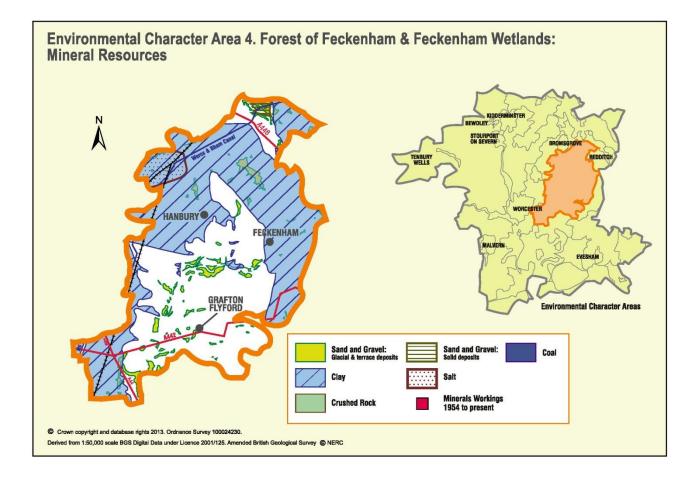
Appendix 4: Analysis of aggregate resources in ECA 4: Forest of Feckenham & Feckenham Wetlands



ECA Summary for the Fourth Stage consultation on MLP (Winter 2018):

Sand and gravel

There are 28 resource areas identified for sand and gravel in Forest of Feckenham and Feckenham Wetlands ECA:

- Key: 2
- Significant: 1
- Not significant: 20
- Compromised: 5

Crushed rock

There are no resource areas identified in Forest of Feckenham and Feckenham Wetlands ECA for crushed rock.

Non-aggregates

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

Overview of resource assessment for ECA 4

Sand and gravel resource areas:

Resource	Second Stage C	onsultation	tation Third Stage Consultation		Fourth Stage Consultation		
number*	Original estimated resource tonnage (2 tonnes/m ³)	Significance	Revised estimate of resource tonnage (1.65 tonnes/m ³)	Significance	New resource number (where resource has been split)	Revised estimate of resource tonnage (1.65 tonnes/m ³)	Significance
4/1	5,217,000	Key	4,304,025	Key	4/1 4/1b	3,296,700	Key Compromised
4/2	360,000	Not significant	297,000	Not significant	4/10		Compromised
4/3	300,000	Not significant	247,500	Not significant	Not reassessed		
4/4	621,000	Compromised	512,325	Compromised			
	,		,	· · ·	4/5	9,075,000	Key
4/5	11,400,000	Key	9,405,000	Кеу	4/5b		Compromised
					4/5c		Compromised
4/6	700,000	Significant	577,500	→ Not significant	Not reassessed		
4/7	1,050,000	Significant	866,250	Significant	4/7	536,250	Not significant
		•			4/7b	ļ	Compromised
4/8	400,000	Not significant	330,000	Not significant	-		
4/9	440,000	Not significant	363,000	Not significant	_		
4/10	280,000	Not significant	231,000	Not significant	Not reassessed		
4/11	220,000	Not significant	181,500	Not significant	_		
4/12	280,000	Not significant	231,000	Not significant		1	
4/13	1,080,000	Significant	891,000	Significant	4/13 4/13b	858,000	Significant Compromised
4/14	300,000	Not significant	247,500	Not significant			••
4/15	300,000	Not significant	247,500	Not significant			
4/16	340,000	Not significant	280,500	Not significant			
4/17	640,000	Significant	528,000	→ Not significant			
4/18	220,000	Not significant	181,500	Not significant			
4/19	260,000	Not significant	214,500	Not significant	Not reassessed		
4/20	260,000	Not significant	214,500	Not significant			
4/21	520,000	Not significant	429,000	Not significant			
4/22	400,000	Not significant	330,000	Not significant			
4/23	520,000	Not significant	429,000	Not significant			
4/24	300,000	Not significant	247,500	Not significant			

Overview					
Resource number:	4/1 O Crown copyright and				
Resource name:	Brockhill to Blackwell				
Resource area:	141ha				
Resource depth:	Estimated 3.7m				
Location	scaleBGS Digital Data under Licence 2001/125				
OS sheet reference:	SO 07 SW, SO 06 NW, SO 97 SE, SO 97 SW				
National grid ref:	40038, 270692				
Resource description:					
Resource description:	Resource area 4.1 is alluvial fan sand and gravel. This is underlain by solid sand deposits which are assessed				
	as resource area 12/8. The BGS memoir states that a deposit has been worked in a small pit east of				
	Cattespool, now flooded, where 4.6m of coarse gravel with seams of sand were recorded. A borehole at the				
	waterworks recorded 4m of sand and gravel and a well 100m east of this recorded 2.4m of sand and gravel on				
	Wildmoor sandstone.				
	The area of deposit near HM Prison Hewell (near Brockhill, at the south of the resource area) is described as limited in extent and generally thin.				
	(Estimated resource depth based on mean average of: a) pit east of Cattespool: 4.6m, b) Borehole at				
	waterworks: 4m and c) well east of borehole: 2.4m = 3.7m)				
Assessment of resource	e for the second consultation on MLP (Autumn 2013)				
Commentary:	A large resource area intersected by roads and built development.				
Crude estimate of	Area: 141 ha x average depth: 3.7 m ÷ 2				
resource:	Estimated resource volume: 2,608,500 m ³				
	Estimated resource tonnage (at 2 t/m ³): 5,217,000 tonnes				
Conclusion:	Significant – key resource.				
	Use to define areas of search.				
L					
Assessment of resource	e for the Third Stage consultation on MLP (Spring 2015)				
Assessment of resource Revised estimate of					

	Estimated resource tonnage (at 1.65	5 t/m³): 4,304,025 tonn	es
Conclusion:	Significant – key resource.		
Assessment of resource	ce for the Fourth Stage consultation or	n MLP (August 2018)	
This resource area has b	been split into areas 4/1 and 4/1b.		
R	esource area 4/1		Resource area 4/1b
Resource area:	108ha	Commentary:	Screened out due to the following appendix A
Resource depth:	3.7m		criterion:
Revised estimate of resource:	Area: 108ha x average depth: 3.7m ÷ 2 Estimated resource volume: 1,998,000m ³ Estimated resource tonnage (at 1.65 t/m ³): 3,296,700 tonnes		 Conservation Area Listed Building Registered Park and Garden Source Protection Zone
Conclusion:	Key resource.	Conclusion:	Compromised

Overview		
Resource number:	4/2	© Crown copyright and
Resource name:	South of Brockhill	4/1 database rights 2018 Ordnance Survey
	Lane	
Resource area:	18ha	Derived from 1:50,000
Resource depth:	Estimated 2m	scaleBG\$/Pigital Data -
Location		Amended British
OS sheet reference: National grid ref:	SO 06 NW, SO 06 NE 400073, 269713	4/2 4/2 4/2 4/2 4/2 4/2 4/2 4/2
Resource description:		
Resource description:	Glaciofluvial sand and g	ravel. The BGS memoir states that, in this geological district, this type of deposit is
	likely to be between 1m	
	· ·	pth based on average of depths in memoirs of 2m).
Assessment of resource		tation on MLP (Autumn 2013)
Commentary:		ntersected by roads and dispersed development
Crude estimate of	Area: 18 ha x average o	
resource:	Estimated resource volu	
	Estimated resource to	onnage (at 2 t/m ³): 360,000 tonnes
Conclusion:	0	eposit with less than 300,000m ³ .
		defining areas of search.
		nsultation on MLP (Spring 2015)
Revised estimate of	Area: 18 ha x average o	
resource:	Estimated resource volu	•
	Estimated resource to	onnage (at 1.65 t/m ³): 297,000 tonnes
Conclusion:	Not significant.	
		consultation on MLP (August 2018)
Not reassessed due to re	esource not being classifie	ed as Key or Significant in the Third Stage Consultation.

Overview		
Resource number:	4/3	© Crown copyright and database ights: 2018 do
Resource name:	North of HM Prison	
	Hewell	Didnance Survey
Resource area:	15ha	Derived from 1.50,000
Resource depth:	Estimated 2m	scaleBGS Digital Data
Location		4/1 under Licende 2001/125.
OS sheet reference:	SO 06 NW, SO 07 SW	4/1b
National grid ref: Resource description:	401081, 270012	4/3 4/3 bit is the set of the s
	Allunial fan aand and	gravel. The area of deposit near HM Prison Hewell is described as limited in extent and
Resource description:		ly between 1m and 3m in this geological district.
		epth based on average of depths in memoirs of 2m).
Assessment of resourc		ultation on MLP (Autumn 2013)
Commentary:		with little built development.
Crude estimate of	Area: 15 ha x average	
resource:	Estimated resource vo	
		onnage (at 2 t/m ³): 300,000 tonnes
Conclusion:		deposit with less than 300,000m ³ .
	0	n defining areas of search.
Assessment of resourc		onsultation on MLP (Spring 2015)
Revised estimate of	Area: 15 ha x average	
resource:	Estimated resource vo	
		onnage (at 1.65 t/m³): 247,500 tonnes
Conclusion:	Not significant.	
Assessment of resourc	e for the Fourth Stage	consultation on MLP (August 2018)
Not reassessed due to re	source not being classif	ied as Key or Significant in the Third Stage Consultation.

Overview	
Resource number:	4/4 © Crown copyright and database rights 2018
Resource name:	FOXIVOIATE Ordnance Survey
Resource area:	23ha
Resource depth:	Estimated 2.7m
Location	ScaleBGS (Digital Data)
OS sheet reference: National grid ref:	SO 06 NW 401467, 267740
Resource description:	
Resource description:	Glaciofluvial sand and gravel. The deposit has been worked in a former gravel pit, now built over by the dual carriageway, to a depth of 7.6m where clean sand with gravel and beds of silt and stoney clay were exposed. A disused sandpit north east of Tack Farm exposes 1m of sand. A borehole in the centre of the dual carriageway on the edge of the exposed deposit recorded 3.2m of clayey sand overlain by boulder clay, a further borehole recorded 2.14m of sand and gravel on boulder clay overlain by 0.76m of boulder clay.
	Investigations by DK Sykes Assoc supplied to the County Council in December 2011 showed that the majority of the superficial deposit in the north west of the site comprised boulder clay with occasional pockets of sand, which was fine in grain size and silty. The sand was thin (around 1.3-1.4m) and was proven to be underlain by Bromsgrove Sandstone. The fine nature and amount of silt was interpreted to make this 'sand' unusable other than for bulk fill / low quality purposes and then it is likely to be too variable. The shallow thickness, limited extent and the presence of overburden led to the report ruling out this part of the deposit from being viable. To the south east of a pipeline the material was interpreted to be of poor quality due to low percentages of gravel, and the amount of silt and clay present. The thickness of the deposit in this area averaged around 1m. The Council considered the resource to be uneconomic to justify objecting to a proposed housing land allocation.
	(Average depth calculated as average of: a) former gravel pit 7.6m b) sandpit north East of Tack Farm: 1m c) Borehole in centre of dual carriageway: 3.2m d) further borehole: 2.14m e) DK Sykes Assoc investigations: 1.35m f) results south east of pipeline: 1m = 2.7m)

Assessment of resource	Assessment of resource for the second consultation on MLP (Autumn 2013)			
Commentary:	A small resource area compromised by highway development.			
Crude estimate of	Area: 23 ha x average depth: 2.7 m ÷ 2			
resource:	Estimated resource volume: 310,500 m ³			
	Estimated resource tonnage (at 2 t/m ³): 621,000 tonnes			
Conclusion:	Compromised by development with less than 10ha of the deposit remaining.			
Assessment of resource	Assessment of resource for the Third Stage consultation on MLP (Spring 2015)			
Revised estimate of	Area: 23 ha x average depth: 2.7 m ÷ 2			
resource:	Estimated resource volume: 310,500 m ³			
	Estimated resource tonnage (at 1.65 t/m ³): 512,325 tonnes			
Conclusion:	Compromised by development.			
Assessment of resource	Assessment of resource for the Fourth Stage consultation on MLP (August 2018)			
Not reassessed due to re	Not reassessed due to resource not being classified as Key or Significant in the Third Stage Consultation.			

Overview			1/ (m) 1 the statement of the second		
Resource number:	4/5	ali unana ana ana ana ana ana ana ana ana a			
Resource name:	The Bentleys				
Resource area:	114ha	Land			
Resource depth:	Estimated 10m	and a local			
Location		$\langle \langle \zeta \rangle \rangle$			
OS sheet reference:	SO 96 NE, SO 96 NW, SO 06 SW		4/5c		
National grid ref:	Britis © Cro	er Licence 200 sh Geological	4/5 4/5 4/5 4/5 4/5 4/5 4/5 4/5 4/5 4/5		
Resource description:					
Resource description:	0		osit varies from brown to red sand and is very pebbly in places. The		
	BGS memoirs show that the deposit is thought to be up to 10m thick, although no details of boreholes or				
	exposures are given.				
	(Average depth based on BGS memoirs: 10m) ce for the second consultation on MLP (Autumn 2013)				
Commentary:			ted by roads with some ribbon development.		
Crude estimate of	Area: 114 ha x average depth: Estimated resource volume: 5,				
resource:	Estimated resource tonnage				
Conclusion:		- (ai 2 VII			
	Significant – key resource. Use to define areas of search.				
Assessment of resource	sessment of resource for the Third Stage consultation on MLP (Spring 2015)				
Revised estimate of	Area: 114 ha x average depth:				
resource:	Estimated resource volume: $5,700,000 \text{ m}^3$				
	Estimated resource volume. 5,700,000 m Estimated resource tonnage (at 1.65 t/m ³): 9,405,000 tonnes				
Conclusion:	Significant – key resource.				
	Assessment of resource for the Fourth Stage consultation on MLP (August 2018)				
	This resource area has been split into areas 4/5 and 4/5b.				
	een spin into areas 4/5 and 4/5		Resource area 4/5b		

Resource area:	111ha	Commentary	Screened out due to the following appendix A
Resource depth:	10m		criterion:
Revised estimate of	Area: 111ha x average depth: 10 m	÷	 Ancient Semi-Natural Woodland
resource:	2		- Listed Building
	Estimated resource volume:		 Scheduled Ancient Monument
	5,550,000m ³		
	Estimated resource tonnage (at		
Conclusion:	1.65 t/m³): 9,157,500 tonnes Key resource.	Conclusion:	Compromised
	ource for the Fourth Stage consultation		
	nas been split into areas 4/5 and 4/5c.		
	Resource area 4/5		Resource area 4/5c
Resource area:	110 ha	Commentary:	Screened out due to the following appendix A criterion:
Resource depth:	Estimated 10m		 Scheduled Ancient Monument
Revised estimate	Area: 110 ha x average depth: 10m ÷ 2		
of resource:	Estimated resource volume: 5,500,000		
	m ³		
	Estimated resource tonnage (at 1.65		
	t/m³): 9,075,000 tonnes		
Conclusion:	Key resource	Conclusion:	Compromised

Overview					
Resource number:	4/6	52 Serowa copyright and			
Resource name:	West of Stoke Prior	Pie database rights 2018			
Resource area:	14ha remaining	Coley Pitto Coley			
Resource depth:	Estimated 5m	The rare to the second se			
Location		OfecateBOS Digital Data			
OS sheet reference:	SO 96 NW	ands Arender Licence 2004 125			
National grid ref:	393164, 267155	4/6 Curdeor Colligent Using Farm Hase			
Resource description:					
Resource	3 rd terrace (Holt Heath)	sand and gravel. A former pit at Upton Warren was worked to a depth of approximately			
description:	5m.				
	(Average depth based on depths at Upton Warren: 5m)				
Assessment of resource	ce for the second const	ultation on MLP (Autumn 2013)			
Commentary:	A small resource area, part of the resource are	split into two parts. The deposit has been extensively worked, this is not included as ea and 14ha remain.			
Crude estimate of	Area: 14 ha x average				
resource:	Estimated resource vol	ume: 350,000 m ³			
	Estimated resource tonnage (at 2 t/m ³): 700,000 tonnes				
Conclusion:	Significant.				
	Consider in defining are				
		onsultation on MLP (Spring 2015)			
Revised estimate of	Area: 14 ha x average				
resource:	Estimated resource vol				
		onnage (at 1.65 t/m³): 577,500 tonnes			
Conclusion:	Change to conclusion:	8			
Assessment of resource	ce for the Fourth Stage	consultation on MLP (August 2018)			
		fied as Key or Significant in the Third Stage Consultation.			

Overview					
Resource number:	4/7	New El	Harbours - gg	Pit Ofown'copyright and database routs 2018	
Resource name:	Piper's Hill	h	Films Hill Ripers Hill	T and and a second second	
Resource area:	21ha	Orchard A.House CP Bdy	K- 0- The	(dsused) Bentláv Comm	
Resource depth:	Estimated 5m	Astwood The Hill	Sharpway Gate Sharpway Sate		
Location			Farm (Strange and a strange and	(disused)	
OS sheet reference: National grid ref:	SO 96 NE, SO 96 SE 395887, 264891	57 Webbl Far Goodwins H Ceppice	Knotts Farm 4/7b nouse Rectory Cappies 103 Rectory Rec	Amended British Geological Survey	
Resource description:					
Resource description:	Glaciofluvial sand and	gravel. Red to o	range-brown clayey sar	nd and gravel, up to 5m thick. The sand and	
•		gravel is overlain by a small patch of boulder clay.			
	(Average depth based on BGS memoirs: 5m)				
Assessment of resourc					
Commentary:	A small resource area i	intersected by a	road with some ribbon	development.	
Crude estimate of	Area: 21 ha x average	depth: 5 m ÷ 2			
resource:	Estimated resource vol	ume: 525,000 m	3		
	Estimated resource to	onnage (at 2 t/n	n ³): 1,050,000 tonnes		
Conclusion:	Significant.				
	Consider in defining are	eas of search.			
Assessment of resourc	e for the Third Stage co	onsultation on	MLP (Spring 2015)		
Revised estimate of	Area: 21 ha x average depth: 5 m ÷ 2				
resource:	Estimated resource volume: 525,000 m ³				
	Estimated resource to	onnage (at 1.65	t/m ³): 866,250 tonnes		
Conclusion:					
Assessment of resource for the Fourth Stage consultation on MLP (August 2018)					
Assessment of resourc		consultation or	n MLP (August 2018)		
Assessment of resource This resource area has b	e for the Fourth Stage		n MLP (August 2018)		
This resource area has b	e for the Fourth Stage		n MLP (August 2018)	Resource area 8/7b	

Resource depth:	5m		criterion:
Revised estimate of resource:	Area: 13ha x average depth: 8m ÷ 2 Estimated resource volume: 325,000m ³ Estimated resource tonnage (at 1.65 t/m ³): 536,250 tonnes		 Ancient Semi-Natural Woodland Listed Building Site of Special Scientific Interest
Conclusion:	Not significant.	Conclusion:	Compromised

Overview		
Resource number:	4/8	© Crown copyright and
Resource name:	Ditchford Bank	Forest Farm Forest Lane Bat
Resource area:	20ha	Broad En Acres Acr
Resource depth:	Estimated 2m	
Location		Broadacres
OS sheet reference:	SO 96 SE	Broadacres 75 Amended British
National grid ref:	398695, 263679	Brodagres Lake Orchards Geological Survey ONER(2 HB HB HB HB HB HB HB HB HB HB HB HB HB
Resource description:		
Resource description:	1 st terrace sand and gra	avel. The gravels are clayey and the BGS memoirs estimate that they are probably not
	more than 2m thick.	
	(Average depth based	
Assessment of resourc		Itation on MLP (Autumn 2013)
Commentary:		with some built development.
Crude estimate of	Area: 20 ha x average	
resource:	Estimated resource vol	
		onnage (at 2 t/m ³): 400,000 tonnes
Conclusion:	0	eposit with less than 300,000m ³ .
		defining areas of search.
		onsultation on MLP (Spring 2015)
Revised estimate of	Area: 20 ha x average	
resource:	Estimated resource vol	ume: 200,000 m ³
	Estimated resource to	onnage (at 1.65 t/m³): 330,000 tonnes
Conclusion:	Not significant.	
Assessment of resourc	e for the Fourth Stage	consultation on MLP (August 2018)

Overview		
Resource number:	4/9	Crown copyright and
Resource name:	Priest Bridge	database rights 2018 Ordnance Survey
Resource area:	22ha	100024230
Resource depth:	Estimated 2m	Derived from 1:50,000
Location		scaleBGS Digital Data
OS sheet reference: National grid ref:	SO 96 SE, SO 06 SW, SO 95 NE 399843, 260133	4/9 Under Licence 2001/125. Amended Britista Geological Survey Bean Hall Mill
Resource description: Resource description:	1 st terrace sand and gra clayey and consist mos terraces in the valley of	avel. The deposit is of variable lithology, and deposits flanking the Bow Brook tend to be sty of sand with very little gravel. The BGS memoir states that there is a suite of five it he Bow Brook. The Bow Brook is part of the River Avon drainage basin and the two brook and Avon) are correlated. All of the Bow Brook terrace deposits are estimated to
	•	ed local information on depths available.
	(Average depth based of	•
Assessment of resourc		Iltation on MLP (Autumn 2013)
Commentary:		with no built development.
Crude estimate of	Area: 22 ha x average	
resource:	Estimated resource vol	ume: 220,000 m ³
	Estimated resource to	onnage (at 2 t/m ³): 440,000 tonnes
Conclusion:		eposit with less than 300,000m ³ .
		defining energy of ecomple
	Not for consideration in	defining areas of search.
Assessment of resourc		
	e for the Third Stage co	onsultation on MLP (Spring 2015)
Revised estimate of	e for the Third Stage co Area: 22 ha x average	onsultation on MLP (Spring 2015) depth: 2m ÷ 2
	e for the Third Stage co Area: 22 ha x average Estimated resource vol	Depth: 2m ÷ 2 ume: 220,000 m ³
Revised estimate of	e for the Third Stage co Area: 22 ha x average Estimated resource vol	onsultation on MLP (Spring 2015) depth: 2m ÷ 2

Assessment of resource for the Fourth Stage consultation on MLP (August 2018) Not reassessed due to resource not being classified as Key or Significant in the Third Stage Consultation.

Overview	
Resource number: Resource name: Resource area: Resource depth: Location OS sheet reference: National grid ref:	4/10 Stock Green 14ha Estimated 2m SO 95 NE 399190, 259347
Resource description:	
Resource description:	2 nd river terrace sand and gravel. Deposits flanking the Bow Brook tend to be clayey and consist mostly of sand with very little gravel. The BGS memoir states that there is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is part of the River Avon drainage basin and the two sets of terraces (Bow Brook and Avon) are correlated. All of the Bow Brook terrace deposits are estimated to be up to 2m thick. There is no more detailed local information on depths available.
	e for the second consultation on MLP (Autumn 2013)
Commentary:	A small resource area with some dispersed development.
Crude estimate of	Area: 14 ha x average depth: 2 m ÷ 2
resource:	Estimated resource volume: 140,000 m ³ Estimated resource tonnage (at 2 t/m ³): 280,000 tonnes
Conclusion:	Not significant: Small deposit with less than 300,000m ³ . Not for consideration in defining areas of search.
	e for the Third Stage consultation on MLP (Spring 2015)
Revised estimate of	Area: 14 ha x average depth: 2 m ÷ 2

resource:	Estimated resource volume: 140,000 m ³
	Estimated resource tonnage (at 1.65 t/m ³): 231,000 tonnes
Conclusion:	Not significant.
Assessment of reso	ource for the Fourth Stage consultation on MLP (August 2018)
Not reassessed due t	to resource not being classified as Key or Significant in the Third Stage Consultation.

Overview		
Resource number:	4/11	Crown copyright and
Resource name:	Hollowfields Road	database rights 2018 Ordnance Survey
Resource area:	11ha	/100024230
Resource depth:	Estimated 2m	Derived from 1:50,000
Location		B scaleBGS Digital Data under Licence 2001/125.
OS sheet reference: National grid ref:	SO 95 NE 397260, 260281	Amended Birtisk Geological Strivey IN REC 4/11 4/12 4/13 Comprovised 4/12
Resource description:		
Resource description:	1 st terrace sand and gra	vel. Deposits flanking the Bow Brook tend to be clayey and consist mostly of sand with
-		GS memoir states that there is a suite of five terraces in the valley of the Bow Brook.
	•	of the River Avon drainage basin and the two sets of terraces (Bow Brook and Avon)
		Bow Brook terrace deposits are estimated to be up to 2m thick.
		ed local information on depths available.
	(Average depth based	
		Itation on MLP (Autumn 2013)
Commentary:	A small resource area ir	
Crude estimate of	Area: 11 ha x average c	
resource:	Estimated resource volu	
		nnage (at 2 t/m ³): 220,000 tonnes
Conclusion:	Not significant: Small de	eposit with less than 300,000m ³ .
	Not for consideration in	defining areas of search.
Assessment of resource		onsultation on MLP (Spring 2015)
Revised estimate of	Area: 11 ha x average of	depth: 2 m ÷ 2
resource:	Estimated resource volu	
	Estimated resource to	onnage (at 1.65 t/m³): 181,500 tonnes
Conclusion:	Not significant.	
	<u> </u>	consultation on MLP (August 2018)

Overview		
Resource number: Resource name: Resource area: Resource depth: Location OS sheet reference: National grid ref:	4/12 Shell Brook Farm and Bishops Hall Farm 14ha Estimated 2m SO 95 NE 396917, 259810	Patrs Brows Hill Farr Brows Hill Farr Hill Far
Resource description:		
Resource description:	very little gravel. The Bo The Bow Brook is part of are correlated. All of the	avel. Deposits flanking the Bow Brook tend to be clayey and consist mostly of sand with GS memoir states that there is a suite of five terraces in the valley of the Bow Brook. of the River Avon drainage basin and the two sets of terraces (Bow Brook and Avon) e Bow Brook terrace deposits are estimated to be up to 2m thick. ed local information on depths available. on BGS memoirs: 2m)
Assessment of resourc	e for the second consul	tation on MLP (Autumn 2013)
Commentary:	A small resource area we periphery of the resource	vith a road running along the northern edge and small scale development on the ce area.
Crude estimate of resource:	Area: 14 ha x average of Estimated resource volu Estimated resource to	depth: 2 m ÷ 2 ume: 140,000 m ³ onnage (at 2 t/m³): 280,000 tonnes
Conclusion:	Not significant: Small de	eposit with less than 300,000m ³ . defining areas of search.
		nsultation on MLP (Spring 2015)
Revised estimate of resource:	Area: 14 ha x average of Estimated resource volu	

Conclusion:

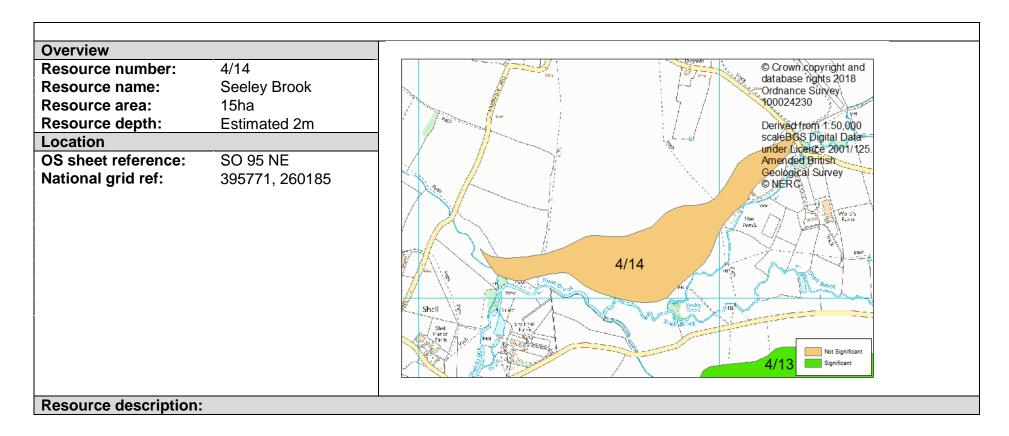
Estimated resource tonnage (at 1.65 t/m³): 231,000 tonnes

Not significant.

Assessment of resource for the Fourth Stage consultation on MLP (August 2018)

Overview		
Resource number: Resource name: Resource area: Resource depth: Location OS sheet reference: National grid ref:	4/13 Digging Wood 54ha Estimated 2m SO 95 NE 396889, 259560	4/11 4/14 4/14 4/14 5 4/14 5 5 5 5 5 5 5 5 5 5 5 5 5
Resource description:		
Resource description:	sand. The BGS memoir Brook is part of the Rive correlated. All of the Bo There is no more detail	avel. The deposit, poorly exposed in ditches, is a red to orange-brown clayey, pebbly r states that there is a suite of five terraces in the valley of the Bow Brook. The Bow er Avon drainage basin and the two sets of terraces (Bow Brook and Avon) are ow Brook terrace deposits are estimated to be up to 2m thick. ed local information on depths available.
Assassment of resource	(Average depth based of a for the second consult	on BGS memoirs: 2m) Itation on MLP (Autumn 2013)
Commentary:		with little built development.
Crude estimate of resource:	Area: 54 ha x average Estimated resource vol	depth: 2 m ÷ 2
Conclusion:	Significant. Consider in defining are	

Assessment of resource	e for the Third Stage consultation on	MLP (Spring 2015)	
Revised estimate of	Area: 54 ha x average depth: 2 m ÷ 2	_	
resource:	Estimated resource volume: 540,000 r	n ³	
	Estimated resource tonnage (at 1.6	5 t/m³): 891,000 tonnes	
Conclusion:	Significant.		
Assessment of resource	e for the Fourth Stage consultation o	n MLP (August 2018)	
This resource area has b	peen split into areas 4/13 and 4/13b.		
Re	source area 4/13		Resource area 4/13b
Resource area:	52ha	Commentary: Screened out due to the following appendix	
Resource depth:	2m	2m criterion:	
Revised estimate of	Area: 52ha x average depth: 2m ÷ 2		 Ancient Semi-Natural Woodland
resource:	Estimated resource volume:		- Listed Building
	520,000m ³		Ğ
	Estimated resource tonnage (at		
	1.65 t/m ³): 858,000 tonnes		
Conclusion:	Significant resource.	Conclusion:	Compromised



Resource description:	1 st terrace sand and gravel. Deposits flanking the Bow Brook tend to be clayey and consist mostly of sand with		
•	very little gravel. The BGS memoir states that there is a suite of five terraces in the valley of the Bow Brook.		
	The Bow Brook is part of the River Avon drainage basin and the two sets of terraces (Bow Brook and Avon)		
	are correlated. All of the Bow Brook terrace deposits are estimated to be up to 2m thick.		
	There is no more detailed local information on depths available.		
	(Average depth based on BGS memoirs: 2m)		
Assessment of resource	e for the second consultation on MLP (Autumn 2013)		
Commentary:	A small resource area with little built development.		
Crude estimate of	Area: 15 ha x average depth: 2 m ÷ 2		
resource:	Estimated resource volume: 150,000 m ³		
	Estimated resource tonnage (at 2 t/m ³): 300,000 tonnes		
Conclusion:	Not significant: Small deposit with less than 300,000m ³ .		
	Not for consideration in defining areas of search.		
Assessment of resource	e for the Third Stage consultation on MLP (Spring 2015)		
Revised estimate of	Area: 15 ha x average depth: 2 m ÷ 2		
resource:	Estimated resource volume: 150,000 m ³		
	Estimated resource tonnage (at 1.65 t/m ³): 247,500 tonnes		
Conclusion:	Not significant.		
Assessment of resource	e for the Fourth Stage consultation on MLP (August 2018)		
Not reassessed due to re	source not being classified as Key or Significant in the Third Stage Consultation.		

Overview		
Resource number:	4/15	© Crown copyright and rate r database rights 2018
Resource name:	West of Himbleton	Ordnance Survey
Resource area:	15ha	
Resource depth:	Estimated 2m	³ Derived from 150,000
Location		HimbletonscaleBGS Dignal Bata
OS sheet reference: National grid ref:	SO 95 NW 394061, 258451	Americad British Geological Survey Others Co Bactorial Survey Contract of the survey of the survey o
Resource description:		
Resource description:		sand and gravel. Deposits flanking the Bow Brook tend to be clayey and consist
		y little gravel. The BGS memoir states that there is a suite of five terraces in the valley
		Bow Brook is part of the River Avon drainage basin and the two sets of terraces (Bow
	,	prrelated. All of the Bow Brook terrace deposits are estimated to be up to 2m thick.
	(Average depth based	ed local information on depths available.
Assessment of resource		Itation on MLP (Autumn 2013)
Commentary:		with some built development.
Crude estimate of	Area: 15 ha x average of	
resource:	Estimated resource volu	
		onnage (at 2 t/m ³): 300,000 tonnes
Conclusion:		eposit with less than 300,000m ³ .
	U	defining areas of search.
Assessment of resourc		onsultation on MLP (Spring 2015)
Revised estimate of	Area: 15 ha x average of	
resource:	Estimated resource volu	
	Estimated resource to	onnage (at 1.65 t/m ³): 247,500 tonnes
Conclusion:	Not significant.	
Assessment of resourc	0	consultation on MLP (August 2018)

Overview		
Resource number: Resource name: Resource area: Resource depth: Location	4/16 Huddington 17ha Estimated 2m	Derived from 1:50,000 scaleBGS Digital Data under Dicence 2001/125.
OS sheet reference: National grid ref:	SO 95 NW 393934, 257004	4/16 4/16 4/17 4/17
Resource description:	nd	
Resource description:	memoir states that there River Avon drainage bas Brook terrace deposits a There is no more detailed	sand and gravel. The deposit is a red to orange-brown, clayey, pebbly sand. The BGS is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is part of the in and the two sets of terraces (Bow Brook and Avon) are correlated. All of the Bow re estimated to be up to 2m thick. d local information on depths available. n BGS memoirs: mid-point of range 2m)
Assessment of resourc		ation on MLP (Autumn 2013)
Commentary:	A small resource area wi	th little built development.
Crude estimate of resource:	Area: 17 ha x average de Estimated resource volu Estimated resource tor	
Conclusion:		posit with less than 300,000m ³ .
Assessment of resourc	e for the Third Stage cor	sultation on MLP (Spring 2015)
Revised estimate of resource:	Area: 17 ha x average de Estimated resource volu	epth: 2 m ÷ 2
Conclusion:	Not significant.	
	<u> </u>	onsultation on MLP (August 2018)
		as Key or Significant in the Third Stage Consultation.
	U	

Overview Resource number:			
	4/17 4/16 Crown copyright and		
	database rights 2018		
	32ha Ordnance Survey		
	Estimated 2m		
Location	scaleBGS Digital Data		
	SO 95 NW		
	39341, 256039		
Resource description:			
Resource description:	1 st terrace (Bretford) sand and gravel. The BGS memoir notes that east of Crowle the 2 nd and 1 st terraces		
	merge and the two cannot be separated. The deposit, poorly exposed in ditches, is a red to orange-brown		
	clayey, pebbly sand. There is evidence of small scale working in this area.		
	The BGS memoir states that there is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is		
	part of the River Avon drainage basin and the two sets of terraces (Bow Brook and Avon) are correlated. All of		
	the Bow Brook terrace deposits are estimated to be up to 2m thick.		
	There is no more detailed local information on depths available.		
	(Average depth based on BGS memoirs: 2m)		
	e for the second consultation on MLP (Autumn 2013)		
	A small resource area intersected by a road		
Crude estimate of	Area: 32 ha x average depth: 2 m ÷ 2		
	Estimated resource volume: 320,000 m ³		
	Estimated resource tonnage (at 2 t/m ³): 640,000 tonnes		
Conclusion:	Significant. Consider in defining areas of search.		
	of or the Third Stage consultation on MLP (Spring 2015)		
	Area: 32 ha x average depth: 2 m ÷ 2		
	Estimated resource volume: 320,000 m ³		
	Estimated resource tonnage (at 1.65 t/m ³): 528,000 tonnes		
	Change to conclusion: Not significant.		
	for the Fourth Stage consultation on MLP (August 2018)		

Overview		
Resource number: Resource name:	4/18 North of Upton Snodsbury	© Crowin copyright and database rights 2018 Ordnance Survey 100024230
Resource area:	11ha	Derived from 1:50,000
Resource depth:	Estimated 2m	scaleBGS Digital Data under Licence 2001/125.
Location		Amended British Geological Survey
OS sheet reference:	SO 95 NW, SO 95 SW	
National grid ref:	393345, 254877	Harris Contraction Hackett
Resource description:		
Resource) sand and gravel. The deposit is a red to orange-brown, clayey, pebbly sand. The BGS
description:	memoir states that ther	e is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is part of the
	0	asin and the two sets of terraces (Bow Brook and Avon) are correlated. All of the Bow
		are estimated to be up to 2m thick.
		led local information on depths available.
		on BGS memoirs: 2m)
	•	ultation on MLP (Autumn 2013)
Commentary:		with no built development.
Crude estimate of	Area: 11 ha x average	
resource:	Estimated resource vol	,
0		onnage (at 2 t/m ³): 220,000 tonnes
Conclusion:	0	eposit with less than 300,000m ³ .
		defining areas of search.
		onsultation on MLP (Spring 2015)
Revised estimate of	Area: 11 ha x average	
resource:	Estimated resource vo	olume: 110,000 m [~]

Estimated resource tonnage (at 1.65 t/m³): 181,500 tonnes

Conclusion: Not significant.

Assessment of resource for the Fourth Stage consultation on MLP (August 2018)

Overview Resource number: 4/19 Resource name: East of Libbery Resource depth: Estimated 2m Location OS sheet reference: SO 95 NE National grid ref: 395817, 255491			
Resource name: East of Libbery Resource area: 13ha Resource depth: Estimated 2m Location DS sheet reference: SO 95 NE National grid ref: 395817, 255491			
Resource area: 13ha Resource depth: Estimated 2m <u>location</u> DS sheet reference: SO 95 NE National grid ref: 395817, 255491			
Location DS sheet reference: SO 95 NE National grid ref: 395817, 255491			
Location DS sheet reference: SO 95 NE National grid ref: 395817, 255491			
DS sheet reference: SO 95 NE National grid ref: 395817, 255491			
Seagers Buildings			
Resource description:			
Resource description: 2 nd terrace (Wasperton) sand and gravel. The deposit is a red to orange-brown, clayey, pebbly sand. Depo flanking the Piddle Brook tend to be clayey and consist mostly of sand with very little gravel. The BGS me states that there is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is part of the Riv	2 nd terrace (Wasperton) sand and gravel. The deposit is a red to orange-brown, clayey, pebbly sand. Deposits flanking the Piddle Brook tend to be clayey and consist mostly of sand with very little gravel. The BGS memoir states that there is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is part of the River Avon drainage basin and the two sets of terraces (Bow Brook and Avon) are correlated. All of the Bow Brook terrace deposits are estimated to be up to 2m thick. There is no more detailed local information on depths available.		
Assessment of resource for the second consultation on MLP (Autumn 2013)			
Commentary: A small resource area with no built development.			
Crude estimate of Area: 13 ha x average depth: 2 m ÷ 2			
esource: Estimated resource volume: 130,000 m ³			
	Estimated resource tonnage (at 2 t/m ³): 260,000 tonnes		
Conclusion: Not significant: Small deposit with less than 300,000m ³ .			
Not for consideration in defining areas of search.			
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)			
Revised estimate of Area: 13 ha x average depth: 2 m ÷ 2			
esource: Estimated resource volume: 130,000 m ³			

Assessment of resource for the Fourth Stage consultation on MLP (August 2018) Not reassessed due to resource not being classified as Key or Significant in the Third Stage Consultation.

Overview		
Resource number: Resource name: Resource area: Resource depth: Location OS sheet reference: National grid ref:	4/20 West of Upton Snodsbury 13ha Estimated 2m SO 95 SW 393720, 254110	tt be Comported from 150,000 contraince Survey 109024230 Upton Snodsbury Denved from 150,000 scaleBCS Digital Data under Licence 200412S Amended Britist Geoported form 150,000 ScaleBCS Digital Data Met Significant
Resource description:		
Resource description:	terrace showed traces of The BGS memoir states part of the River Avon d the Bow Brook terrace of There is no more detaile (Average depth based of	
		Itation on MLP (Autumn 2013)
Commentary:	A small resource area intersected by a road with some built development.	
Crude estimate of resource:	Area: 13 ha x average depth: 2 m ÷ 2 Estimated resource volume: 130,000 m ³ Estimated resource tonnage (at 2 t/m ³): 260,000 tonnes	
Conclusion:	Not significant: Small deposit with less than 300,000m ³ . Not for consideration in defining areas of search.	
		onsultation on MLP (Spring 2015)
Revised estimate of	Area: 13 ha x average o	Jepth: 2 m ÷ 2

resource:	Estimated resource volume: 130,000 m ³	
	Estimated resource tonnage (at 1.65 t/m ³): 214,500 tonnes	
Conclusion:	Not significant.	
Assessment of resource for the Fourth Stage consultation on MLP (August 2018)		
Not reassessed due to resource not being classified as Key or Significant in the Third Stage Consultation.		

Overview	<u>,</u>	
Resource number: Resource name: Resource area: Resource depth: Location OS sheet reference: National grid ref:	4/21 Edward's Lane 26ha Estimated 2m SO 95 SW 392999, 253360	4/20 Crown-copyright and database rights 2018 Ordinance Survey 100024230 Derived from 1:50,000 scaleBGS Digital Data under Licence 2001/125. Amerided British Geölogical Survey 0 NERC 0 NERC
Resource description:		
Resource description:	sand matrix, locally clar angular quartzite, chert The BGS memoir state part of the River Avon of the Bow Brook terrace). A ditch section 1m deep within the deposit found gravel, red-brown poorly sorted yey and pebble-free, pebbles, mostly rounded Kidderminster formation quartzites with t, various sandstones, shale. s that there is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is drainage basin and the two sets of terraces (Bow Brook and Avon) are correlated. All of deposits are estimated to be up to 2m thick. led local information on depths available. on BGS memoirs: 2m)
Assessment of resource	· • •	Iltation on MLP (Autumn 2013)
Commentary:	A small resource area,	with little built development.
Crude estimate of	Area: 26 ha x average	depth: 2 m ÷ 2

resource:	Estimated resource volume: 260,000 m ³		
	Estimated resource tonnage (at 2 t/m ³): 520,000 tonnes		
Conclusion:	Not significant: Small deposit with less than 300,000m ³ .		
	Not for consideration in defining areas of search.		
Assessment of resour	ce for the Third Stage consultation on MLP (Spring 2015)		
Revised estimate of	Area: 26 ha x average depth: 2 m ÷ 2		
resource:	Estimated resource volume: 260,000 m ³		
	Estimated resource tonnage (at 1.65 t/m³): 429,000 tonnes		
Conclusion:	Not significant.		
Assessment of resour	Assessment of resource for the Fourth Stage consultation on MLP (August 2018)		
Not reassessed due to r	Not reassessed due to resource not being classified as Key or Significant in the Third Stage Consultation.		

Overview			
Overview Resource number: Resource name: Resource area: Resource depth: Location OS sheet reference: National grid ref:	4/22 Edward's Bridge 20ha Estimated 2m SO 95 SW 393537, 253112	4/21 4/21 4/21 4/21 4/21 4/22 15/1 0 Crown copyright and database rights 2018 Ordnance Survey 100024230 Derived from 1:50,000 scaleBGS Digital-Data under Licence 2001/125 Amended British Geölogical Survey 0 NERC 15/4	
Resource description:	and		
Resource description:	 2nd terrace (Wasperton). A ditch section 1m deep within the deposit to the west found gravel, red-brown poorly sorted sand matrix, locally clayey and pebble-free, pebbles, mostly rounded Kidderminster formation quartzites with angular quartzite, chert, various sandstones, shale. The BGS memoir states that there is a suite of five terraces in the valley of the Bow Brook. The Bow Brook is part of the River Avon drainage basin and the two sets of terraces (Bow Brook and Avon) are correlated. All of the Bow Brook terrace deposits are estimated to be up to 2m thick. There is no more detailed local information on depths available. (Average depth based on BGS memoirs: 2m) 		
		tation on MLP (Autumn 2013)	
Commentary:		ntersected by a road, with little built development.	
Crude estimate of resource:	Area: 20 ha x average of Estimated resource volu	ume: 200,000 m ³	
Conclusion:	Not significant: Small de	nnage (at 2 t/m ³): 400,000 tonnes eposit with less than 300,000m ³ . defining areas of search.	
Assessment of resource	e for the Third Stage co	nsultation on MLP (Spring 2015)	
Revised estimate of	Area: 20 ha x average c		
resource:	Estimated resource volu		

Estimated resource tonnage (at 1.65 t/m³): 330,000 tonnes

Conclusion: Not significant.

Assessment of resource for the Fourth Stage consultation on MLP (August 2018)

Overview			
Resource number:	4/23	Coppier 41	
Resource name:	Sneachill	Hult	
Resource area:	26ha	Hilly Stoney Construction Bred por Bred por Farm CB Stonepit 100024230	
Resource depth:	Estimated 2m	Bunks Hall 46 Derived from 150 000	
Location		scaleBGS Digital Data	
OS sheet reference:	SO 95 SW	Coppice Arrended British	
National grid ref:	391038, 253628	Herein and the second s	
Resource description:			
Resource description:	Glaciofluvial sand and	gravel. No exposures seen, but brown clayey sand proved by augering. The BGS	
-	memoirs estimate that the deposit is about 2m thick.		
	(Average depth based	on BGS memoirs estimate of 2m)	
Assessment of resourc	e for the second consu	ultation on MLP (Autumn 2013)	
Commentary:		crossed by A roads in the north and south.	
Crude estimate of	Area: 26 ha x average	depth: 2 m ÷ 2	
resource:	Estimated resource volume: 260,000 m ³		
		onnage (at 2 t/m³): 520,000 tonnes	
Conclusion:		leposit with less than 300,000m ³ .	
		n defining areas of search.	
		onsultation on MLP (Spring 2015)	
Revised estimate of	Area: 26 ha x average		
resource:	Estimated resource vo	lume: 260,000 m ³	
		onnage (at 1.65 t/m³): 429,000 tonnes	
Conclusion:	Not significant.		
		consultation on MLP (August 2018)	
Not reassessed due to re	esource not being classif	ied as Key or Significant in the Third Stage Consultation.	

Overview			
Resource number:	4/24	Crown copyright and	
Resource name:	Low Hill	database rights 2018 Ordnance Survey	
Resource area:	15ha	100024230	
Resource depth:	Estimated 2m	Derived from 1:50,000	
Location		scaleBiSs,Digital Data under Licence 2001/125.	
OS sheet reference:	SO 95 SW	Amended British	
National grid ref:	390924, 252295	A/24 Horr II Court Formulation of the second optical Survey of the second	
Resource description:			
Resource description:	Glaciofluvial sand and	gravel. No exposures seen, but brown clayey sand proved by augering. The BGS	
-	memoirs estimate that the deposit is about 2m thick.		
	(Average depth based on BGS memoirs estimate of 2m)		
Assessment of resourc	e for the second consu	ultation on MLP (Autumn 2013)	
Commentary:	A small resource area	with some built development.	
Crude estimate of	Area: 15 ha x average depth: 2 m ÷ 2		
resource:	Estimated resource volume: 150,000 m ³		
		onnage (at 2 t/m ³): 300,000 tonnes	
Conclusion:	0	leposit with less than 300,000m ³ .	
	Not for consideration in defining areas of search.		
Assessment of resource		onsultation on MLP (Spring 2015)	
Revised estimate of	Area: 15 ha x average depth: 2 m ÷ 2		
resource:	Estimated resource volume: 150,000 m ³		
	Estimated resource t	onnage (at 1.65 t/m³): 247,500 tonnes	
Conclusion:	Not significant.		
Assessment of resourc	e for the Fourth Stage	consultation on MLP (August 2018)	
		ied as Key or Significant in the Third Stage Consultation.	