed to also consider levels of employment development and its influence on demand for aggregates, to ensure a consistent approach to the preparation of LAA's across the region.
- 5.45. It is important to note that the construction industry which generates much of the demand for aggregates is wider than new housing and employment, including such activities as the refurbishment, improvement and extension of existing housing and employment

stock; formation, refurbishment, improvement and extension of other components of commercial stock; and infrastructure maintenance and provision (particularly roads).

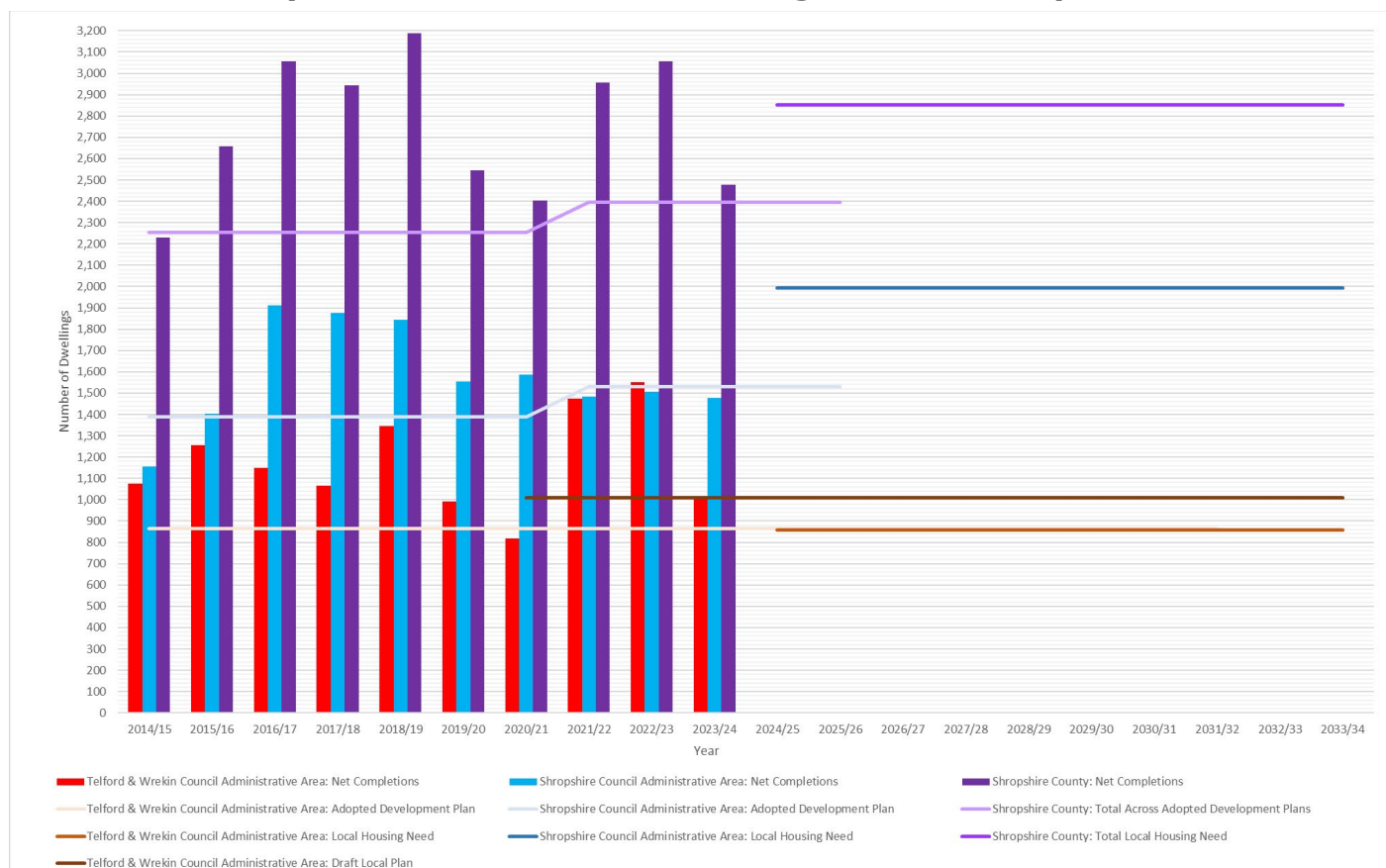
- 5.46. Furthermore, sand & gravel and crushed rock aggregate production in Shropshire is not just for local markets - whilst this is the main market for these aggregates, a proportion also service wider markets.
- 5.47. However, whilst acknowledging these issues, housing and employment development activity in Shropshire is considered an effective indicator of potential changes to sand & gravel and crushed rock aggregate demand in Shropshire.

Housing

- 5.48. Figure 5.1 allows comparison of past residential development activity trends with both the planned levels of development for this period and future residential development activity proposals.
- 5.49. As such, for the Shropshire Council administrative area, Figure 5.1 details:
- a. Housing completions over the last 10 years (2014/15-2023/24).
 - b. Planned levels of housing development within the adopted Development Plan over the last 10 years (2014/15-2023/24) and the remainder of the plan period (2024/25-2025/26).
 - c. Housing development required to achieve local housing need (calculated using Government's standard methodology) over the next 10-years (2024/25-2033/34).
- 5.50. For the Telford & Wrekin Council administrative area, Figure 5.1 details:
- a. Housing completions over the last 10 years (2014/15-2023/24).
 - b. Planned levels of housing development within the adopted Development Plan over the last 10 years (2014/15-2023/24) and the remainder of the plan period (2024/25-2031/32).
 - c. Levels of housing development proposed within the draft Local Plan from the start of the proposed plan period (2020/21) and over next 10-years (2024/25-2033/34).
 - d. Housing development required to achieve local housing need (calculated using Government's standard methodology) over the next 10-years (2024/25-2033/34).
- 5.51. For Shropshire County (both Shropshire and Telford & Wrekin Council's administrative areas), Figure 5.1 details:
- a. Housing completions over the last 10 years (2014/15-2023/24).

- b. Total planned levels of housing development within adopted Development Plans over the last 10 years (2014/15-2023/24) and the remainder of the shortest plan period (2024/25-2025/26).
- c. Housing development required to achieve total local housing need (calculated using Government's standard methodology) over the next 10-years (2024/25-2033/34).

Figure 5.1: Housing Completions, Local Plan Housing Requirements and Local Housing Need in Shropshire



5.52. It is apparent from Figure 5.1 that housing completions in Shropshire have fluctuated over the last 10 years, reflecting the cycle of 'peaks' and 'troughs' expected in the housing market, which is influenced by numerous local, regional, national and international factors.

5.53. Table 5.3 compares the average housing completions achieved over the last 3 and 10 years (consistent with the time periods which inform the primary and secondary forecasts of future aggregate demand) with:

- a. Annual housing requirements in adopted Development Plans.
- b. Annual Local Housing Need.
- c. Latest available position on future annual housing growth expectations – using either Local Housing Need or proposed housing requirements in draft Development Plans as available.

Table 5.3: Comparison of Housing Completions with Housing Needs and Requirements

Administrative Area	Annual Average Housing Completions		Annual Average Housing		
	Last 10-Year Average	Last 3-Year Average	Adopted Plan Requirement	Need*	Future Growth Expectations
Shropshire Council	1,580	1,490	1,375	1,994	1,994**
Telford & Wrekin Council	1,172	1,341	864	857	1,010***
Shropshire County	2,752	2,831	2,239	2,851	3,004

*Calculated using Government's Standard Methodology.

**Local housing need.

***Proposed housing requirement in the draft Local Plan.

5.54. Figure 5.1 and Table 5.3 illustrate that annual average housing completions in Shropshire over the 10 year period which informed the primary forecast (2,752 dwellings) are greater than the combined annual average housing requirements for Shropshire within adopted Development Plans (2,239 dwellings).

5.55. They also illustrate that annual average housing completions in Shropshire over the 10 year period which informed the primary forecast (2,752 dwellings) are less than but not dissimilar to the combined annual average local housing need for Shropshire (2,851) resulting from Government's standard methodology, with the difference being some 3.5%.

5.56. Latest available information on housing growth expectations in Shropshire is drawn from Local Housing Need for Shropshire Council and the proposed housing requirement in the draft Local Plan for Telford & Wrekin Council. This level of growth is around 9% higher than annual average completions over the last 10 years and 6% higher than annual average completions over the last 3 years.

5.57. On balance it is considered that the primary forecast (based on 10-year average sales data) is appropriately responsive to future housing growth aspirations, but that this will need to be carefully monitored to understand any impact of future planning for housing development in the County on production capacity and permitted reserves of sand & gravel and crushed rock aggregates.

Employment

5.58. Figure 5.2 allows comparison of past employment development activity trends with both the planned levels of development for this period and future residential development activity proposals.

5.59. As such, for the Shropshire Council administrative area Figure 5.2 details:

- a. Employment completions over the last 10 years (2014/15-2023/24).
- b. Total planned levels of employment development within adopted Development Plans over the last 10 years (2014/15-2023/24) and the remainder of the shortest plan period (2024/25-2025/26).
- c. Employment development required to achieve total local housing need (calculated using Government's standard methodology) over the next 10-years (2024/25-2033/34).

5.60. For the Telford & Wrekin Council administrative area, Figure 5.2 details:

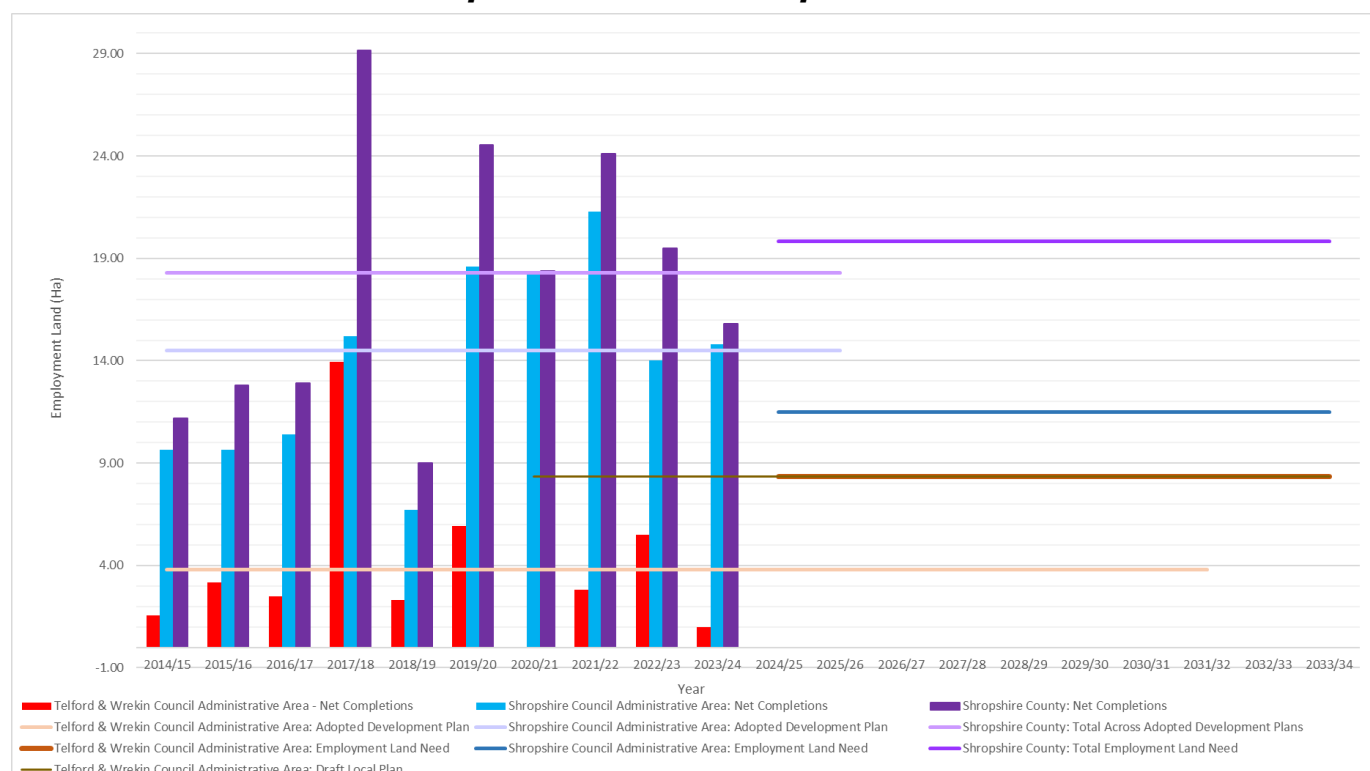
- a. Employment completions over the last 10 years (2014/15-2023/24).
- b. Planned levels of employment development within the adopted Development Plan over the last 10 years (2014/15-2023/24) and the remainder of the plan period (2024/25-2025/26).
- c. Levels of employment development proposed within the draft Local Plan from the start of the proposed plan period (2016/17) and over next 10-years (2024/25-2033/34).
- d. Employment development required to achieve local employment need over the next 10-years (2024/25-2033/34), based on the most recent Economic Development Needs Assessment.

5.61. For the Shropshire County (both Shropshire and Telford & Wrekin Council's administrative areas), Figure 5.2 details:

- a. Employment completions over the last 10 years (2014/15-2023/24).
- b. Total planned levels of employment development within adopted Development Plans over the last 10 years (2014/15-2023/24) and the remainder of the shortest plan period (2024/25-2025/26).
- c. Employment development required to achieve total local housing need (calculated using Government's standard methodology) over the next 10-years (2024/25-2033/34).

5.62. It is apparent from Figure 5.2 that annual employment completions in Shropshire have fluctuated over the last 10 years, influenced by prevailing market conditions and progress on larger development sites.

Figure 5.2: Employment Land Completed and Employment Land Requirements in Shropshire



5.63. Table 5.4 compares the average employment completions achieved over the last 3 and 10 years (consistent with the time periods which inform the primary and secondary forecasts of future aggregate demand) with:

- Annual employment land requirements in adopted Development Plans.
- Annual Local Employment Land Need.
- Latest available position on future annual employment land growth expectations – using either Local Employment Land Need or proposed employment land requirements in draft Development Plans as available.

Table 5.4: Comparison of Employment Land Completions with Employment Land Needs and Requirements (2014/15-2023/24)

Administrative Area	Annual Average Employment Completions		Annual Average Employment		
	Last 10-Year Average	Last 3-Year Average	Adopted Plan Requirement	Need	Future Growth Expectations
Shropshire Council	13.87	16.70	14.50	11.5	11.5*
Telford & Wrekin Council	3.87	3.10	3.80	8.35	8.35**
Shropshire County	17.74	19.80	18.30	19.85	19.85

*Local employment land need.

**Proposed employment land requirement in the draft Local Plan.

- 5.64. Figure 5.2 and Table 5.4 illustrate that annual average employment completions in Shropshire over the 10 year period which informed the primary forecast (17.74ha) are similar to the combined annual average employment requirements for Shropshire in adopted Development Plans (18.30ha), equating to around 97%.
- 5.65. They also illustrate that annual average employment land completions in Shropshire over the 10 year period which informed the primary forecast (17.74ha) are less than but not dissimilar to the combined annual average employment land need for Shropshire (19.85ha), with the difference being some 12%.
- 5.66. Latest available information on employment land growth expectations in Shropshire is drawn from Local Employment Land Need for Shropshire Council and the proposed employment land requirement in the draft Local Plan for Telford & Wrekin Council. This level of growth is around 12% higher than annual average completions over the last 10 years, but generally aligns with the annual average completions over the last 3 years.
- 5.67. **On balance it is considered that the primary forecast (based on 10-year average sales data) is appropriately responsive to future employment land growth aspirations, but that this will need to be carefully monitored to understand any impact of future planning for employment development in the County on production capacity and permitted reserves of sand & gravel and crushed rock aggregates.**

Consideration of Strategic Projects

- 5.68. Many large scale infrastructure projects require aggregates, potentially in significant quantities, for their construction. As such, where such projects are likely to occur within or in proximity to Shropshire, they have the potential to increase demand for aggregates.

Local Projects

- 5.69. There is one significant known local infrastructure project that has the potential to increase demand for aggregates, this is the North West Relief Road at Shrewsbury (NWRR). However, the Council have now officially paused all work on this project due to a significant funding gap to complete the scheme.
- 5.70. It is understood that if progressed, this project would require:
- a. Around 170,000 tonnes of crushed rock aggregate.
 - b. Around 87,000 tonnes of asphalt concrete and around 70,000 tonnes of concrete (sand & gravel aggregates form part of the materials used in production of these concretes).

- c. Around 190,000 tonnes of imported fill (the majority of this material is expected to constitute imported earthworks; however a proportion would likely include aggregates).
- 5.71. It is understood that positive consideration would be given to the use of secondary/recycled aggregates within this project, particularly with regard to asphalt concrete, concrete and imported fill. However, there is no certainty on specific quantities.
- 5.72. If this project were progressed, it would require sand & gravel aggregate to produce the required concrete, but this aggregate is not the only component of these concrete products and it is apparent that positive consideration would be given to the use of secondary/recycled aggregates for this purpose.
- 5.73. As such, if this project were progressed it is difficult to predict the extent of additional demand for primary sand & gravel aggregate and whether it can be absorbed within the existing primary forecast of future demand for sand & gravel aggregate (based on 10-year average sales data).
- 5.74. **Given the fact the project has officially paused and the uncertainty regarding the level of demand for primary sand & gravel aggregate if it was pursued, at this stage it is considered that there is insufficient justification for an upward adjustment to the primary forecast of future demand for sand & gravel aggregate (based on 10-year average sales data).**
- 5.75. If this project were progressed, it would require around 170,000 tonnes of crushed rock aggregate, although there may be some potential for this to include secondary or recycled materials, so the specific quantities of primary crushed rock aggregates that would be required if this project were progressed is unknown.
- 5.76. Furthermore, this level of demand is relatively small in the context of total demand identified within the primary forecast (based on 10-year average sales data), so it can likely be 'absorbed' within this wider demand.
- 5.77. **As such, given the fact the project has officially paused, the uncertainty regarding the level of demand for primary crushed rock aggregate if it was pursued, and the total amount of crush rock aggregate that would be required in the context of total production in Shropshire, at this stage it is considered that there is insufficient justification for an upward adjustment to the primary forecast of future demand for sand & gravel aggregate (based on 10-year average sales data).**

Regional and National Projects

- 5.78. Alongside Planning Application registers maintained by Local Planning Authorities, information on future regional and national infrastructure projects can be sourced from:
- a. The National Infrastructure Planning website:
<https://infrastructure.planninginspectorate.gov.uk/projects/>
 - b. National Highways project plans: <https://nationalhighways.co.uk/>
- 5.79. According to these sources, there are a range of regional and national infrastructure projects proposed within the West Midlands.
- 5.80. Only one of these projects, the proposed reinforcement to the North Shropshire Electricity Distribution Network, is located within Shropshire. It is not currently anticipated that this project would result in significant demand for additional aggregates.
- 5.81. It is considered that the locations of the other projects within the West Midlands region means they are unlikely to result in significant additional demand for aggregate production in Shropshire.
- 5.82. However, it will be important to monitor the usage of aggregates produced in Shropshire, so that any indirect impact on production capacity and permitted reserves of sand & gravel and crushed rock from these projects can be assessed.
- 5.83. The decision by Government to terminate HS2 at Handsacre near Lichfield, and not progress through the north of the Country, which could have had implications for the consumption of sand & gravel produced in Staffordshire, does however mean that there is significantly less risk of projects in the West Midlands resulting in the displacement of existing demand for sand & gravel and crushed rock aggregate from elsewhere in the region to Shropshire.
- 5.84. **At this stage, it is not considered there is robust evidence which justifies an upward adjustment to the primary forecast of future demand for sand & gravel or crushed rock aggregates (based on 10-year average sales data) to service regional or national projects.**

Consideration of the Identified Supply

Constraints to and Levels of Existing Permitted Reserves

- 5.85. Sand & gravel aggregate reserves have reduced over the last year, primarily as a result of 'workings' that occurred within this period.
- 5.86. These reserves are distributed across active sites (57% of total reserves) and currently inactive sites (43% of total reserves), this

includes the recent commitment at the Former Ironbridge Power Station Site.

- 5.87. None of Shropshire's active sites (at 1st January 2024) are considered to have conditions attached which would restrict their ability to appropriately contribute to the achievement of future demand for aggregates.
- 5.88. It is considered that much of the reserves on inactive sites (specifically excluding the Former Ironbridge Power Station Site which is expected to be worked in accordance with the timescales documented within Planning Permission 19/05509/MAW) are unlikely to be worked in the short term, however this provides some certainty about the longer term supply of sand & gravel aggregate.
- 5.89. There are also further 'reserves' associated with allocated sites, which are also considered unlikely to be worked in the short term, but provide further certainty about the longer term supply of sand & gravel aggregate.
- 5.90. **This is not suggestive of the need for an upward adjustment to the primary forecast of future demand for sand & gravel aggregate (based on 10-year average sales data).**
- 5.91. Crushed rock reserves have decreased over the last year, primarily as a result of 'workings' that occurred.
- 5.92. Crushed rock reserves are distributed across active sites (84.5% of total reserves) and currently inactive sites (15.5%). It is considered there is a very robust level of reserves and reserves that are 'workable' in the short term.
- 5.93. It is apparent that the majority of the total reserves are associated with active sites. None of Shropshire's active sites (at 1st January 2024) are considered to have conditions attached which would restrict their ability to appropriately contribute to the achievement of future demand for aggregates.
- 5.94. **This is not suggestive of the need for an upward adjustment to the primary forecast of future demand for crushed rock aggregate (based on 10-year average sales data).**

Mineral Permissions

- 5.95. The adopted Development Plan includes allocations for 4 extensions to existing sand & gravel quarries. Of these allocations, consent has been granted for mineral workings on two of these extensions (although both have some residual capacity).
- 5.96. There have also been windfall planning permissions granted in recent years, including the recent consent for the prior extraction of sand &

gravel aggregate in advance of the redevelopment of the Former Ironbridge Power Station Site. Furthermore, there is also known interest in future windfall planning applications.

5.97. This provides confidence in the ability to produce sand & gravel aggregates in Shropshire and is a positive indication of ability to maintain this supply in the future.

5.98. **This is not suggestive of the need for an upward adjustment to the primary forecast of future demand for sand & gravel aggregate (based on 10-year average sales data).**

5.99. The adopted Development Plan does not include any allocations for crushed rock working. However, there remains a significant landbank.

5.100. This provides confidence in the ability to produce crushed rock aggregate in Shropshire and is a positive indication of ability to maintain this supply in the future.

5.101. **This is not suggestive of the need for an upward adjustment to the primary forecast of future demand for crushed rock aggregate (based on 10-year average sales data).**

Potential Future 'Reserves'

5.102. Strategic-level information suggests significant sand & gravel aggregate resource exists in Shropshire, beyond existing committed reserves.

5.103. The quality of these potential future 'reserves' and their suitability for working will be a matter for consideration at the time of any planning application or site allocation process.

5.104. **Ultimately, it is not considered this data indicates the need for an upward adjustment to the primary forecast of future demand for sand & gravel aggregate (based on 10-year average sales data).**

5.105. Strategic-level information also suggests significant crushed rock resource exists in Shropshire, beyond existing committed reserves.

5.106. The quality of these potential future 'reserves' and their suitability for working will be a matter for consideration at the time of any planning application or site allocation process.

5.107. **Ultimately, it is not considered this data indicates the need for an upward adjustment to the primary forecast of future demand for crushed rock aggregate (based on 10-year average sales data).**

Transport of Aggregates

5.108. Mineral aggregates produced in Shropshire are moved exclusively by road, although there is some potential for movement of aggregates by rail in the future.

5.109. **It is not considered that data indicates the appropriateness of any particular methodology for the assessment of future demand.**

Other Sources of Supply: Secondary, Recycled and Marine Aggregates

5.110. Paragraphs 223(b) and 226(a) of the NPPF require Mineral Planning Authorities to take into account the contribution that secondary and recycled aggregates make to the supply of materials before considering extraction of primary materials.

5.111. Paragraph 63 of the NPPG on Minerals (ID27) explains that:

- a. Recycled aggregates, include material from *"construction, demolition and excavation waste"*.
- b. Secondary aggregates include material from *"industrial wastes such as glass (cullet), incinerator bottom 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. They can also include hydraulically-bound materials"*.
- c. Marine aggregates are all owned by The Crown Estate with licenses issued by either the Marine Management Organisation (English waters) or Natural Resources Wales (Welsh waters). Information on *"the areas licensed by the Marine Management Organisation for marine sand and gravel dredging and, as they are prepared over time, Marine Plans"* therefore needs to be considered.

5.112. Secondary and recycled aggregates are generally a high density, low value material. Due to this and the transportation costs associated with the movement of such material, it often cannot be moved more than short distances on a cost effective basis.

5.113. This is particularly problematic in a predominantly rural area like Shropshire, where there are often significant distances involved in the transportation of materials from their source to processing facilities and then to where there is demand for the resultant aggregate produced.

5.114. According to estimates produced by the Mineral Products' Association (MPA) within the document 'Contribution of Recycled and Secondary Materials to Total Aggregates Supply in Great Britain – 2021

Estimate' around 28% of total aggregate 'consumption' in 2021 was from recycled and secondary aggregates.

- 5.115. This study explains that *"it is assumed that all [construction, demolition and excavation waste] CDEW which can be recycled as aggregates is being used, with limited opportunity for a significantly higher share of [construction, demolition and excavation waste] CDEW in aggregates markets."*
- 5.116. Unfortunately, a recurring theme of previous LAA reports is the difficulty of monitoring the quantity of secondary and recycled materials generated or used as aggregates at a Mineral Planning Authority level. Therefore, it is not possible to establish if the national figure is applicable at a local level.
- 5.117. However, whilst there is no specific information on the generation or use of secondary and recycled aggregates at a Mineral Planning Authority level, the Environment Agency's Waste Data Interrogator (2023) does provide recent information on total construction and demolition waste generated and managed in Shropshire. It also provides information on the amount that was subject to some form of treatment or recovery, that may have resulted in the production of recycled aggregate.
- 5.118. This therefore provides an indication of the maximum amount of construction and demolition waste both generated and managed in Shropshire that could have been processed for use as aggregates, as summarised within Table 5.5.

Table 5.5: Construction, Demolition and Excavation Waste Generated and Managed in Shropshire⁴

Total Construction, Demolition and Excavation Waste	Generated in Shropshire		Managed in Shropshire	
	481,996 tonnes		305,933 tonnes	
Of this total:	Amount (tonnes)	Percentage (approximate)	Amount (tonnes)	Percentage (approximate)
Subject to Treatment/Recovery	303,600	63.0%	33,519	11.0%
Deposited in Landfill	94,139	19.5%	185,749	60.7%
Incinerated	18,092	3.8%	24,263	7.9%
Transferred Elsewhere	66,164	13.7%	62,401	20.4%

⁴ For information, this dataset also indicates that around 58.3% (280,852 tonnes) of the construction and demolition waste generated in Shropshire was also managed in Shropshire. A further 16.9% (81,433 tonnes) of the construction and demolition waste generated in Shropshire was managed in the West Midlands, with the remainder primarily consisting of relatively small waste streams to other areas.

- 5.119. Table 5.5 demonstrates that 481,996 tonnes of construction and demolition waste generated in Shropshire and 305,933 tonnes of construction and demolition waste managed in Shropshire was subject to some form of treatment / recovery.
- 5.120. This therefore represents the maximum amount of construction and demolition waste generated / managed in Shropshire that could have been processed for use as aggregates.
- 5.121. The last Aggregate Minerals Survey for England and Wales (1st January 2024 base date) calculated that some 2.87 million tonnes of primary aggregates were 'consumed' in Shropshire in 2023.
- 5.122. As such, the maximum possible amount of recycled aggregate produced from construction and demolition waste that underwent some form of treatment / recovery in Shropshire (303,600 tonnes) would equate to around 10.6% of the total quantity of primary aggregates consumed in Shropshire in 2023.
- 5.123. Ultimately, available data is insufficient to determine the specific amount of secondary or recycled aggregates generated at a local level, or to monitor how this changes over time.
- 5.124. For this reason, whilst both the adopted Development Plans for Shropshire and Telford & Wrekin contain policies which promote and encourage the appropriate use of secondary and recycled aggregates, neither contain specific target rates. This approach is proposed to continue through plan making processes in Shropshire.
- 5.125. For the purpose of this LAA, consistent with the cautious assumption made by the MPA within their assessment of the *Contribution of Recycled and Secondary Materials to Total Aggregates Supply in Great Britain*, it is assumed that the amount of recycled and secondary aggregates generated in Shropshire will remain constant.
- 5.126. **It is not considered this data indicates the need for an upward adjustment to the primary forecast of future demand for sand & gravel or crushed rock aggregates (based on 10-year average sales data).**
- 5.127. This is considered a precautionary approach which will ensure that a sufficient reserves of primary aggregates are available in Shropshire to achieve the minimum landbank required nationally.
- 5.128. Shropshire is the largest inland county in the country and as such has no potential for the production of marine aggregates. Furthermore, according to the last Aggregate Minerals Survey for England and Wales (1st January 2020 base date), no marine aggregates were utilised in Shropshire.
- 5.129. Marine aggregates may form part of the future aggregate supply to Shropshire - although presently due to the availability of locally

derived aggregates and transport costs for aggregate materials, the scope is currently considered to be relatively limited.

- 5.130. **As such, for the purpose of this LAA, it is assumed that no marine aggregates will be produced or utilised in Shropshire.**

Conclusion

- 5.131. Shropshire Council and Telford & Wrekin Council consider the primary forecast of future demand for sand & gravel and crushed rock aggregates (based on 10-year average sales data) represents a robust dataset upon which to plan for the future demand for these aggregates.
- 5.132. This conclusion has been informed by consideration of both a secondary forecast of future demand for sand & gravel and crushed rock aggregates (based on 3-year average sales data); and other relevant indicators.
- 5.133. Whilst there is a variation between the primary (based on 10-year average sales data) and secondary (based on 3-year average sales data) forecasts of future demand for sand & gravel and crushed rock aggregates, it is considered that the 10-year average sales data is appropriately responsive to and informed by past fluctuations of development activity, which primarily stimulate the demand for sand & gravel and crushed rock aggregates.
- 5.134. The average annual housing completions for Shropshire over the 10-year period that informed the primary forecast (2,752 dwellings) are greater than the combined annual average housing requirements for Shropshire within adopted Development Plans. Whilst somewhat less than, they are also not dissimilar to, local housing need.
- 5.135. Latest available information on housing growth expectations in Shropshire suggest proposals will be around 9% higher than annual average completions over the last 10 years and 6% higher than annual average completions over the last 3 years.
- 5.136. Average annual employment land completions over the 10-year period (17.74ha), that informed the primary forecast, are less than, but not dissimilar to, the combined annual average employment requirements for Shropshire within adopted Development Plans.
- 5.137. Whilst they are some 12% lower than annual average employment need and latest available information on employment growth expectations in Shropshire, employment needs and requirements inevitably include a level of aspiration.
- 5.138. On balance it is considered that the primary forecast (based on 10-year average sales data) is appropriately responsive to future growth












aspirations, but that this will need to be carefully monitored to understand any impact of future planning for employment development in the County on production capacity and permitted reserves of sand & gravel and crushed rock aggregates.

- 5.139. It is recognised that there is a potential major development project in Shropshire, the proposed Shrewsbury North West Relief Road, which will require sand & gravel and crushed rock aggregate in the production of necessary concrete products. However, the Council have now officially paused all work on this project due to a significant funding gap to complete the scheme.
- 5.140. Furthermore, if this project were to proceed there would be a commitment to give positive consideration to the use of secondary/recycled aggregates.
- 5.141. As such, it is not considered this suggests the need for an adjustment to the primary forecast of demand (based on 10-year average sales data).
- 5.142. Comparison of sand & gravel and crushed rock aggregate consumption and production in Shropshire alongside changes to the levels of sand & gravel and crushed rock aggregate consumed in Shropshire from imports (from beyond Shropshire) do not suggest that under-production has occurred or a need for an adjustment to the primary forecast.
- 5.143. There is no up-to-date sub-regional apportionment guidelines to be considered in determining local provision of sand & gravel or crushed rock aggregates. However, the last annual apportionment rates attributed to Shropshire are generally comparable with those resulting from the forecast of future demand for aggregates based on 10-year average sales data. This perhaps provides some endorsement of the validity of this calculation.
- 5.144. Information on the identified supply of aggregates provides general confidence in the robustness of the supply of sand & gravel and crushed rock aggregates, and is not suggestive of the need for an upward adjustment of the forecast for sand & gravel or crushed rock based on 10-year average sales data.
- 5.145. As such, it is considered that there is no relevant local information which indicates deviation from the primary forecast of future demand for sand & gravel and crushed rock aggregate in Shropshire (based on 10-year average sales data).

6. Demand and Supply at January 2024

- 6.1. Table 6.1 provides a succinct summary of the forecast of future demand for aggregates in Shropshire. This forecast is based on **10-year average sales data at 1st January 2024**.
- 6.2. This forecast identifies the minimum required landbank; identified 'reserves'; and resultant actual landbank in Shropshire. These 'reserves' consist of minerals committed on currently active and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral working which do not yet benefit from planning permission.
- 6.3. Table 6.1 demonstrates that for both sand & gravel and crushed rock aggregates, sufficient reserves are available to demonstrate necessary landbanks.

Table 6.1: Future Demand for Aggregates in Shropshire

	Sand & Gravel	Change from 2022	Crushed Rock	Change from 2022
Required Landbank (years)	7 years		10 years	
10-Year Average Sales (at 1 st January 2024)	0.88mt		2.98mt	
Landbank Required (mt) Based on 10-Year Average Sales (at 1 st January 2024)	6.15mt		29.79mt	
Reserves (mt) (as at 1st January 2024)	20.07mt		77.67mt	
Actual Landbank (years) Based on 10-Year Average Sales at 1st January 2024	22.84 years		26.07 years	
Key:  Up from the previous year;  Down from the previous year;  Same as previous year				

Sand & Gravel Aggregate Informatives: Reserves have decreased (from 21.47m in 2023, primarily due to 'working' that occurred over the year) and the required landbank has increased (from 5.70mt in 2023). However, the identified landbank remains well in excess of the 7 year minimum requirement.

The reserves which contribute to this landbank are distributed across active sites (57% of total reserves) and currently inactive sites (43% of total reserves), including the recent commitment at the Former Ironbridge Power Station Site.

It is considered that a significant proportion of the reserves on inactive sites are unlikely to be worked in the short term, however this provides some certainty about the longer term supply of sand & gravel aggregate. There are further 'reserves' associated with allocated sites, these reserves are also considered unlikely to be worked in the short term, but again provide further certainty about the longer term supply of sand & gravel aggregate.

Crushed Rock Aggregate Informatives:

Reserves have decreased (from 83.05 in 2023 due to a combination of 'working' that occurred and re-allocation of some reserves from aggregate to other purposes) but so has the required landbank (from in 30.13mt 2023). This has resulted in an increase to the actual landbank, which is well in excess of the 10 year minimum requirement.

The reserves which contribute to this landbank are distributed across active sites (84.5% of total reserves) and currently inactive sites (15.5%). It is considered there is a robust level of reserves that are 'workable' in the short term.

7. Demand and Supply: Next Local Plan For Shropshire

- 7.1. Shropshire Council is intending to begin work on the next Local Plan under the revised plan-making system, which is expected to be brought into force in Autumn 2025.
- 7.2. Table 7.1 provides a succinct summary of the forecast of future demand and supply of sand & gravel aggregates in Shropshire across the 20 year period between 2025 and 2045. Specifically, it summarises:
- a. The level of production required across this 20 year period, based on the based on 10-year average sales data (at 1st January 2024).
 - b. Existing permitted sand & gravel aggregate reserves (at 1st January 2024) considered 'workable' between 2025 and 2045 (this excludes those reserves expected to have been worked in 2024). These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - c. Sand & gravel aggregate reserves associated with allocations within adopted Development Plans considered 'workable' between 2025 and 2045.
 - d. A calculation of the balance between the identified sand & gravel aggregate production requirements over the period between 2025 and 2045 and identified sand & gravel aggregate reserves considered 'workable' over this period.
 - e. The level of reserves required at the end of the proposed plan period (2045) to maintain an appropriate landbank (minimum of 7 years), based on 10-year average sales data (at 1st January 2024).
 - f. Any surplus from the 20 year period, available to form part of the proposed landbank at 2045.
 - g. Existing permitted sand & gravel aggregate reserves (at 1st January 2024) considered 'workable' beyond 2045. These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - h. Sand & gravel aggregate reserves associated with allocations within adopted Development Plans considered 'workable' beyond 2045.

- i. A calculation of the balance between the identified sand & gravel aggregate landbank requirement at 2045 and identified sand & gravel aggregate reserves available at 2045.

Table 7.1: Forecast of Future Demand and Supply of Sand & Gravel Aggregates in Shropshire – Next Local Plan for Shropshire Period

Plan Period (2025-2045)	Demand	Sand & Gravel Production Requirement over the Plan Period (2025-2045), based on the 10-year average sales data (at 1st January 2024):	17.60mt
	Supply	<i>Existing Permitted Reserves (at 1st January 2024) workable from 2025-2045:</i>	<i>14.24mt</i>
		<i>Development Plan Allocation Reserves* (at 1st January 2024) workable from 2025-2045:</i>	<i>5.04mt</i>
		Total Permitted/Allocated Production Potential to 2045:	19.28mt
	Balance	Surplus/Shortfall – Production Requirement Over Period 2025-2045:	1.68mt surplus
Landbank Requirement (2045)	Demand	Landbank Required at end of the Plan Period (2045), based on the 10-year average sales data (as at 1st January 2024):	6.16mt
	Supply	<i>Surplus from Plan Period:</i>	<i>1.68mt</i>
		<i>Existing Permitted Reserves (at 1st January 2024) workable after 2045:</i>	<i>5.83mt</i>
		<i>Development Plan Allocation Reserves* (at 1st January 2024) workable after 2045:</i>	<i>0.00mt</i>
		Total Permitted/Allocated Production Potential after 2045:	7.51mt
	Balance	Surplus/Shortfall – Landbank Required at 2045:	1.35mt surplus
Informatives: <i>*Capacity of Development Plan allocations reflect most recent estimates.</i> <i>**Known potential windfall capacity is not included within this table but has the potential to complement the identified supply, subject to planning permission being granted for the associated mineral working. It is considered that if potential windfall opportunities are ultimately approved, then delivery of permitted reserves and/or Development Plan Allocations may be later than currently forecast.</i>			

7.3. Table 7.1 demonstrates that sufficient sand & gravel aggregate that is workable over the period from 2025 to 2045 exists to meet the production requirement for this same period. It also demonstrates that sufficient additional reserves exist to demonstrate the necessary 7 year landbank at the end of this period.

- 7.4. Importantly, Table 7.1 does not include known potential windfall capacity which may emerge to complement the committed supply identified in Shropshire.
- 7.5. Table 7.2 provides a succinct summary of the forecast of future demand and supply of crushed rock aggregates in Shropshire across the 20 year period between 2025 and 2045. Specifically, it summarises:
- a. The level of production required across this 20 year period, based on the based on 10-year average sales data (at 1st January 2024).
 - b. Existing permitted crushed rock aggregate reserves (at 1st January 2024) considered 'workable' between 2025 and 2045 (this excludes those reserves expected to have been worked in 2024). These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - c. A calculation of the balance between the identified crushed rock aggregate production requirements over the period between 2025 and 2045 and identified crushed rock aggregate reserves considered 'workable' over this period.
 - d. The level of reserves required at the end of the proposed plan period (2045) to maintain an appropriate landbank (minimum of 10 years), based on 10-year average sales data (at 1st January 2024).
 - e. Any surplus from the 20 year period, available to form part of the proposed landbank at 2045.
 - f. Existing permitted crushed rock aggregate reserves (at 1st January 2024) considered 'workable' beyond 2045. These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - g. A calculation of the balance between the identified crushed rock aggregate landbank requirement at 2045 and identified crushed rock aggregate reserves available at 2045.

Table 7.2: Forecast of Future Demand and Supply of Crushed Rock Aggregates in Shropshire – Next Local Plan for Shropshire Period

Plan Period (2025-2045)	Demand	Crushed Rock Production Requirement over the Plan Period (2025-2045), based on the 10-year average sales data (at 1st January 2024):	59.57mt
	Supply	<i>Existing Permitted Reserves (at 1st January 2024) workable from 2025-2045:</i>	<i>65.75mt</i>
		Total Permitted/Allocated Production Potential to 2045:	65.75mt
	Balance	Surplus/Shortfall – Production Requirement Over Period 2025-2045:	6.17mt surplus
Landbank Requirement (2045)	Demand	Landbank Required at end of the Plan Period (2045), based on the 10-year average sales data (as at 1st January 2024):	29.79mt
	Supply	<i>Surplus from Plan Period:</i>	<i>6.17mt</i>
		<i>Existing Permitted Reserves (at 1st January 2024) workable after 2045:</i>	<i>11.92mt</i>
		Total Permitted/Allocated Production Potential after 2045:	18.09mt
	Balance	Surplus/Shortfall – Landbank Required at 2045:	11.69mt shortfall
Informatives: <i>*Known potential windfall capacity is not included within this table but has the potential to complement the identified supply, subject to planning permission being granted for the associated mineral working. It is considered that if potential windfall opportunities are ultimately approved, then delivery of permitted reserves may be later than currently forecast.</i>			

- 7.6. Table 7.2 demonstrates that sufficient crushed rock aggregate that is workable over the period from 2025 to 2045 exists to meet the production requirement for this same period. However, it also demonstrates that currently insufficient additional reserves would exist to demonstrate the necessary 10 year landbank at the end of this period. Importantly, Table 7.2 does not include known potential windfall capacity which may emerge to complement the committed supply identified in Shropshire.
- 7.7. Given the extent of the shortfall identified to the landbank at the end of the proposed plan period, it may be appropriate to seek additional supply through the plan making process.

8. Demand and Supply: Draft Telford & Wrekin Local Plan

- 8.1. Telford & Wrekin Council are currently progressing a Local Plan which addresses the period from 2020-2040.
- 8.2. Table 8.1 provides a succinct summary of the forecast of future demand and supply of sand & gravel aggregates in Shropshire across the 20 year period between 2020 and 2040. Specifically, it summarises:
 - a. The level of production required across this 20 year period, based on the based on 10-year average sales data (at 1st January 2024).
 - b. Sand & gravel aggregate production that has already occurred within the proposed plan period (2020-2023).
 - c. Existing permitted sand & gravel aggregate reserves (at 1st January 2024) considered 'workable' by 2040. These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - d. Sand & gravel aggregate reserves associated with allocations within adopted Development Plans considered 'workable' by 2040.
 - e. A calculation of the balance between the identified sand & gravel aggregate production requirements over the period between 2020 and 2040 and identified sand & gravel aggregate reserves considered 'workable' over this period.
 - f. The level of reserves required at the end of the proposed plan period (2040) to maintain an appropriate landbank (minimum of 7 years), based on 10-year average sales data (at 1st January 2024).
 - g. Any surplus from the 20 year period, available to form part of the proposed landbank at 2040.
 - h. Existing permitted sand & gravel aggregate reserves (at 1st January 2024) considered 'workable' beyond 2040. These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - i. Sand & gravel aggregate reserves associated with allocations within adopted Development Plans considered 'workable' beyond 2040.

- j. A calculation of the balance between the identified sand & gravel aggregate landbank requirement at 2040 and identified sand & gravel aggregate reserves available at 2040.

Table 8.1: Forecast of Future Demand and Supply of Sand & Gravel Aggregates in Shropshire – Draft Telford & Wrekin Local Plan Period

Plan Period (2020-2040)	Demand	Sand & Gravel Production Requirement over the Plan Period (2020-2040), based on the 10-year average sales data (at 1st January 2024):	17.60mt
	Supply	<i>Aggregates Already Produced during the proposed Plan Period (2020-2023):</i>	<i>4.40mt</i>
		<i>Existing Permitted Reserves (at 1st January 2024) workable from 2020-2040:</i>	<i>14.34mt</i>
		<i>Development Plan Allocation Reserves* (at 1st January 2024) workable from 2020-2040:</i>	<i>4.24mt</i>
		Total Permitted/Allocated Production Potential to 2040:	22.98mt
	Balance	Surplus/Shortfall – Production Requirement Over Period 2020-2040:	5.38mt surplus
Landbank Requirement (2040)	Demand	Landbank Required at end of the Plan Period (2045), based on the 10-year average sales data (as at 1st January 2024):	6.16mt
	Supply	<i>Surplus from Plan Period:</i>	<i>5.38mt</i>
		<i>Existing Permitted Reserves (at 1st January 2024) workable after 2040:</i>	<i>5.73mt</i>
		<i>Development Plan Allocation Reserves* (at 1st January 2024) workable after 2040:</i>	<i>0.80mt</i>
		Total Permitted/Allocated Production Potential after 2040:	11.91mt
	Balance	Surplus/Shortfall – Landbank Required at 2040:	5.75mt surplus
Informatives: <i>*Capacity of Development Plan allocations reflect most recent estimates.</i> <i>**Known potential windfall capacity is not included within this table but has the potential to complement the identified supply, subject to planning permission being granted for the associated mineral working. It is considered that if potential windfall opportunities are ultimately approved, then delivery of permitted reserves and/or Development Plan Allocations may be later than currently forecast.</i>			

- 8.3. Table 8.1 demonstrates that sufficient sand & gravel aggregate that is workable over the period from 2020 to 2040 exists to meet the production requirement for this same period. It also demonstrates

that sufficient additional reserves exist to demonstrate the necessary 7 year landbank at the end of this period.

- 8.4. Importantly, Table 8.1 does not include known potential windfall capacity which may emerge to complement the committed supply identified in Shropshire.
- 8.5. Table 8.2 provides a succinct summary of the forecast of future demand and supply of crushed rock aggregates in Shropshire across the 20 year period between 2020 and 2040. Specifically, it summarises:
 - a. The level of production required across this 20 year period, based on the based on 10-year average sales data (at 1st January 2024).
 - b. Existing permitted crushed rock aggregate reserves (at 1st January 2024) considered 'workable' between 2020 and 2040. These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - c. A calculation of the balance between the identified crushed rock aggregate production requirements over the period between 2020 and 2040 and identified crushed rock aggregate reserves considered 'workable' over this period.
 - d. The level of reserves required at the end of the proposed plan period (2040) to maintain an appropriate landbank (minimum of 10 years), based on 10-year average sales data (at 1st January 2024).
 - e. Any surplus from the 20 year period, available to form part of the proposed landbank at 2040.
 - f. Existing permitted crushed rock aggregate reserves (at 1st January 2024) considered 'workable' beyond 2040. These 'reserves' consist of minerals committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.
 - g. A calculation of the balance between the identified crushed rock aggregate landbank requirement at 2040 and identified crushed rock aggregate reserves available at 2040.

Table 8.2: Forecast of Future Demand and Supply of Crushed Rock Aggregates in Shropshire – Draft Telford & Wrekin Local Plan Period

Plan Period (2025-2045)	Demand	Crushed Rock Production Requirement over the Plan Period (2020-2040), based on the 10-year average sales data (at 1st January 2024):	59.57mt
	Supply	<i>Aggregates Already Produced during the proposed Plan Period (2020-2023):</i>	<i>11.48mt</i>
		<i>Existing Permitted Reserves (at 1st January 2024) workable from 2020-2040:</i>	<i>54.26mt</i>
		Total Permitted/Allocated Production Potential to 2040:	65.74mt
	Balance	Surplus/Shortfall – Production Requirement Over Period 2020-2040:	6.17mt
Landbank Requirement (2045)	Demand	Landbank Required at end of the Plan Period (2045), based on the 10-year average sales data (as at 1st January 2024):	29.79mt
	Supply	<i>Surplus from Plan Period:</i>	<i>6.17mt</i>
		<i>Existing Permitted Reserves (at 1st January 2024) workable after 2040:</i>	<i>23.41mt</i>
		Total Permitted/Allocated Production Potential after 2040:	29.58mt
	Balance	Surplus/Shortfall – Landbank Required at 2040:	0.21mt deficit
Informatives: <i>*Known potential windfall capacity is not included within this table but has the potential to complement the identified supply, subject to planning permission being granted for the associated mineral working. It is considered that if potential windfall opportunities are ultimately approved, then delivery of permitted reserves may be later than currently forecast.</i>			

8.6. Table 8.2 demonstrates that sufficient crushed rock aggregate that is workable over the period from 2020 to 2040 exists to meet the production requirement for this same period. It also demonstrates that the required 10 year landbank at the end of this period would largely be available. Importantly, Table 8.2 does not include known potential windfall capacity which may emerge to complement the committed supply identified in Shropshire.

8.7. Given the identified shortfall to the landbank at the end of the proposed plan period is so minor; the time period involved (a 10 year landbank in over 15 years' time); the potential for additional windfall supply to arise; and the expectation that Local Plans are reviewed every five years, it is not considered necessary to identify additional supply at this stage. However, the crushed rock aggregate landbank should be monitored to inform future review processes.

9. Analysis of Aggregate Supply

- 9.1. This section of the LAA provides a summary of the analysis of sand & gravel and crushed rock aggregates in Shropshire.

Sand & Gravel

- 9.2. In 2023, there were 8 active sand & gravel quarries in Shropshire and a further 2 sand & gravel quarries which were committed but not currently active (this includes the new quarry granted planning permission to facilitate the prior-extraction of sand & gravel aggregate alongside the redevelopment of the Former Ironbridge Power Station site).
- 9.3. In addition, there was 1 sand & gravel quarry that was identified as statutory dormant (where workings cannot occur without a further mineral planning permission).
- 9.4. Sand & gravel 'working' currently occurs exclusively within the Shropshire Council administrative area.
- 9.5. Further information on the sand & gravel quarries in Shropshire is provided within Appendix 1: Sand & Gravel Aggregate Quarries in Shropshire, of this document.
- 9.6. The adopted Development Plan for Shropshire Council's administrative area does not include any allocations for new sand & gravel aggregate quarries. However, it does include allocations for four extensions to existing quarries for further sand & gravel working. Of these, two have secured planning permission for the 'working' of part of the reserves available within these allocated extensions.
- 9.7. The adopted Development Plan for Telford & Wrekin Council does not include any allocations for new sand & gravel quarries or extensions to existing quarries to facilitate further sand & gravel working.
- 9.8. Similarly, the draft Local Plan for Telford & Wrekin Council's administrative area does not propose any further mineral allocations.
- 9.9. The majority of sand & gravel aggregate 'working' in Shropshire is now from glacial or bunter deposits which are of more variable quality than river terrace materials which have now been largely worked out in Shropshire.
- 9.10. These sand & gravel deposits frequently contain a high proportion of sand and more limited quantities of gravel and often suffer from clay and lignite (also known as brown coal, consisting of naturally compressed peat) contamination. These characteristics mean that deposits often require additional processing to generate a saleable product.

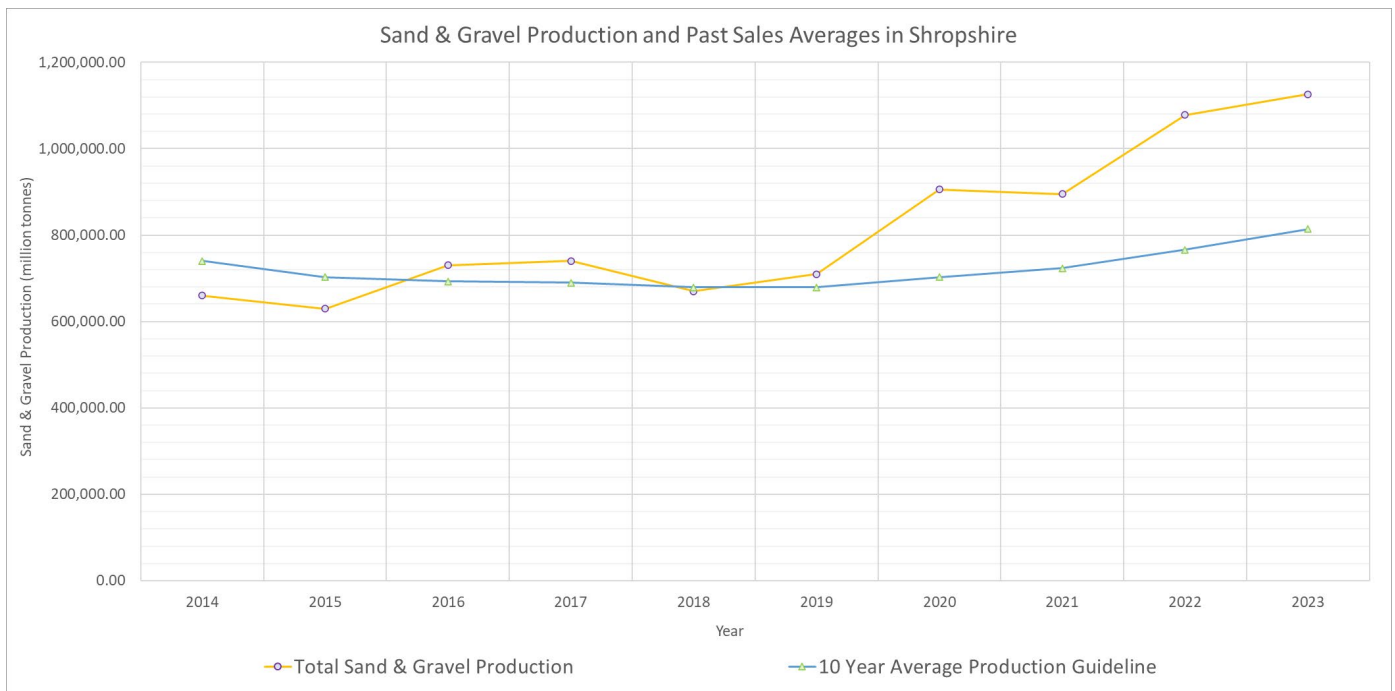
- 9.11. Sand & gravel aggregate produced in Shropshire primarily supplies the construction industry with building sand, concrete and concrete products.
- 9.12. The majority of the sand & gravel aggregate produced in Shropshire is used locally within Shropshire and the immediate surrounding area. Only a relatively limited amount of sand & gravel aggregate produced from Shropshire is currently exported eastwards to the main markets in the West Midlands conurbation due to the availability of more proximate and higher quality materials closer to these markets. These trends are expected to continue.
- 9.13. Aggregate monitoring data for 2023 indicates that of the sand & gravel aggregate with known destinations, around 67.7% was utilised in Shropshire, 21.4% was distributed within the rest of the West Midlands, 10.11% was distributed to Cheshire and Wales, and the remainder was to Herefordshire and Worcestershire.
- 9.14. It is expected that much of the considerable sand & gravel aggregate produced in Shropshire with unknown destinations (within the 2023 data) was utilised in Shropshire.
- 9.15. Table 9.1 provides a summary of changes to the number of operational sand & gravel quarries, sand & gravel aggregate production and sand & gravel aggregate production guidelines over the last 10 years.

Table 9.1: Sand & Gravel Production in Shropshire

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Operational Quarries	6	5	5	5	6	6	6	6	8	8
Sand & Gravel Production (mt)	0.63	0.73	0.74	0.67	0.71	0.91	0.90	1.08	1.13	1.30
Production Guideline (mt) (10 year average)	0.70	0.69	0.69	0.68	0.68	0.70	0.72	0.77	0.81	0.88

9.16. Figure 9.1 effectively illustrates the 10 year trend for sand & gravel aggregate production and the relevant production guideline (based on 10 year average sales data for each year).

Figure 9.1: Sand & Gravel Aggregate Production in Shropshire



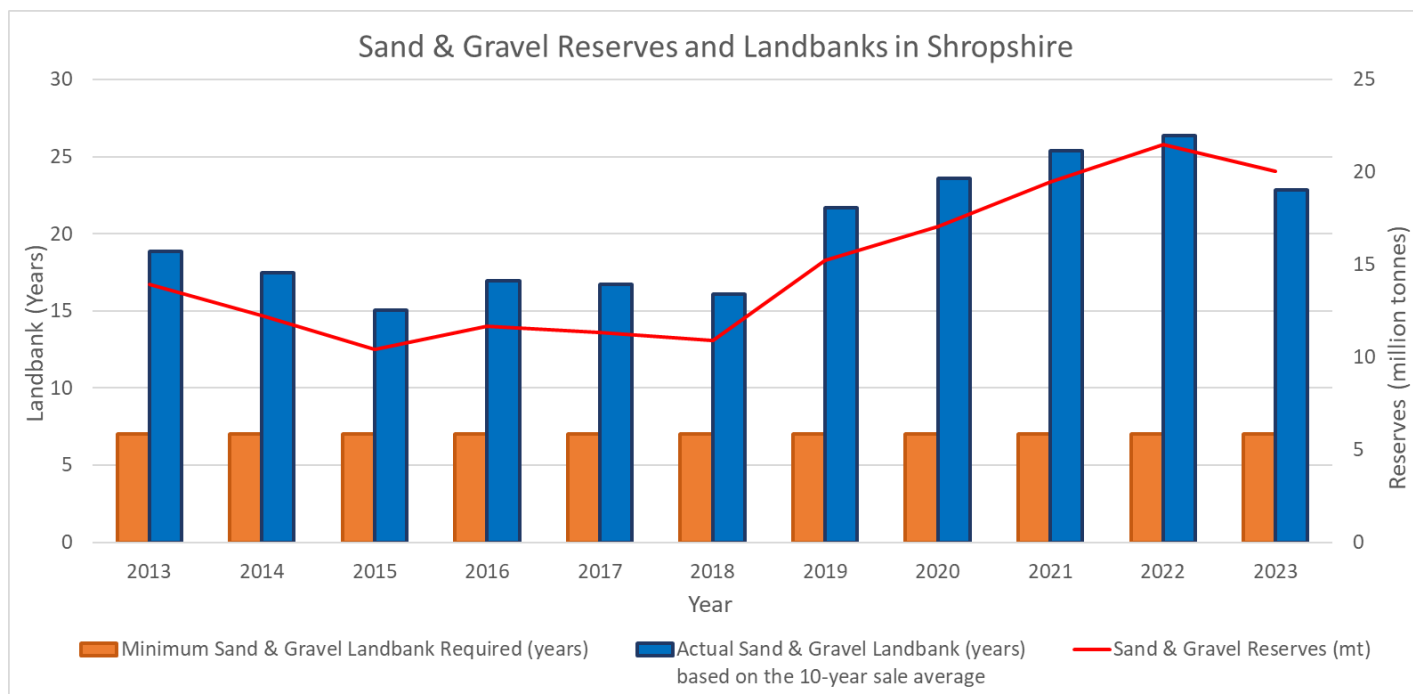
9.17. It is apparent from Table 9.1 and Figure 9.1 that:

- The 8 operational sand & gravel aggregate quarries in 2023 represent the joint highest number that have concurrently operational over the last 10 years. This provides confidence in the ability to produce sand & gravel aggregate and also to respond to any changes in demand.
- Sand & gravel aggregate production in 2023 was the highest it has been over the last 10 years. This again provides confidence in the ability to produce sufficient sand & gravel aggregate to respond to any changes in demand.
- The 10 year average sales of sand & gravel aggregate (2014-2023) was 0.88 million tonnes over the period, is the highest it has been over the last 10 years. This reflects the ever reducing impact of the mid-2000 economic downturn on construction activity and associated demand for sand & gravel aggregates.
- Sand & gravel aggregate production has exceeded the equivalent 10 year average production guideline in each of the last 6 years.

9.18. Figure 9.2 illustrates changes to sand & gravel aggregate reserves and landbanks. Minimum landbanks required and identified landbank are both based on 10-year average sales data.

- 9.19. 'Reserves' consist of aggregates committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.

Figure 9.2: Sand & Gravel Reserves and Landbanks in Shropshire



- 9.20. Figure 9.2 demonstrates sand & gravel aggregate reserves have resulted in a landbank to meet future demand that has remained consistently above the minimum landbank required within the NPPF.
- 9.21. The landbank at 1st January 2024 was equivalent to over 22 years based on 10 year average sales data (at 1st January 2024).
- 9.22. It is also apparent that sand & gravel aggregate reserves have steadily increased over the five year period between 2018 and 2022. This was as a result of re-appraising reserves available on existing quarries, granting planning permission (including on site allocations) for extensions to existing quarries, and the formation of a new quarry (to facilitate the prior-extraction of sand & gravel aggregates alongside the redevelopment of the Former Ironbridge Power Station site).
- 9.23. Whilst reserves reduced in 2023, as a result of 'working' that occurred during this period, they remain high creating a landbank substantially above the minimum requirement.
- 9.24. In addition, further reserves that are not currently permitted through a planning permission remain on the aforementioned extensions to quarries allocated within the adopted Development Plan for Shropshire Council's administrative area, which complement existing permitted reserves.

- 9.25. It is also understood that the operators of a number of sand & gravel quarries in Shropshire are minded to submit planning applications for vertical / lateral extensions to existing quarries in order to ensure the comprehensive working of resources.
- 9.26. Such proposals would constitute potential 'windfall' opportunities (not specifically planned for within the adopted Development Plan), which if approved would also complement existing permitted reserves.

Crushed Rock

- 9.27. In 2023, there were 5 active crushed rock quarries in Shropshire and a further 2 crushed rock quarries which were committed but not currently active. Of these 1 active crushed rock quarry is located within the Telford & Wrekin Council administrative area. The remaining crushed rock quarries are located within the Shropshire Council administrative area.
- 9.28. Further information on the crushed rock quarries in Shropshire is provided within Appendix 2: Crushed Rock Aggregate Quarries in Shropshire, of this document.
- 9.29. The adopted Development Plan for Shropshire Council's administrative area does not contain allocations/proposed allocations for new crushed rock quarries or extensions to existing crushed rock quarries.
- 9.30. Similarly, neither the adopted Development Plan for Telford & Wrekin Council or the draft Local Plan for Telford & Wrekin include any allocations for new crushed rock quarries or extensions to existing crushed rock quarries.
- 9.31. Crushed rock aggregates produced in Shropshire fall into three categories of rock, these are sandstone, limestone and igneous rock. They are primarily used as engineering fill, roadstone and asphalt in road construction and maintenance; ballast during rail track construction and maintenance; bedding material during water and effluent filtration pipe installation and maintenance; and also serve various industries such as ready mix and precast concrete manufacturing.
- 9.32. The majority of the crushed rock aggregate produced in Shropshire is used locally within Shropshire and the immediate surrounding area. However, the high polishing resistance of some crushed rock aggregate resources in Shropshire supports export to a larger market area, and as such a relatively significant proportion of production supplies national markets outside the West Midlands. These trends are expected to continue.

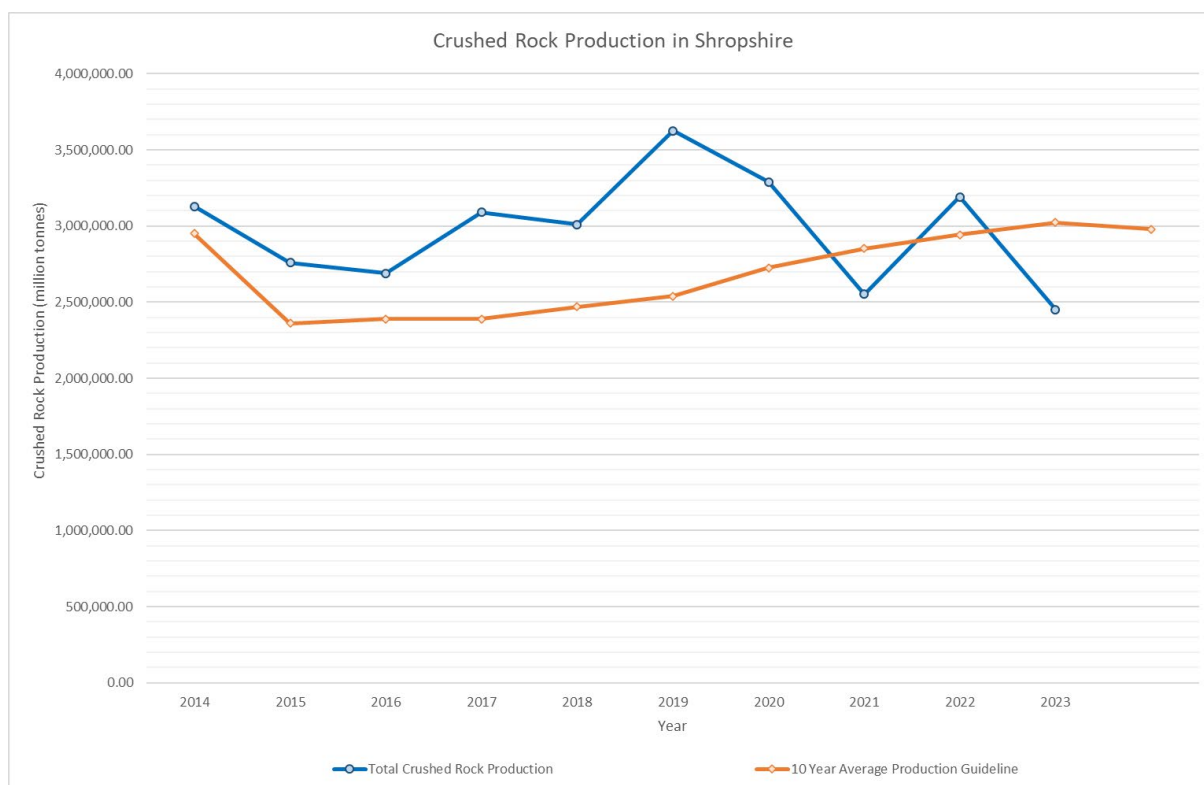
- 9.33. Aggregates monitoring data for 2023 indicates that of the crushed rock with known destinations, 51% was utilised in Shropshire, 18% has been utilised within the rest of the West Midlands, and the remaining 31% is distributed to locations all over the country. Much of the crushed rock with an unknown destination was utilised within the West Midlands.
- 9.34. Table 9.2 provides a summary of changes to crushed rock aggregate production and the crushed rock aggregate production guideline over the last 10 years.

Table 9.2: Crushed Rock Aggregate Production in Shropshire

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Crushed Rock Production (mt)	3.13	2.76	2.69	3.09	3.01	3.62	3.29	2.55	3.19	2.45
Production Guideline (mt) (10-year average)	2.36	2.39	2.39	2.47	2.54	2.73	2.85	2.94	3.02	2.98

- 9.35. Figure 9.3 effectively illustrates the 10 year trend for crushed rock aggregate production and the relevant production guideline (based on a 10 year average for each year).

Figure 9.3: Crushed Rock Production in Shropshire



- 9.36. It is apparent from Table 9.2 and Figure 9.3 that:
- Crushed rock aggregate production over the last 10 years has remained relatively stable, although there have been fluctuations

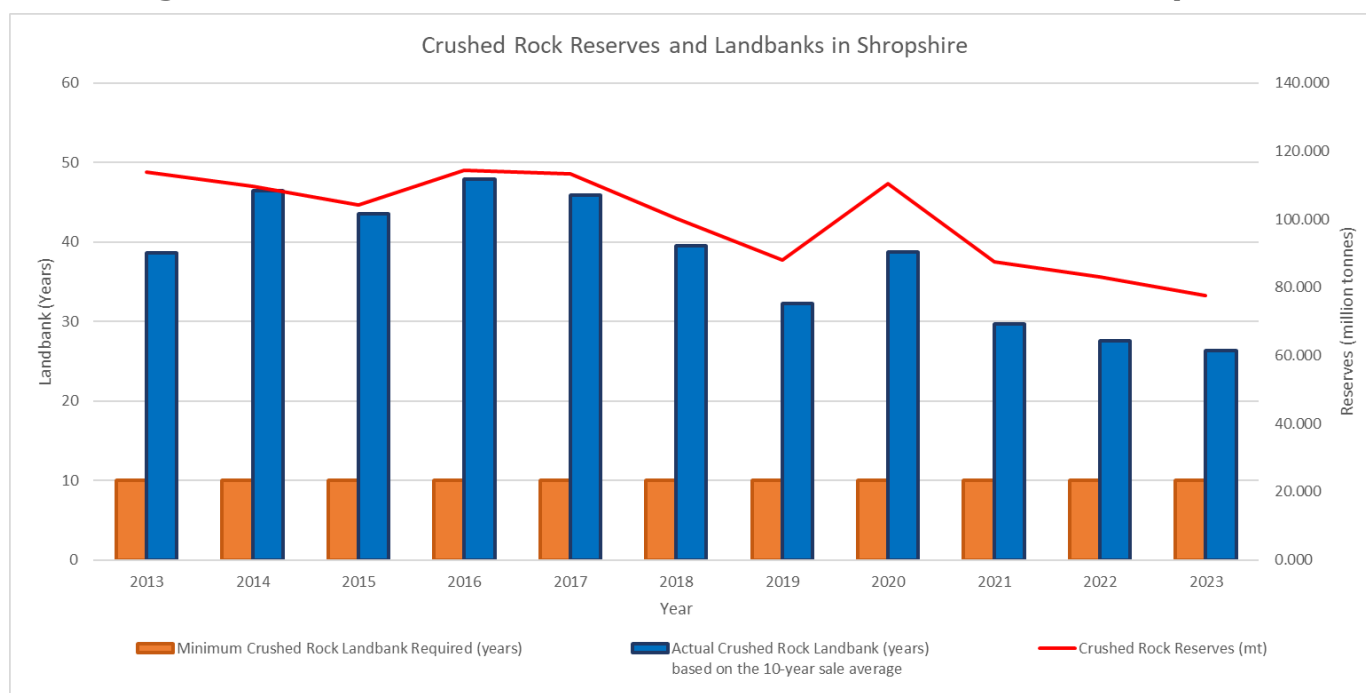
with a peak of 3.62 million tonnes in 2019 and trough of 2.45 million tonnes in 2023.

- b. The level of crushed rock aggregate production in 2023 represents a reduction to levels of production in 2022 and is the lowest in the last 10 years.
- c. The 10 year average sales of crushed rock aggregate was 2.98 million tonnes over the period 2014-2023, which is the second highest it has been over the last 10 years and is also higher than the 3 year average for the period 2021-2023. This reflects the ever reducing impact of the mid-2000 economic downturn on construction activity and associated demand for sand & gravel aggregates.
- d. Crushed rock aggregate production was lower than the equivalent 10 year average production guideline in 2023, this was also the case in 2021. In all of the other last 10 years, production exceeded the equivalent 10 year average production guideline.

9.37. Figure 9.4 illustrates changes to crushed rock aggregate reserves and landbanks (minimum landbank required and identified landbank, both based on 10 year average sales data).

9.38. 'Reserves' consist of aggregates committed on currently active sites and currently inactive sites. However, they do not include 'reserves' associated with statutory dormant sites or sites allocated for future mineral workings which do not yet benefit from planning permission.

Figure 9.4: Crushed Rock Reserves and Landbanks in Shropshire



- 9.39. Figure 9.4 demonstrates that crushed rock aggregate reserves to meet future demand have resulted in a landbank that has remained consistently above the minimum landbank level required by NPPF.
- 9.40. The landbank at 1st January 2024 was equivalent to over 26 years based on 10 year average sales data (at 1st January 2024).
- 9.41. The general trend in crushed rock aggregate reserves, has been a steady depletion since 2017 (with the exception of 2020), as a result of 'workings' that have been undertaken. However, a resilient reserve remains in Shropshire, well above required landbanks.

10. Other Mineral Working in Shropshire

- 10.1. Appendix 3: Other Quarries in Shropshire provides a list of some of the other mineral quarries operating in Shropshire.

Building Stone

- 10.2. During 2023, 1 building stone quarry was operational in Shropshire, producing local building stone and dimension stone (Grinshill Quarry in Shropshire Council's administrative area).
- 10.3. Local building stone is mainly for the repair of historic buildings and structures, although is also used in certain new build projects. Dimension stone is rock that has been selected and finished to specific sizes or shapes and is used locally, regionally and nationally in building restoration projects.
- 10.4. The adopted Development Plan for Shropshire Council's administrative area provides a flexible policy approach, which allows other small quarries to open on a temporary and short-term basis to work stone for particular local refurbishment and conservation projects. This approach has been utilised successfully on a number of occasions in the recent past.
- 10.5. The adopted Development Plan for Telford & Wrekin Council's administrative area supports mineral extraction subject to specific criteria.

Brick and Fire Clays

- 10.6. During 2023, there were two operational quarries producing brick clay in Shropshire. These were New Hadley Quarry (in Telford & Wrekin Council's administrative area) and Knowle Sands Quarry (in Shropshire Council's administrative area).
- 10.7. Telford & Wrekin Council's administrative area contains a brickworks (Blockley's Brick Works). Clay production in Shropshire support the manufacture of bricks and clay related products at this brickworks. The remainder of the brick clay produced in Shropshire is generally exported elsewhere in the West Midlands.
- 10.8. Periodically, clay has also been worked in South Shropshire to secure clays which allow for the production of tiles to match existing, as part of the repair of local historic buildings.
- 10.9. Fire clay production has currently ceased in Shropshire, although some fire clay mineral resources do still exist in the County.

Coal and Hydrocarbon Resources

- 10.10. There has been both surface and deep mining of coal in Shropshire in the past and coal reserves do remain in some areas. However, much of this coal reserve is at depths which mean it is not currently considered commercially viable to 'work'. As a result, coal production has currently ceased in Shropshire.
- 10.11. Whilst exploratory drilling for coalbed methane extraction has taken place in two areas in the past, this has not resulted in active working of these resources. Furthermore, whilst some licence areas for unconventional hydrocarbons do fall within Shropshire, none of the licences concerned have been taken up.

11. Mineral Transport and Handling Facilities

- 11.1. Mineral aggregates produced in Shropshire are moved exclusively by road. Reflecting this importance of road infrastructure for the transportation of aggregates:
 - a. The adopted Development Plan for Shropshire Council's administrative area safeguards main access roads to mineral sites and haul roads within mineral sites.
 - b. Similarly, the adopted Development Plan for the Telford & Wrekin Council's administrative area seeks to safeguard important mineral related infrastructure. This is intended to continue within the draft Local Plan for Telford & Wrekin.
- 11.2. In seeking to support the potential for utilising railfreight to transport aggregates in the future, the adopted Development Plan for Shropshire Council's administrative area identifies and safeguards a number of railfreight facilities, including rail sidings at Bayston Hill near Shrewsbury and the Oswestry mineral railway (Cambrian Line).
- 11.3. The Planning Permission for crushed rock production at Bayston Hill Quarry recognises the potential for material to be exported via the Bayston Hill sidings.
- 11.4. Opportunities to export sand & gravel aggregate 'worked' via rail at the new quarry at the site of the Former Ironbridge Power Station is being proactively investigated.
- 11.5. The railfreight terminal in north Telford is not currently used to move mineral aggregates but could potentially be used for this purpose in future.

Appendix 1: Sand & Gravel Aggregate Quarries in Shropshire

Site	Mineral Planning Authority Area	Grid Reference	Status (During 2023)	Date Current Planning Permission Expires	Operator	Known Insurmountable Constraints to 'Working' of Committed Reserves
Bridgwalton Farm Quarry	Shropshire Council	SO 689 920	Active Site	23/11/2028	Shropshire Sand & Gravel Co Ltd	None
Bromfield Quarry	Shropshire Council	SO 481 773	Active Site	02/01/2033	Bromfield Sand & Gravel Co Ltd	None
Cound Quarry	Shropshire Council	SJ 550 060	Statutory Dormant Site	Statutory Dormant Site	Hanson Aggregates	Statutory Dormant Site
Former Ironbridge Power Station Quarry	Shropshire Council	SJ 646 038	Not Currently Active Site	16/09/2031 (assumed)	To be confirmed	None
Gonsal Quarry	Shropshire Council	SJ 484 044	Active Site	07/01/2028	Shropshire Sand & Gravel Co Ltd	None
Gonsal Quarry Extension (North)	Shropshire Council	SJ 484 044	Site Allocation (part committed)	Not applicable	Shropshire Sand & Gravel Co Ltd	None
Gonsal Quarry Extension (South)	Shropshire Council	SJ 484 044	Site Allocation	Not applicable	Shropshire Sand & Gravel Co Ltd	None
Morville Quarry	Shropshire Council	SO 685 936	Active Site	22/02/2027	Shropshire Sand & Gravel Co Ltd	None
Morville Quarry Extension	Shropshire Council	SO 685 936	Site Allocation	Not applicable	Shropshire Sand & Gravel Co Ltd	None
Norton Farm, Condover Quarry	Shropshire Council	SJ 497 075	Active Site	19/09/2036	Hanson Aggregates	None

Site	Mineral Planning Authority Area	Grid Reference	Status (During 2023)	Date Current Planning Permission Expires	Operator	Known Insurmountable Constraints to 'Working' of Committed Reserves
Shipleigh Quarry	Shropshire Council	SO 813 963	Active Site	12/02/2035	JPE Aggregates	None
Sleap Quarry	Shropshire Council	SJ 480 265	Not Currently Active Site	17/03/2038	Hanson Aggregates	None
Wood Lane Quarry	Shropshire Council	SJ 422 328	Active Site	22/06/2026	TG Aggregates	None
Wood Lane Quarry Extension	Shropshire Council	SJ 422 328	Site Allocation (part committed)	Not applicable	TG Aggregates	None
Woodcote Wood Quarry	Shropshire Council	SJ 773 149	Active Site	20/08/2033	NRS Woodcote Aggregates Ltd	None

Appendix 2: Crushed Rock Aggregate Quarries in Shropshire

Site	Local Planning Authority	Grid Reference	Status (at March 2024)	Date Current Planning Permission Expires	Operator	Known Insurmountable Constraints to 'Working' of Committed Reserves
Bayston Hill Quarry	Shropshire Council	SJ 493 091	Active Site	01/01/2060	Tarmac Trading Ltd	None
Blodwel Quarry	Shropshire Council	SJ 257 229	Not Currently Active Site	21/02/2042	Hanson Aggregates	None
Callow Hill Quarry	Shropshire Council	SJ 387 050	Not Currently Active Site	21/02/2042	Tarmac Trading Ltd	None
Clee Hill Quarry	Shropshire Council	SO 599 762	Active Site	31/08/2048	Midland Quarry Products (MQP) Ltd	None
Haughmond Hill Quarry	Shropshire Council	SJ 542 148	Active Site	31/12/2046	Aggregate Industries UK Ltd	None
Leaton Quarry	Telford & Wrekin Council	SJ 618 113	Active Site	31/12/2040	Breedon Group	None
Llynclys Quarry	Shropshire Council	SJ 264 242	Active Site	05/12/2051	Llynclys Aggregates	None
More Quarry	Shropshire Council	SO 325 933	Statutory Dormant Site	Statutory Dormant Site	Tarmac Trading Ltd	Statutory Dormant Site

Appendix 3: Other Quarries in Shropshire

Site	Local Planning Authority	Material 'Worked'	Grid Reference	Status (as at 1 st January 2023)	Operator
Grinshill Quarry	Shropshire Council	Local Building Stone and Dimension Stone	SJ 526 238	Active Site – Periodically Worked	Grinshill Stone Quarries Ltd
Myddle Quarry	Shropshire Council	Local Building Stone and Dimension Stone	SJ 476 231	Active Site– Periodically Worked	Grinshill Stone Quarries Ltd
Knowle Sands Quarry	Shropshire Council	Brick Clay	SO 718 916	Active Site	Ibstock Brick Limited
New Hadley Quarry	Telford & Wrekin Council	Brick Clay (with ancillary crushed rock aggregates)	SO 590 980	Active Site	Michelmersh Brick UK Ltd

Please Note: This is not intended to be an exhaustive list of other quarries operating in Shropshire, rather it focuses on the non-aggregate quarries identified and referenced within this LAA.