

APPENDIX 2

SLAA Methodology and Output Note

Technical Note: SLAA Database Methodology and Output Note

Summary of Methodology

1. Peter Brett Associates (PBA) developed a SLAA database to conform to Chelmsford City Council's (CCC) specific circumstances. This includes local policy designations and other constraints, as well as designing the specific criteria applied in this case, including the associated formulae required in the background of the database.
2. Following the adjustments required to meet CCC's specific circumstances, all sites have been inputted so that they can be categorised in terms of their 'deliverability' and 'developability' as required by paragraph 47 of the National Planning Policy Framework.
3. Sites included within the database include all sites submitted under the 2014 Call for Sites and all sites submitted alongside the 2015 Issues and Options Consultation and the 2017 Preferred Options Consultation. Updates received in respect of any sites have also been considered and where appropriate necessary amendments have been made to the database to reflect the new or additional information received.

Work Undertaken

Stage 1: Criteria Note

4. A criteria note was agreed with the Council as the basis for developing PBA's database to CCC's specific requirements around Suitability, Availability and Achievability considerations (see Technical Note 1 – SLAA Assessment Criteria Note). It also provides the basis of what are considered to be 'absolute constraints' – critical issues which prevent the site being considered further and which are not included in the SLAA database. The only exception to this approach was the consideration of the sites wholly within the Metropolitan Green Belt, a Green Wedge or a Green Corridor. In this case PBA have provided two versions of the database to CCC – the first excluding sites wholly within the Green Belt, a Green Wedge or Green Corridor as an absolute constraint, and the second including them with, in effect, no policy restriction to inform emerging plan preparation.

Stage 2: Adjusting the Database

5. In line with the suitability, availability and achievability criteria agreed in Stage 1, the SLAA database was adjusted to suit CCC's requirements. This involved:
 - Adjusting the structure and layout of the database to suit
 - Adjusting formulae to reflect adjusted criteria
 - Adjusting aggregate 'score' bandings which form the basis of the category bandings (Category 1– Deliverable Sites, Category 2 – Developable Sites and Category 3 – Not Currently Developable Sites)

- Adding in reporting provision for consideration of sites within the Green Belt, a Green Wedge, or Green Corridor

Stage 3: Ensuring all Relevant Data is entered

6. Information is gathered from a number of sources to inform the 'suitability' and 'availability' of sites. These include any site constraints as well as:
 - Sites which fall within Flood Zone 3 and also specifically functional floodplain (Flood Zone 3b);
 - The specific proportions of the site being brownfield (previously developed) or greenfield;
 - The specific proportions of the sites within the Metropolitan Green Belt, a Green Wedge, or Green Corridor;
 - Distance of the site from the defined Air Quality Management Area;
 - Sites which are likely to have highway access issues;
 - Which sites fall within which parishes; and
 - The existing and proposed uses of each site.
7. Alongside this PBA have assessed the viability of a number of specific site typologies which are representative of the range of sites being considered in the Chelmsford SLAA. The outputs from these typologies have informed the 'achievability' component of the SLAA database.

Stage 4 – Input data into Database

8. The data sourced by CCC (suitability and availability) and PBA (achievability) are then inputted into the Chelmsford SLAA database. As set out above under Stage 1, two versions of the database have been provided to CCC:
 - The first excludes sites wholly within the Metropolitan Green Belt, a Green Wedge, or Green Corridor and also discounting the relevant element of sites which partially fall within the Green Belt, a Green Wedge, or Green Corridor – essentially a 'policy on' approach.
 - The second version of the database includes sites within the Green Belt, a Green Wedge, or Green Corridor and therefore places no restriction on their consideration – essentially a 'policy off' approach.
9. This approach assists the City Council in informing policy choices and options. The database can be added to and amended as and when additional sites are received, or if additional information is received relating to sites which then need revision.

Basis of information

10. The outputs from this work have been undertaken on the basis of the available information. It is important to note that a SLAA is a strategic level analysis of sites based on the information provided by landowners/developers and from data sourced by the City Council. For the achievability component, this has been undertaken on the basis of 'typical' typologies which have then been extrapolated to similar sites contained in the database, given the

strategic nature of the study. It is important to note that the actual achievability of individual sites is based on multiple factors relevant to the individual characteristics of the site. Undertaking individual viability appraisals of all sites is not a feasible option given the number of sites involved, however utilising a typology approach provides a proportionate method for the consideration of potential sites appropriate to the strategic remit of a SLAA assessment.

Refinement of SLAA outputs

11. The outputs set out above provide gross figures for all sites in the Council's SLAA Database. However, a refinement of these figures is required to provide a more accurate assessment of available land. A number of pieces of land have been submitted to the Council more than once, or have areas which overlap with other submissions. Therefore, the gross outputs would represent, potentially significant, double counting of land and therefore yield within the various site categories. As a result the following sites, areas and yields have been discounted to give a more accurate picture of the quantum of land available:

- Sites wholly within another SLAA submission
- Sites with planning permission (but not yet built)

Sites wholly within another SLAA submission

12. The sites listed in the table below lie wholly within another submission and therefore their outputs can be removed from gross outputs provided above.

Site Reference	Site Address	Land within submission	Site Area (ha)	Yield	Category	PDL / Greenfield	GB / GW
CFS21	Land East of Junction with Hyde Lane and Mill Lane Danbury	15SLAA45	2.5	66	1	Greenfield	
CFS44	Land North of Cranham Road, Little Waltham	CFS125	5.81	0	3	Greenfield	
CFS49	Land South East of The Lion Inn, Main Road Boreham	CFS9	14.4	353	2	Greenfield	
CFS56	Land North of Mill Lane East of Barley Mead and South of Maldon Road, Danbury	15SLAA45	12.3	286	1	Greenfield	
CFS57	Land North of Mill Lane East of Barley Mead and South of Maldon Road, Danbury	15SLAA45	12.22	284	1	Greenfield	
CFS79	Montpelier Farm, Blasford Hill, Little Waltham	CFS181	12.25	244	2	Greenfield	

CFS106	Land east of Plantation Road, Boreham	CFS145	6.95	170	1	Greenfield	
CFS113	Land North East of Skeggs Farm, Chelmsford Road, Writtle	17SLAA13	16.5	404	2	Greenfield	Yes
CFS116	Land East of 1-15 Millfields, Danbury	CFS190	3.3	87	1	Greenfield	
CFS123	Land South East of Little Belsteads, Back Lane, Little Waltham	CFS94	2.15	0	3	Greenfield	Yes
CFS124	Land Opposite Mid Essex Gravel Pits Ltd, Essex Regiment Way, Little Waltham	CFS94	7.6	0	3	Greenfield	Yes
CFS138	Land East of Hallfield House, Back Lane, Little Waltham	CFS94	3.3	45	1	Greenfield	Yes
CFS156	Land South West of 2 Scotts Green, Hollow Lane, Broomfield	CFS183	9.8	228	1	Greenfield	
CFS157	Land North West of Pennyfields, Parsonage Green, Broomfield	CFS181	46.46	971	1	Greenfield	
CFS184	Land North West of Sundayville, Lynfords Drive, Runwell, Wickford	CFS236	18.3	314	1	Greenfield	Yes
CFS185	Land North Of Woodhouse Lodge, Woodhouse Lane, Little Waltham	CFS181	27.8	483	1	Greenfield	
CFS186	Land North of the A12 East of Southend Road, Great Baddow	CFS73	12.2	0	2	Greenfield	
CFS187	Land North South East and West of Pontlands Park Hotel, West Hanningfield Road, Great Baddow	CFS73	30.6	448	1	Greenfield	
CFS232	Land North East of Meadow Road, Rettendon	15SLAA40	9.58	201	1	PDL	
CFS235	Rembrandt House, Blasford Hill, Little Waltham	17SLAA9	0.3	7	1	Greenfield	Yes
CFS268	Land on the South side of Woodham Road, Battlesbridge, Wickford	CFS270	2.27	46	1	Greenfield	Yes
CFS269	Land between Highview and High House Farm, Woodham Road, Battlesbridge	CFS270	4.2	71	1	Greenfield	Yes
CFS271	Land between Highview and High	CFS270	1.05	24	1	Greenfield	Yes

	House Farm, Woodham Road, Battlesbridge						
CFS273	Land South East of Fortune Cottage, School Lane, Great Leighs	17SLAA31	0.26	7	1	Greenfield	
15SLAA19	Land North of St Swithins Cottages, Howe Green	CFS55	23.49	0	2	Greenfield	
15SLAA20	Land North of St Swithins Cottages, Howe Green	CFS55	23.49	302	2	Greenfield	
15SLAA47	Sports Centre, Partridge Green, Broomfield	CFS181	12.72	312	2	Greenfield	
15SLAA48	Land South of Rough Hill Complex, The Tye, East Hanningfield	CFS130	8.93	223	1	Greenfield	
17SLAA11	Land North of Cranham Road, Little Waltham	CFS125	8.49	0	3	Greenfield	
17SLAA21	Land South East Of 36 Castle Close and North West of 42 Catherines Close, Great Leighs	CFS195	2.35	53	1	Greenfield	
17SLAA26	Land East of The Crescent, Little Leighs	CFS119	3.88	17	1	Greenfield	

Sites with planning permission

13. Sites which have an approved planning consent are included in the Council's Five Year Supply Housing Site Schedule. It is therefore considered sites which already have a planning permission should be removed from the SLAA assessment outputs. The table below outlines the SLAA sites which have an approved planning permission.

14. Site Reference	Site Address	Permitted planning reference	Site Area (ha)	Yield	Category	PDL / Greenfield	GB / GW
CFS2	The Lordship Stud, Writtle College Back Road, Writtle	15/01855/FUL	1.5	39	1	PDL	Yes
CFS202	The Lordship Stud, Writtle College, Back Road, Writtle	15/01855/FUL	0.71	19	1	Greenfield	Yes
CFS250	Play Area, Cherwell Drive, Chelmsford	15/01140/FUL	0.29	9	1	Greenfield	
CFS251	Garage Site, Cherry Garden Road, Great Waltham	15/00838/FUL	0.45	11	1	Greenfield	
CFS264	Chelmer Waterside	16/01630/FUL	6.45	650	2	PDL	

	Development, Wharf Road, Chelmsford						
CFS278	County Library Headquarters, Goldlay Gardens, Chelmsford	16/01389/FUL	0.47	28	1	PDL	

Outputs to discount, excluding Green Belt, Green Wedge and Green Corridor sites

15. In light of the above the following overall figures have been removed from the Policy-On SLAA.

Category	Number of Sites	Site Area (ha)	Yield (dwellings)
Category 1 - Deliverable	17	178.14	3,572
Category 2 – Developable	7	105	1,861
Category 3 – Not currently developable	2	14.3	0
TOTAL	26	297.44	5,433

	Previously Developed Land			Greenfield			
	No. Sites	Area (ha)	Yield (dwellings)	No. Sites	Area (ha)	Yield (dwellings)	Yield TOTAL
Category 1	2	10.05	229	15	168.09	3,343	3,572
Category 2	1	6.45	650	6	98.55	1,211	1,861
Category 3	0	0	0	2	14.3	0	0
TOTAL	3	16.50	879	23	280.94	4,554	5,433

Outputs to discount, including Green Belt, Green Wedge and Green Corridor sites

16. In light of the above the following overall figures have been removed from the Policy-Off SLAA.

Category	Number of Sites	Site Area (ha)	Yield (dwellings)
Category 1 - Deliverable	25	209.77	4,137
Category 2 – Developable	8	121.50	2,265
Category 3 – Not currently developable	4	24.05	0
TOTAL	37	355.32	6,402

	Previously Developed Land			Greenfield			
	No. Sites	Area (ha)	Yield (dwellings)	No. Sites	Area (ha)	Yield (dwellings)	Yield TOTAL
Category 1	3	11.55	268	22	198.22	3,869	4,137
Category 2	1	6.45	650	7	115.05	1,615	2,265
Category 3	0	0	0	4	24.05	0	0
TOTAL	4	18	918	33	337.32	5,484	6,402

Overlapping sites

17. It should also be noted that there are some sites which overlap each other. Due to the fact that some of these overlapping sites may fall within differing categories and have varying levels of Greenfield/Brownfield splits between them it is impossible to discount site areas and site yields in a fair and consistent manner. As such the reporting output figures below should be viewed with some caution as, although the majority of double counting has been removed, there will be elements of site overlapping, but is not possible to give an accurate figure for how much and in which categories.

Reporting Outputs

18. The Chelmsford SLAA database has a number of built in reporting functions to provide information on the level and nature of potentially deliverable, developable and not currently developable sites. This includes:
- By Category 1, 2 or 3 (or all three)

- By Land type - brownfield or greenfield (or both)
- By specific parish (or all parishes)
- By Green Belt/Green Wedge/Green Corridor (additional reporting functionality if required for the second database which includes Green Belt, Green Wedge and Green Corridor sites)

19. Individual site summary reports can also be produced which provides the key information on the performance of a site against the various Suitability, Availability and Achievability criteria. These can be found within Appendix 4 and Appendix 6. It should be noted that within each site sheet any overlapping or discounts set out above have not been made to the sheets. These are made as a whole within the overall totals in the tables below.
20. Taking into account the above discounts to be made, the overall totals for the Policy-On and Policy-Off SLAA Assessments in Appendix 4 and 6 are as follows:

Table 1: Contribution from sites by Category, *excluding* Green Belt, Green Wedge and Green Corridor sites (Policy-On SLAA Assessment – Appendix 4)

Category	Number of Sites	Site Area (ha)	Yield (dwellings)
Category 1 - Deliverable	82	1,539.27	27,156
Category 2 – Developable	64	1,371.4	17,079
Category 3 – Not currently developable	4	108	531
TOTAL	150	3,018.67	44,766

21. As can be seen from Table 1 for sites outside of the Green Belt, a Green Wedge or Green Corridor (essentially a 'policy on' approach), a yield of 27,156 dwellings can be achieved from Category 1 sites and 17,079 from Category 2 sites. Category 3 sites, those which are not currently developable, amounts to just 531 dwellings.

Table 2: Contribution from sites by Category and land type, *excluding* Green Belt, Green Wedge and Green Corridor sites (Policy-On SLAA Assessment – Appendix 4)

	Previously Developed Land			Greenfield			Yield TOTAL
	No. Sites	Area (ha)	Yield (dwellings)	No. Sites	Area (ha)	Yield (dwellings)	
Category 1	14	25.92	1,050	78	1,512.32	26,106	27,156
Category 2	18	29.25	582	46	1,337.75	16,497	17,079
Category 3	2	0.89	0	2	107.11	531	531
TOTAL	34	56.06	1,632	116	2957.18	43,134	44,766

22. Table 2 provides a greater level of detail including the land type. The yield of previously developed (brownfield) sites from Category 1 amounts to 1,050, compared to a yield of 27,156 greenfield dwellings. The yield of previously developed (brownfield) sites from Category 2 amounts to 700, compared to a yield of 17,517 greenfield dwellings, and 548 dwellings from Category 3 greenfield sites.
23. If sites within the Metropolitan Green Belt, a Green Wedge or Green Corridor are included (essentially a 'policy off' approach) to these elements, the following totals are achieved:

Table 3: Contribution from sites by Category, including Green Belt, Green Wedge and Green Corridor sites (Policy-Off SLAA Assessment – Appendix 6)

Category	Number of Sites	Site Area (ha)	Yield (dwellings)
Category 1 - Deliverable	183	2289.01	41,289
Category 2 – Developable	100	1765.48	22,926
Category 3 – Not currently developable	20	143.79	850
TOTAL	303	4,198.28	65,065

24. As can be seen from Table 3, a yield of 41,289 dwellings can be achieved from Category 1 sites and 22,926 from Category 2 sites. Category 3 sites, those which are not currently developable, amount to 850 dwellings.

Table 4: Contribution from sites by Category and land type, including Green Belt, Green Wedge and Green Corridor sites (Policy-Off SLAA Assessment – Appendix 6)

	Previously Developed Land			Greenfield			Yield TOTAL
	No. Sites	Area (ha)	Yield (dwellings)	No. Sites	Area (ha)	Yield (dwellings)	
Category 1	22	31.97	1,199	161	22,56.01	40,090	41,289
Category 2	22	43.17	902	78	1,722.3	22,024	22,926
Category 3	6	14.47	188	14	129.32	662	850
TOTAL	50	89.61	2,289	253	4,107.63	62,776	65,065

25. Table 4 provides a greater level of detail including the land type. The yield of previously developed (brownfield) sites from Category 1 amounts to 1,199, compared to a yield of 40,090 from Category 1 greenfield sites. The yield of previously developed (brownfield) sites from Category 2 amounts to 902, compared to a yield of 22,024 from Category 2 greenfield sites. Previously developed (brownfield) sites from Category 3 amount to a yield of 188, compared to a yield of 662 from Category 3 greenfield sites.