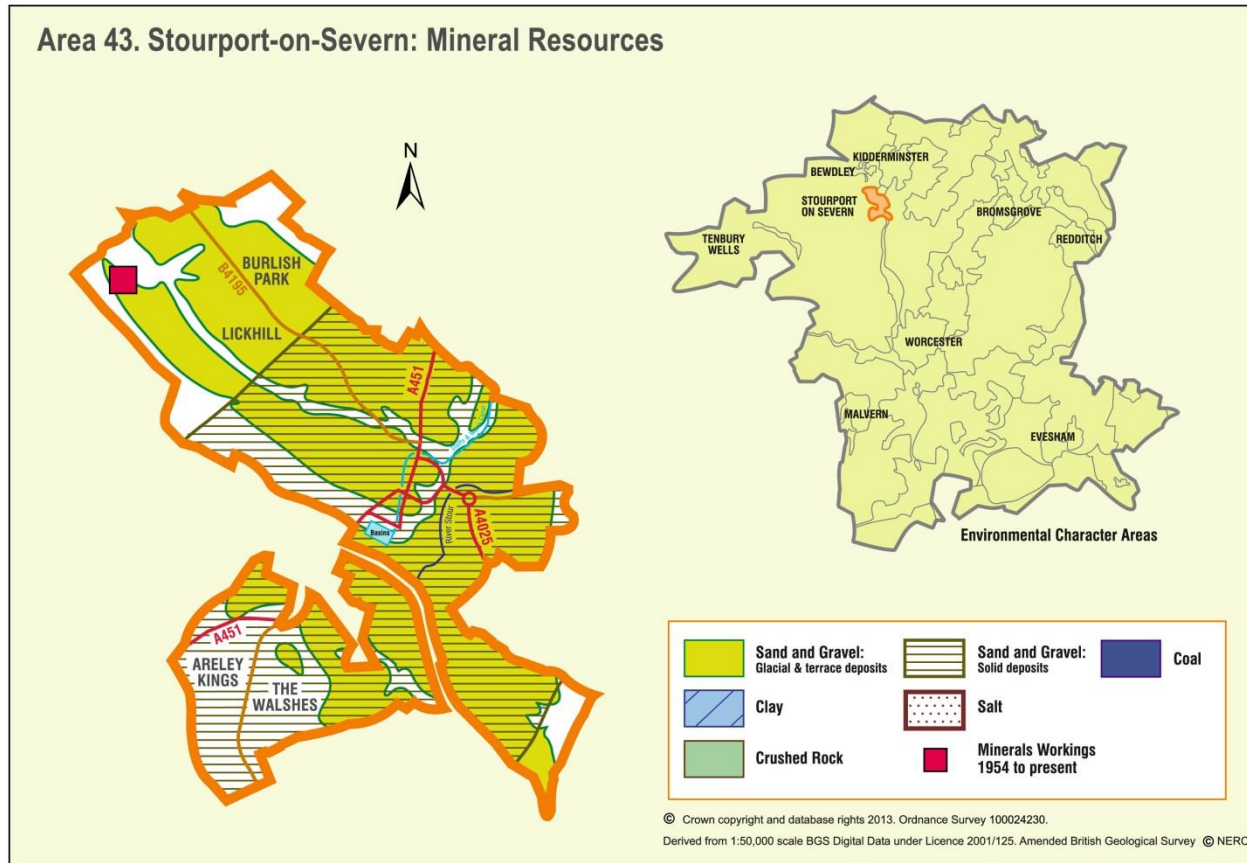


Appendix 43: Analysis of aggregate resources in Area 43: Stourport-on-Severn



ECA Summary for the Third Stage consultation on MLP (Spring 2015):

Sand and gravel

There are 4 resource areas identified for sand and gravel in Stourport Area:

- Significant: 1
- Compromised: 3

There are also solid sand deposits in this area, these are assessed as resource areas 1/32, 2/22 and 2/23.

Crushed rock

There are no resource areas identified in Stourport Area for crushed rock.

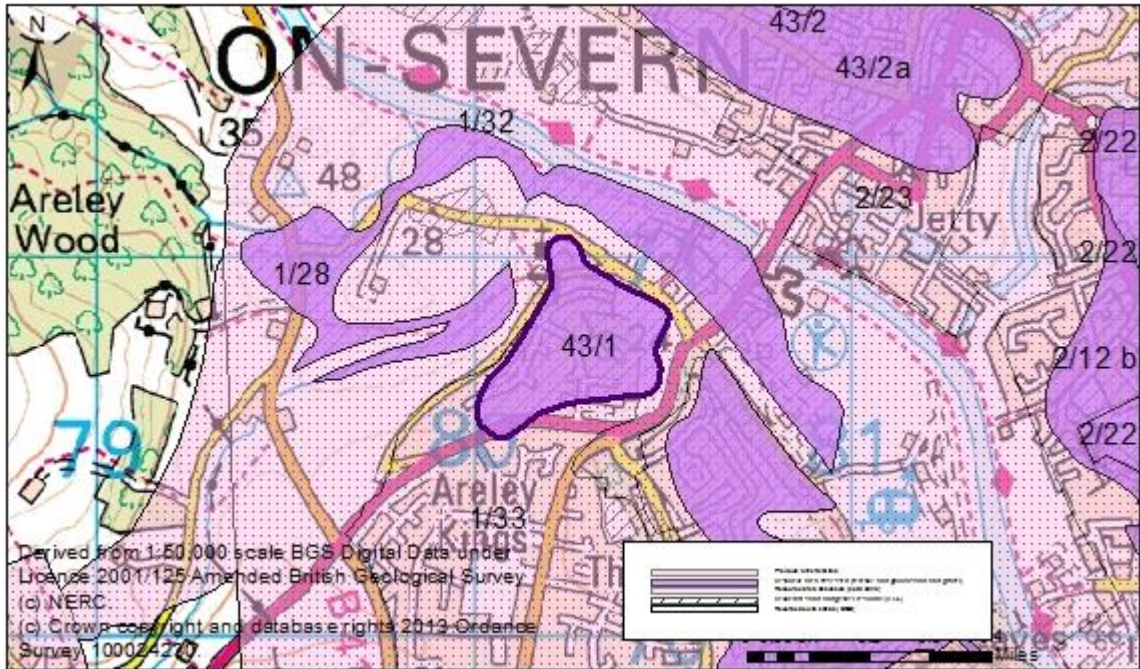
Non-aggregates

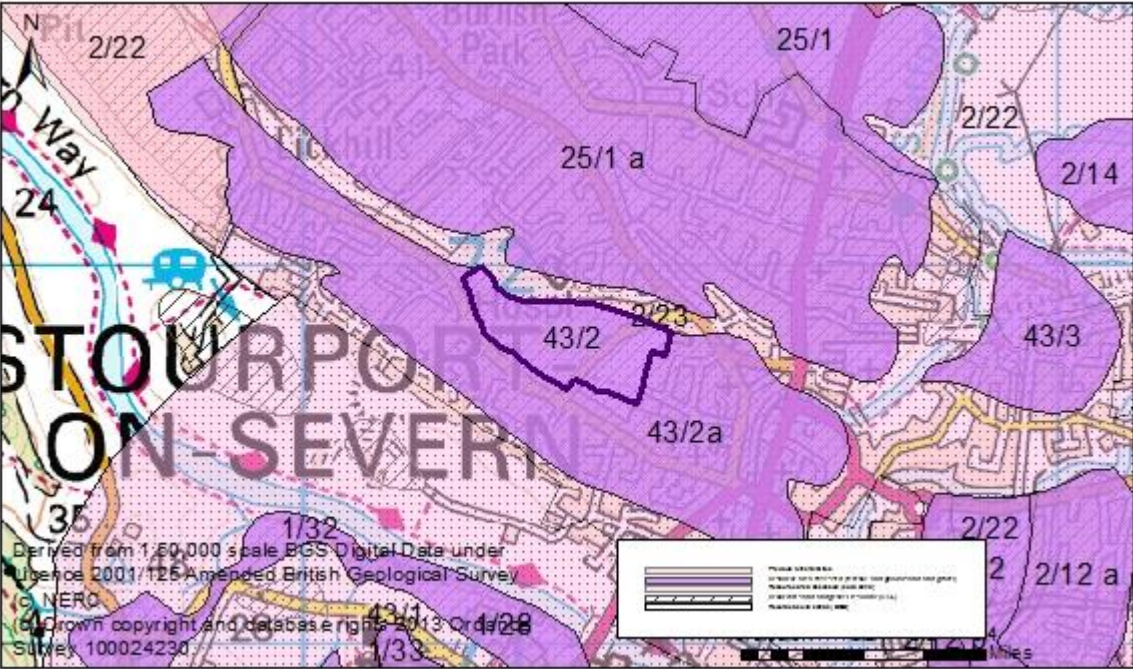
BGS data indicates that there are no non-aggregate mineral deposits in this area.

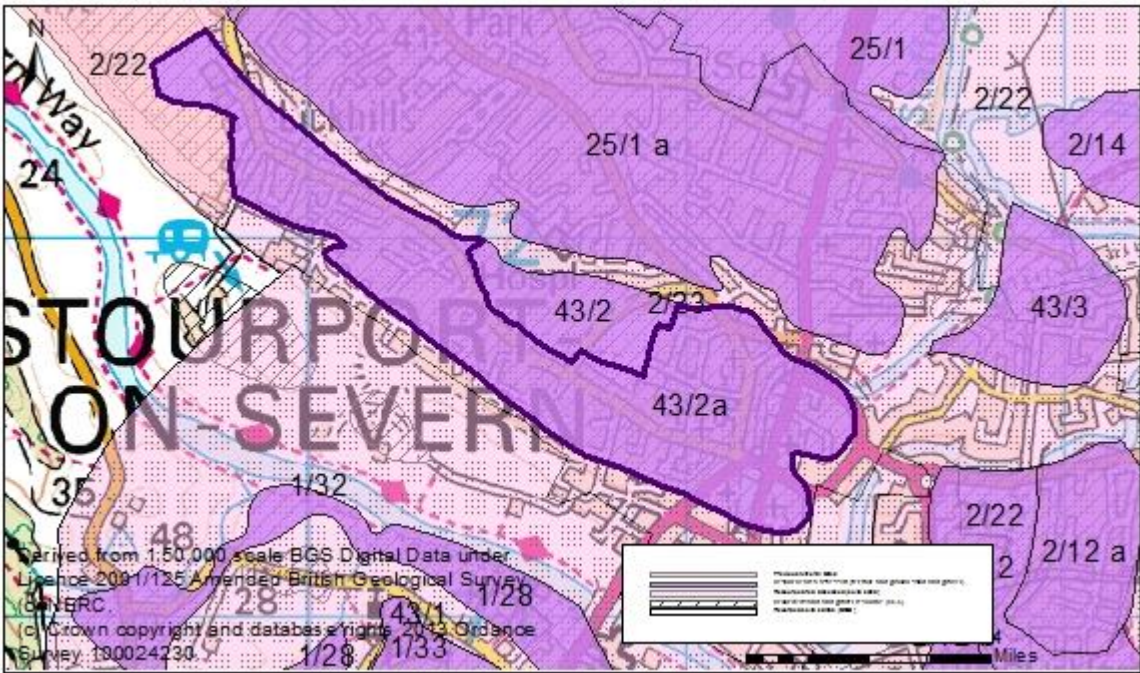
Overview of resource assessment for ECA 43

Sand and gravel resource areas:

Resource number*	Second Stage Consultation		Third Stage Consultation	
	Original estimated resource tonnage (2 tonnes/m ³)	Significance	Revised estimate of resource tonnage (1.65 tonnes/m ³)	Significance
43/1	854,000	Compromised	704,550	Compromised
43/2	1,000,000	Significant	825,000	Significant
43/2a	5,600,000	Compromised	4,620,000	Compromised
43/3	448,000	Compromised	369,600	Compromised

Overview	
Resource number:	43/1
Resource name:	Areley Kings
Resource area:	14ha
Resource depth:	Estimated 6.1m
Location	
OS sheet reference:	SO 87 SW
National grid ref:	380268, 270763
	
Resource description:	
Resource description:	Resource area 43/1 is 3 rd terrace (Holt Heath) sand and gravel. The 3 rd terrace varies between 15' (4.5m) and 25' (7.6m) in the Stourport area. Estimated resource depth based on mid-point of 3 rd terrace depths (4.5m to 7.6m): 6.1m This resource area is underlain by solid sand deposits (assessed as resource area 1/33).
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A small resource area overlain by the settlement of Areley Kings.
Crude estimate of resource:	Area: 14 ha x average depth: 6.1 m ÷ 2 Estimated resource volume: 427,000 m ³ Estimated resource tonnage (at 2 t/m³): 854,000 tonnes
Conclusion:	Compromised by development.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	Area: 14 ha x average depth: 6.1 m ÷ 2 Estimated resource volume: 427,000 m ³ Estimated resource tonnage (at 1.65 t/m³): 704,550 tonnes
Conclusion:	Compromised by development.

Overview	
Resource number:	43/2
Resource name:	Stourport South
Resource area:	10ha
Resource depth:	Estimated 10m
Location	
OS sheet reference:	SO 77 SE, SO 87 SW
National grid ref:	380705, 271806
	
Resource description:	
Resource description:	Resource area 43/2 is 2 nd terrace (Worcester) sand and gravel. The deposit was worked at Lickhill Quarry (to the north west of this resource area), the application stated a maximum depth of 10m of sand and gravel. Estimated resource depth based on information provided with Lickhill Quarry application: 10m This resource area is underlain by solid sand deposits (assessed as resource area 2/23)
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A small resource area in the centre of Stourport. The deposit continues under the urban area of Stourport (assessed as resource area 43/2a) and continues to the west where it has been worked extensively at Lickhill Quarry.
Crude estimate of resource:	Area: 10 ha x average depth: 10 m ÷ 2 Estimated resource volume: 500,000 m ³ Estimated resource tonnage (at 2 t/m³): 1,000,000 tonnes
Conclusion:	Significant. Consider in defining areas of search.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	Area: 10 ha x average depth: 10 m ÷ 2 Estimated resource volume: 500,000 m ³ Estimated resource tonnage (at 1.65 t/m³): 825,000 tonnes
Conclusion:	Significant.

Overview	
Resource number:	43/2 a)
Resource name:	Stourport South a)
Resource area:	56ha
Resource depth:	Estimated 10m
Location	
OS sheet reference:	SO 77 SE, SO 87 SW
National grid ref:	380705, 271806
	
Resource description:	
Resource description:	Resource area 43/2a is 2 nd terrace (Worcester) sand and gravel. The deposit was worked at Lickhill Quarry (to the west of this resource area), the application stated a maximum depth of 10m of sand and gravel. Estimated resource depth based on information provided with Lickhill Quarry application: 10m This resource area is underlain by solid sand deposits (assessed as resource area 2/23)
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A medium-sized resource area overlain by the settlement of Stourport. The deposit continues to the north (assessed as resource area 43/2) and continues to the west where it has been worked extensively at Lickhill Quarry.
Crude estimate of resource:	Area: 56 ha x average depth: 10 m ÷ 2 Estimated resource volume: 2,800,000 m ³ Estimated resource tonnage (at 2 t/m³): 5,600,000 tonnes
Conclusion:	Compromised by development with less than 10ha of the deposit remaining.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	Area: 56 ha x average depth: 10 m ÷ 2 Estimated resource volume: 2,800,000 m ³ Estimated resource tonnage (at 1.65 t/m³): 4,620,000 tonnes
Conclusion:	Compromised by development.

Overview		
Resource number:	43/3	
Resource name:	Upper Mitton Bridge	
Resource area:	14ha	
Resource depth:	Estimated 3.2m	
Location		
OS sheet reference:	SO 87 SW	
National grid ref:	381948, 271814	
Resource description:		
Resource description:	<p>Resource area 43/3 is 1st terrace (Powerhouse) sand and gravel. The BGS memoirs record that 1st terrace varies in depth between 6' (1.8m), 14'8" (4.5m) in the Stourport area.</p> <p>Estimated resource depth based on mid-point of 1st terrace depth (1.8m to 4.5m): 3.2m</p> <p>This resource area is underlain by solid sand deposits (assessed as resource area 2/22 and 2/23)</p>	
Assessment of resource for the second consultation on MLP (Autumn 2013)		
Commentary:	A small resource area which is largely overlain by the settlement of Stourport on Severn.	
Crude estimate of resource:	<p>Area: 14 ha x average depth: 3.2 m ÷ 2</p> <p>Estimated resource volume: 224,000 m³</p> <p>Estimated resource tonnage (at 2 t/m³): 448,000 tonnes</p>	
Conclusion:	Compromised by development with less than 10ha of the deposit remaining.	
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)		
Revised estimate of resource:	<p>Area: 14 ha x average depth: 3.2 m ÷ 2</p> <p>Estimated resource volume: 224,000 m³</p> <p>Estimated resource tonnage (at 1.65 t/m³): 369,600 tonnes</p>	
Conclusion:	Compromised by development.	