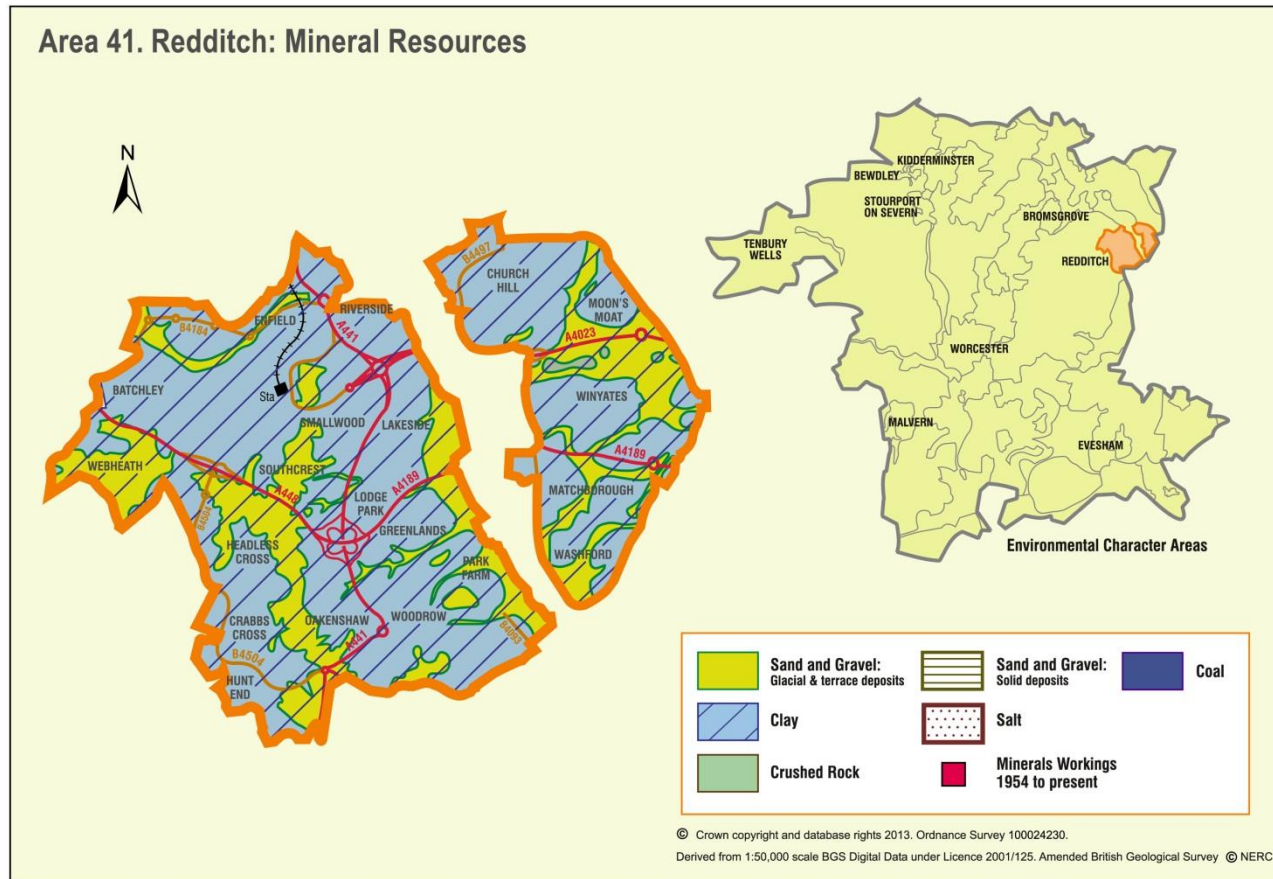


## Appendix 41: Analysis of aggregate resources in Area 41: Redditch



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

#### Sand and gravel

There are 6 resource areas identified for sand and gravel in Redditch area:

- Not significant: 1
- Compromised: 5

#### Crushed rock:

There are no resource areas identified for crushed rock in Redditch area.

#### Non-aggregates

BGS data indicates that there are deposits of clay in this ECA.

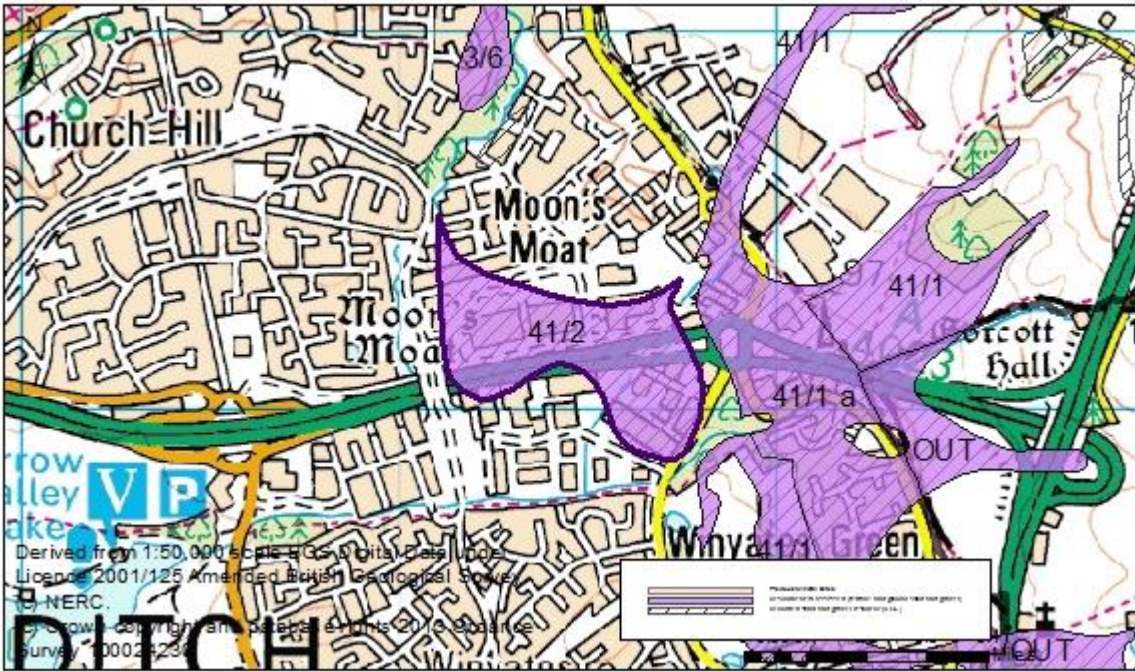
## Overview of resource assessment for ECA 41

### Sand and gravel resource areas:

Resource number*	Second Stage Consultation		Third Stage Consultation	
	Original estimated resource tonnage (2 tonnes/m <sup>3</sup> )	Significance	Revised estimate of resource tonnage (1.65 tonnes/m <sup>3</sup> )	Significance
41/1	Depth unknown	Not significant	Depth unknown	Not significant
41/1 a	Depth unknown	Compromised	Depth unknown	Compromised
41/2	Depth unknown	Compromised	Depth unknown	Compromised
41/3	528,000	Compromised	435,600	Compromised
41/4	Depth unknown	Compromised	Depth unknown	Compromised
41/5	1,260,000	Compromised	1,039,500	Compromised

<b>Overview</b>	
<b>Resource number:</b>	41/1
<b>Resource name:</b>	Winyates Green
<b>Resource area:</b>	29ha
<b>Resource depth:</b>	Not known
<b>Location</b>	
<b>OS sheet reference:</b>	SO 06 NE
<b>National grid ref:</b>	408217, 268322
<b>Resource description:</b>	
<b>Resource description:</b>	<p>Alluvial fan sand and gravel. Boreholes gave readings of grey and brown silty clay with thin bands of sand and gravel to 2.4m, grey brown pebbly silty clay to 2.1m, and red brown mudstone to 2.1m. An exposure between Holy Ascension Church and Common Farm (outside the county boundary) show red pebbly clay to 2m, the top 0.6m weathered to grey clayey gravel.</p> <p>From this information it seems unlikely that this resource area will comprise of significant amounts of sand and gravel and it is not possible to estimate the resource depth of sand and gravel as the composition appears to be intermixed with silt and clay.</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area with little built development but split by the urban area of Redditch, this section is considered as resource area 41/1a. The deposit also extends over the county boundary into Warwickshire (shown as OUT on the figure).
<b>Crude estimate of resource:</b>	Depth not known.
<b>Conclusion:</b>	Not significant: Small deposit with insufficient information to estimate the resource in this area. Not for consideration in defining areas of search.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	No change to the assessment.
<b>Conclusion:</b>	Not significant.

<b>Overview</b>	
<b>Resource number:</b>	41/1 a
<b>Resource name:</b>	Winyates Green a)
<b>Resource area:</b>	36ha
<b>Resource depth:</b>	Not known
<b>Location</b>	
<b>OS sheet reference:</b>	SO 06 NE
<b>National grid ref:</b>	408106, 267894
<b>Resource description:</b>	
<b>Resource description:</b>	<p>Alluvial fan sand and gravel. Boreholes gave readings of grey and brown silty clay with thin bands of sand and gravel to 2.4m, grey brown pebbly silty clay to 2.1m, and red brown mudstone to 2.1m. An exposure between Holy Ascension Church and Common Farm (outside the county boundary) show red pebbly clay to 2m, the top 0.6m weathered to grey clayey gravel.</p> <p>From this information it seems unlikely that this resource area will comprise of significant amounts of sand and gravel and it is not possible to estimate the resource depth of sand and gravel as the composition appears to be intermixed with silt and clay.</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area overlain by the town of Redditch. The deposit extends to the north east and south west (considered as resource area 41/1) and over the county boundary into Warwickshire (shown as OUT on the figure).
<b>Crude estimate of resource:</b>	Depth not known.
<b>Conclusion:</b>	Compromised by development.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	No change to the assessment.
<b>Conclusion:</b>	Compromised by development.

<b>Overview</b>	
<b>Resource number:</b>	41/2
<b>Resource name:</b>	Moon's Moat
<b>Resource area:</b>	21ha
<b>Resource depth:</b>	Not known
<b>Location</b>	
<b>OS sheet reference:</b>	SO 06 NE
<b>National grid ref:</b>	407458, 268154
	
<b>Resource description:</b>	
<b>Resource description:</b>	<p>Alluvial fan sand and gravel. Boreholes gave readings of grey and brown silty clay with thin bands of sand and gravel to 2.4m, grey brown pebbly silty clay to 2.1m, and red brown mudstone to 2.1m. An exposure between Holy Ascension Church and Common Farm (outside the county boundary) show red pebbly clay to 2m, the top 0.6m weathered to grey clayey gravel.</p> <p>From this information it seems unlikely that this resource area will comprise of significant amounts of sand and gravel and it is not possible to estimate the resource depth of sand and gravel as the composition appears to be intermixed with silt and clay.</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area overlain by the settlement of Redditch.
<b>Crude estimate of resource:</b>	Depth not known
<b>Conclusion:</b>	Compromised by development.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	No change to the assessment.
<b>Conclusion:</b>	Compromised by development.

<b>Overview</b>	
<b>Resource number:</b>	41/3
<b>Resource name:</b>	Redditch Station
<b>Resource area:</b>	12ha
<b>Resource depth:</b>	Estimated 4.4m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 06 NW
<b>National grid ref:</b>	404092, 267625
<b>Resource description:</b>	
<b>Resource description:</b>	Glaciofluvial sand and gravel. A borehole in the deposit showed made ground to 1.2m, sand and gravel to 5.6 and red brown mustone to 7.6m (total 4.4m sand and gravel). Estimated resource depth based n borehole record of sand and gravel: 4.4m
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area overlain by the settlement of Redditch.
<b>Crude estimate of resource:</b>	Area: 12 ha x average depth: 4.4 m ÷ 2 Estimated resource volume: 264,000 m <sup>3</sup> <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 528,000 tonnes</b>
<b>Conclusion:</b>	Compromised by development.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	Area: 12 ha x average depth: 4.4 m ÷ 2 Estimated resource volume: 264,000 m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 435,600 tonnes</b>
<b>Conclusion:</b>	Compromised by development.

<b>Overview</b>	
<b>Resource number:</b>	41/4
<b>Resource name:</b>	West of Arrow Valley Park
<b>Resource area:</b>	49ha
<b>Resource depth:</b>	Not known
<b>Location</b>	
<b>OS sheet reference:</b>	SO 06 NE, SO 06 NW
<b>National grid ref:</b>	405631, 266416
<b>Resource description:</b>	
<b>Resource description:</b>	<p>Alluvial fan sand and gravel. A borehole in the deposit showed grey and brown sandy pebbly clay with bands of sand and gravel to 6.4m and red mudstone to 7.5m. Two exposures show respectively: grey gravel 0.3m deep above red brown clayey gravel 1.2m deep on red pebbly clay; the second shows gravelly clay 0.9m deep on red clay.</p> <p>From this information it seems unlikely that this resource area will comprise of significant amounts of sand and gravel and it is not possible to estimate the resource depth of sand and gravel as the composition appears to be intermixed with silt and clay.</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area overlain by the settlement of Redditch.
<b>Crude estimate of resource:</b>	Depth not known
<b>Conclusion:</b>	Compromised by development.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	No change to the assessment.
<b>Conclusion:</b>	Compromised by development.

<b>Overview</b>		
<b>Resource number:</b>	41/5	
<b>Resource name:</b>	Park Farm	
<b>Resource area:</b>	28ha	
<b>Resource depth:</b>	Estimated 4.5m	
<b>Location</b>		
<b>OS sheet reference:</b>	SO 06 NE, SO 06 SE	
<b>National grid ref:</b>	406389, 265159	
<b>Resource description:</b>		
<b>Resource description:</b>	<p>Alluvial fan sand and gravel. A borehole in the northern end of the deposit showed red brown sandy silty clay with bands of sand and gravel to 6m and red mudstone to 6.1m. From this information it is not possible to estimate the resource depth of sand and gravel as the composition appears to be intermixed with silt and clay.</p> <p>However, a borehole in the deposit further south outside the county boundary showed gravel to 1.65m and sand to 7.25m and clay seen to 9.25m.</p> <p>Estimated resource depth based on mean average of: a) borehole in north: assumed 0m, b) borehole in south (1.65m + 7.25m): 8.9m = 4.5m</p>	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A small resource area which is overlain by the settlement of Redditch. The deposit extends over the county boundary into Warwickshire (shown as OUT on the figure), this is not included as part of the resource area.	
<b>Crude estimate of resource:</b>	<p>Area: 28ha x average depth: 4.5 m ÷ 2</p> <p>Estimated resource volume: 630,000 m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 1,260,000 tonnes</b></p>	
<b>Conclusion:</b>	Compromised by development.	
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>		
<b>Revised estimate of resource:</b>	<p>Area: 28ha x average depth: 4.5 m ÷ 2</p> <p>Estimated resource volume: 630,000 m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 1,039,500 tonnes</b></p>	
<b>Conclusion:</b>	Compromised by development.	



