





## Epping Forest District Council - Appendix I - Whole Plan Viability Assessment (Stage 2) - Residential Assumptions Overview Sheet - 1 of 2

Scheme Size Appraised	Туре	Density	Site type	Land Area (ha)*	Build Period (Months)
1	House	35	PDL / Existing Residential	0.03	6
4	Houses	35	PDL / Existing Residential	0.13	6
5	Houses	35	PDL / Existing Residential	0.16	6
9	Houses	35	Greenfield / PDL	0.30	9
10	Houses	35	Greenfield / PDL	0.33	9
11	Houses	35	Greenfield / PDL	0.36	9
15	Houses	35	Greenfield / PDL	0.49	12
15	Flats	75	Greenfield / PDL	0.23	12
25	Mixed	50	Greenfield / PDL	0.58	12
30	Flats (Sheltered)	125	PDL	0.28	18
50	Flats	150	Greenfield / PDL	0.38	18
50	Mixed	50	Greenfield / PDL	1.15	18
100	Mixed 10% Low Cost Home Ownership	40	Greenfield / PDL	2.88	24
100	Mixed	40	Greenfield / PDL	2.88	24
250	Mixed	40	Greenfield / PDL	7.19	48

Note: Assumed base Affordable Housing tenure split 81% Affordable Rented and 19% Shared Ownership/Intermediate.

Scheme Size Appraised (Mixed-Use only)	Туре	Density	Site type	Land Area (ha)*	Build Period (Months)
	Flats with GF Convenience Retail	150	PDL (Town Centre)	0.38	
	Annual Rent of £225/m2 - MV	Based on data collected	I from CoStar		
50	Build Cost - £1,478/m2 Plus 10% external work	BCIS Median Data rebas	18		
	Yield @ 6%				

Note: sensitivity testing to be carried out for M4(3) Access at varying % basis (50 Mixed), basement car parking (50 Flats), Open Space allowance and alternative tenure split at 70% AR / 30% SO tested on 100 Mixed scenarios only.

\*Land Area Adjustment - 15% added

	Scheme Size Appraised (Strategic Sites only)	Туре	Density	Site type	Land Area (ha)*	Build Period (Months)**
	750	Mixed	35	Greenfield	28***	60
	1050	Mixed	35	Greenfield	102.37	78
- [	2100	Mixed	35	Greenfield	116.80	120

\*Land area as provided by EFDC

\*\*Assumes multiple developers

\*\*\*Assumes pro-rated area of larger site (3,350 units on total 125ha)

Unit Cines (ex. m)*	Stage 1	(2014/15)	Stage 2	2 (2017)
Unit Sizes (sq. m)*	Affordable	Private	Affordable	Private
1-bed flat	50	45	50	50
2-bed flat	67	60	70	70
2-bed house	75	75	79	79
3-bed house	85	95	93	100
4-bed house	110	125	112	130

150 (Large)

Dwelling mix principles (based on West Essex and East Hertfordshire SHMA 2015)

Market Housing 1-Beds 5%, 2-Bed Flats 10% 2-Bed Houses 15% 3-Beds 50%, 4-Beds 20% Affordable Housing 1-Beds 20%, 2-Bed Flats 15% 2-Bed House 20% 3-Beds 35%, 4-Beds 10% Note: All subject to 'best fit scenario' within assumed mix

Stage 1 (2014/15) Study Value Assumptions

Stage I (2014/15/ Stady Value									
Open Market Value	VL1	VL2	VL3	VL4	VL5	VL6	VL7	VL8	VL9
1 Bed Flat	£123,750	£146,250	£168,750	£191,250	£213,750	£236,250	£258,750	£281,250	£303,750
2 Bed Flat	£165,000	£195,000	£225,000	£255,000	£285,000	£315,000	£345,000	£375,000	£405,000
2 Bed House	£206,250	£243,750	£281,250	£318,750	£356,250	£393,750	£431,250	£468,750	£506,250
3 Bed House	£261,250	£308,750	£356,250	£403,750	£451,250	£498,750	£546,250	£593,750	£641,250
4 Bed House	£343,750	£406,250	£468,750	£531,250	£593,750	£656,250	£718,750	£781,250	£843,750
Value House (£/m2)	£2,750	£3,250	£3,750	£4,250	£4,750	£5,250	£5,750	£6,250	£6,750

Stage 2 (2017) Study Value Assumptions - values range updated based latest research data

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Open Market Value	VL1	VL2	VL3	VL4	VL5	VL6	VL7	VL8	VL9
1 Bed Flat	£175,000	£200,000	£225,000	£250,000	£275,000	£300,000	£325,000	£350,000	£375,000
2 Bed Flat	£245,000	£280,000	£315,000	£350,000	£385,000	£420,000	£455,000	£490,000	£525,000
2 Bed House	£276,500	£316,000	£355,500	£395,000	£434,500	£474,000	£513,500	£553,000	£592,500
3 Bed House	£350,000	£400,000	£450,000	£500,000	£550,000	£600,000	£650,000	£700,000	£750,000
4 Bed House	£455,000	£520,000	£585,000	£650,000	£715,000	£780,000	£845,000	£910,000	£975,000
Value House (£/m2)	£3,500	£4,000	£4,500	£5,000	£5,500	£6,000	£6,500	£7,000	£7,500

Note: Sheltered Housing tested at VL7-9 based on research contained within Appendix III

Affordable Housing Revenue Assumptions (Average LHA Rates\*)

Unit	Stage 1 (2014/15)	Stage 2 (2017)
Onit	LHA (Average) Cap	LHA (Average) Cap
1BF	£143.00	£145.15
2BF	£180.00	£181.29
2BH	£180.00	£181.29
ЗВН	£196.00	£223.60
4BH	£276.00	£295.42

\*comprises average of Harlow & Stortford, Outer North East London and South East Herts BRMA LHA Rates

Unit	Market Size	Average AH Transfer Price (LHA Cap)	AH Transfer Price less 10%
1BF	50	£105,721	£96,110
2BF	70	£132,040	£120,036
2BH	79	£132,040	£120,036
ЗВН	100	£162,858	£148,053
4BH	130	£215,165	£195,605

\*Shared Ownership assumes 65% of MV

## Epping Forest District Council - Appendix I - Whole Plan Viability Assessment (Stage 2) - Residential Assumptions Overview Sheet - 2 of 2

Development / Policy Costs	Stage 1 (2014/15)	Stage 2 (2017)	Notes
RESIDENTIAL BUILDING, MARKETING & S106 COSTS			
Build Costs Mixed Developments - generally (£/sq. m) <sup>1</sup>	£1,096	£1,310	
	£1,059	£1,457	Only applicable to scenarios <10 units. Increased by 14% from updated base figures - adjustment
Build Costs Estate Housing - generally (£/sq. m)	11,039	11,437	based on BCIS FSB report. <sup>2</sup>
Build Costs Estate Housing - generally (£/sq. m)	£1,059	£1,278	11+ units
	£1,570	£2,142	Only applicable to scenarios <3 units. Increased by 14% from updated base figures - adjustment
Build Costs 'One-off' Detached Housing (3 units or less)	11,370	12,142	based on BCIS FSB report. <sup>2</sup>
Build Costs Flats - generally (£/sq. m)	£1,266	£1,489	
Build Costs Flats - 3-5 Storey (£/sq. m)	n/a	£1,478	
Build Costs Flats - 6+ storey (£/sq. m)	£1,592	£1,914	
Build Costs (Sheltered Housing - 3-storey) (£/sq.m) <sup>1</sup>	£1,283	£1,503	
	£4,500	£4,500	Assumed at £17,000 - £23,000/dwelling equivalent - strategic scale development (500+ dwellings
Site Prep & Survey Costs (£ / unit)	ŕ	ŕ	tests) where applicable
Continuousias (9/ of build cost)	5%	5%	
Contingencies (% of build cost) Professional & Other Fees (% of build cost)	10.0%	10.0%	
Professional & Other Fees (% of build cost)	10.076	10.076	
Lifetime Homes (10% of dwellings on 10+ units only) <sup>3</sup>	£1,975	n/a	
Sustainable Design / Construction Standards (% of build cost) <sup>3</sup>	£1,932 / unit	2.00%	Latest data suggests allowances in the range of 1% to 1.5% to meet building regulations
	,,		
Desidual - 400 / see Cil see to Consequità see et si si	62.000	62.000	
Residual s.106 /non-CIL costs (£ per unit) - non-strategic sites	£3,000	£3,000	
On strategic sites - carried out on surplus basis unless detailed infrastructure costs and timings			
known			
	Tested at £25/m <sup>2</sup>	£150-£225/m²	Based on DSP previously recommended rates as part of Stage 1. District-wide rate excluding
EFDC CIL Rates (£/m²)	intervals from £0 -	£15U-£225/III	Waltham Abbey and Strategic Sites
EFDC CIL Nates (E/III )	£350/m <sup>2</sup>		Passad on DSD proviously recommended rates as part of Stage 1. Waltham Abboy only
	1350/111	£80-£100/m²	Based on DSP previously recommended rates as part of Stage 1. Waltham Abbey only
Building Regs M4 (2) Compliance (100% of dwellings) <sup>4</sup>	n/a	£1,646 (Flats)	per unit (applicable units only) - tested at 100% (base policy position)
Building Kegs 1914 (2) Compliance (100% of dwellings)	11/4	£2,447 (Houses)	per unit (applicable units only) rested at 100% (base policy position)
Building Regs M4 (3) Compliance Sensitivity Testing <sup>4</sup>	n/a	£15,691 (Flats)	per unit (applicable units only) - sensitivity tested at 5%, 10% and 20% of units
building riegs wit (5) compilative sensitivity resting	.,,=	£26,816 (Houses)	у-т (
Technical Housing Standards - nationally described space standard			
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Reduced Water usage (max consumption)	n/a		Based on the Housing/technical Standards Review - optional increased standard included within
	,	per day	Building Reg.s
Electric Car Charging Points	n/a	£500 per unit	
			per unit based on tariff levels provided by EFDC following AECOM report to SAC MoU.
		£1,404 (1-Beds) £2,146 (2-Beds)	r · · · · · · · · · · · · · · · · · · ·
SAC Mitigation (£/per unit)	n/a	£2,146 (2-Beds) £2,628 (3-Beds)	Note: Local Tariff per Affordable Housing reduced by 33% equating to £941 (1-Beds), £1,438 (2-
		£3,140 (4-Beds)	Beds), £1,761 (3-Beds and £2,104 (4-Beds)
Marketing & Sales Costs (%of GDV)	3%	3%	
Legal Fees on sale (£ per unit)	£750	£750	
DEVELOPER'S RETURN FOR RISK AND PROFIT			
Open Market Housing Profit (% of GDV)	20.0%	20.0%	
Affordable Housing Profit (% of GDV)	6.0%	6.0%	
FINANCE & ACQUISITION COSTS			
FINANCE & ACQUISITION COSTS  Agents Food (% of cite value)	1.50%	1.50%	
Agents Fees (% of site value) Legal Fees (% of site value)	0.75%	0.75%	
Stamp Duty Land Tax (% of site value)	0.75% 0% to 5%	0.75% 0% to 5%	HMRC scale
Finance Rate including Arrangement Fees - Build (%)	6.5%	6.5%	THVING Scale
Finance Rate - Land (%)	6.5%	6.5%	
The second control (19)	5.570	5.570	
Notes:			

## Notes

<sup>1</sup> Build cost taken as "Median" figure from BCIS for that build type - e.g. flats; houses storey heights etc. and then rounded. Median figure gives a better figure than the Mean as it is not so influenced by rogue figures that can distort the mean on small sample sizes. The BCIS figure for Epping Forest has been used. Includes allowance for uplift to build costs based on BCIS / FSB research for sites of 10 or fewer dwellings. External works added separately - 10% of base build costs.

<sup>2</sup>BCIS report for the Federation of Small Businesses - Housing development: the economics of small sites - the effect of project size on the cost of housing construction (August 2015)







<sup>&</sup>lt;sup>3</sup> The above costs are based on the DCLG Housing Standards Review Impact Assessment costings assuming equivalent CfSH L4 energy costs only base. Appraisals assume cost uplift in line with figures above assuming average cost uplift from each unit type (£1,932 per unit average, equating to the 2% assumed above).

<sup>&</sup>lt;sup>4</sup> Sensitivity tested allowance to meet Building Regs M4 Category 2 and Category 3 (adaptable) acknowledged within report as potential variable cost issue (depending on design etc.). EC Harris DCLG Housing Standards Review Cost Impact indicate average extra over cost to be £1,646 (Cat.2) and £15,691 (additional space cost (Cat. 3)) for flats and £2,447 (Cat.2) and £26,816 (additional space cost (Cat.3 adaptable)) for houses.



								Dwelling N	∕lix Assumptio	ns - 0% AH								AD 010/	SO 19%	Overall AH %
Sch	eme Typology		1-BF			2-BF			2-BH			3-BH			4-BH		Total Check	AR 81%		
		Market	AR	so	Market	AR	so	Market	AR	so	Market	AR	so	Market AR SO				Check	Check	Check
1	House													1			1	0.00%	0.00%	0.00%
4	Houses							1			2			1			4	0.00%	0.00%	0.00%
5	Houses							1			3			1			5	0.00%	0.00%	0.00%
9	Houses							2			5			2			9	0.00%	0.00%	0.00%
10	Houses							2			6			2			10	0.00%	0.00%	0.00%
11	Houses							2			6			3			11	0.00%	0.00%	0.00%
15	Houses							3			8			4			15	0.00%	0.00%	0.00%
15	Flats	7			8												15	0.00%	0.00%	0.00%
25	Mixed	1			3			4			12			5			25	0.00%	0.00%	0.00%
30	Flats (Sheltered)	22			8												30	0.00%	0.00%	0.00%
50	Flats**	22			28												50	0.00%	0.00%	0.00%
50	Mixed***	2			5			8			25			10			50	0.00%	0.00%	0.00%
100	Mixed 10% Low Cost Home Ownership								n/a								0	0.00%	0.00%	0.00%
100	Mixed	5			10			15			50			20			100	0.00%	0.00%	0.00%
250	Mixed	12			25			38			125			50			250	0.00%	0.00%	0.00%
750	Mixed	37			75			113			375			150			750	0.00%	0.00%	0.00%
1050	Mixed	52			105			158			525			210			1050	0.00%	0.00%	0.00%
2100	Mixed	105			210			315			1050			420			2100	0.00%	0.00%	0.00%



								Dwelling N	lix Assumption	ns - 40% AH								AH units	AR 81%	CO 100/	Overell All (
Sc	heme Typology		1-BF			2-BF			2-BH			3-BH			4-BH		Total Check			SO 19%	Overall AH
		Market	AR	so	Market	AR	so	Market	AR	so	Market	AR	so	Market	AR	SO		Total	Check	Check	Check
1	House							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	0.00%	0.00%	0.00%
4	Houses							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	0.00%	0.00%	0.00%
5	Houses							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	0.00%	0.00%	0.00%
9	Houses							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	0.00%	0.00%	0.00%
10	Houses							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	0.00%	0.00%	0.00%
11	Houses							1	0	1	4	2	0	2	1	0	11	4	75.00%	25.00%	36.36%
15	Houses							1	1	1	5	3	0	3	1	0	15	6	83.33%	16.67%	40.00%
15	Flats	4	2	1	5	3	0										15	6	83.33%	16.67%	40.00%
25	Mixed	0	0	1	1	1	1	3	1	0	8	4	0	3	2	0	25	10	80.00%	20.00%	40.00%
30	Flats (Sheltered)	16	5	1	2	5	1										30	12	83.33%	16.67%	40.00%
50	Flats	13	7	2	17	9	2										50	20	80.00%	20.00%	40.00%
50	Mixed	0	1	1	2	2	1	4	2	2	17	8	0	7	3	0	50	20	80.00%	20.00%	40.00%
100	Mixed 10% Low Cost Home Ownership*	1	2	2	4	3	3	7	5	3	34	16	0	14	6	0	100	40	80.00%	20.00%	40.00%
100	Mixed	1	2	2	4	3	3	7	5	3	34	16	0	14	6	0	100	40	80.00%	20.00%	40.00%
100	Mixed 70/30 Split	0	1	4	3	3	4	7	4	4	36	14	0	14	6	0	100	40	70.00%	30.00%	40.00%
250	Mixed	4	4	4	10	8	7	18	12	8	84	41	0	34	16	0	250	100	81.00%	19.00%	40.00%
750	Mixed	11	12	14	31	24	20	54	36	23	253	122	0	101	49	0	750	300	81.00%	19.00%	40.00%
1050	Mixed	15	17	20	43	34	28	76	50	32	354	171		141	69		1050	421	81.00%	19.00%	40.10%
2100	Mixed	31	34	40	86	68	56	151	100	64	708	342		282	138		2100	842	81.00%	19.00%	40.10%

\*assumes 3 x 1BF, 3 x 2BF, 4 x 2BH as LCHO units

EFDC - Local Plan (0	Consultation 2016 Version with Reg 19 amendments) - Polic	y Analysis
Policy No. / Name	Addressed where applicable through specific study approach / assumptions - Y/N - and associated commentary	Cost / specific allowance?
SP1 - Presumption in Favour of Sustainable Development	Y - but in respect of the general nature and quality of development expected to come forward and be supportable through the usual planning application and development management process. Therefore reflected in the nature of the build and related costs assumptions used for all appraisals.	Reflected in build costs assumptions and location of development scenarios
SP2 - Spatial Development Strategy 2011-2033	Y - A variety of residential and commercial (non-residential) scenarios have been modelled, also covering a range of values levels overall representing the variety relevant in different areas of the District, all in accordance with the emerging Plan. Affordable housing has been tested at alternative trial levels as part of informing the Plan development. (See Appendix I - Development Assumptions).	results - influence on recommendations.
SP3 - Place Shaping	Y - Firstly in respect of the general nature and quality of development expected to come forward and be supportable through the usual planning application and development management process. Therefore reflected in the nature of the build and related costs assumptions used for all appraisals. Secondly, additional cost allowances have been made in relation to sustainability to meet Part L of the Building Regulations, Lifetime Homes (now under Part M) - see Appendix I Residential Assumptions	Reflected in assumptions - assumed development appropriate as would be permitted under the range of development management criteria. Additional sustainability requirements included as part of build cost assumptions
SP4 - Development & Delivery of Garden Communities in the Harlow and Gilston Garden Town	Y - A variety strategic site scenarios have been modelled, also covering a range of values levels overall representing those sites identified within the emerging Plan. Affordable housing has been tested at alternative trial levels as part of informing the Plan development. (See Appendix I - Development Assumptions).	Reflected in selection of scheme scenarios (strategic sites), assumptions and interpretation of appraisal results - influence on recommendations. Range of specific allowances made for affordable housing.
SP5 - Garden Town Strategic Allocations	Y - same as SP4 above.	
SP56 - Green Belt and District Open Land	Y - Planning / design issue rather than direct cost impact except in exceptional circumstances. Any costs included within fees assumptions.	No particular additional assumptions that apply across the range of scheme types.
SP7 - The Natural Environment, Landscape Character and Green Infrastructure	Y - to the extent that the assessment assumptions consider regular design and layout characteristics. Scope of achievable planning obligations packages may be relevant to particular proposals - especially for larger/strategic scale developments where the surplus available to support a planning obligations package is likely to be considered. More of general development management matter and does not inform particular viability assessment assumptions.	No particular additional assumptions that apply across the range of scheme types.
H1 - Housing Mix and Accommodation Types	Y - A variety of residential scenarios have been modelled, also covering a range of values levels and accommodation types, overall representing the variety relevant in different areas of EFDC. Affordable housing has been tested at alternative trial levels as part of informing the Plan development. (See Appendix I - Development Assumptions).	Reflected in selection of scheme scenarios, assumptions and interpretation of appraisal results - influence on recommendations. Range of specific allowances made for affordable housing.
H2 - Affordable Housing	Y - Affordable housing policy as currently included at 40% taken as base position. Study investigates through matrix of testing against both previously recommended CIL level and other policies level of AH potentially viable (i.e. tests range of proportions / thresholds of affordable housing. (See Appendix I - Residential Development Assumptions).	No further assumptions - regular application of affordable housing and other policies assumed.
H3 - Rural Exception Sites	Y - A variety of residential scenarios have been modelled, also covering a range of values levels overall representing the variety relevant in different areas of the District, all in accordance with the emerging Plan. Affordable housing has been tested at alternative trial levels as part of informing the Plan development. (See Appendix I - Development Assumptions).	Reflected in selection of scheme scenarios, assumptions and interpretation of appraisal results - influence on recommendations. Range of specific allowances made for affordable housing.
H4 - Traveller Site Development	This policy has not been specifically addressed, being outside the scope of those that directly impact development costs in a way that specifically influences the assessment process and assumptions	None specific
E1 - Employment Sites	Y - A variety of commercial development scenarios of various types have been considered at an appropriate high level for the study purpose, covering a range of values representing the variety relevant in different areas and across different scheme/site types. (See main report text)	Reflected in values and costs assumptions used within high level commercial scenarios as considered within the report text.
E2 - Centre Hierarchy / Retail Policy E3 - Food Production and Glasshouses	Y - as per E1 above. Scenario testing to include both town centre and outer town centre commerc Y - as per E1 above. Specific scenario test for Glasshouses	ial development
E4 - The Visitor Economy	Y - A variety of commercial development scenarios of various types have been considered at an appropriate high level for the study purpose, including those in support of the visitor economy e.g. hotels and other tourism led uses, all covering a range of values representing the variety relevant in different areas and across different scheme/site types. (See main report text)	Reflected in values and costs assumptions used within high level commercial scenarios as considered within the report text.
T1 - Sustainable Transport Choices	N/A - more of a planning and land use implication than for viability consideration relevant to this assessment.	N/A
T2 - Safeguarding of routes and facilities	N/A - more of a planning and land use implication than for viability consideration relevant to this assessment.	N/A
DM1 - Habitat Protection and improving biodiversity	Y - to the extent that the assessment assumptions consider regular design and layout characteristics. Scope of achievable planning obligations packages may be relevant to particular proposals - especially for larger/strategic scale developments where the surplus available to support a planning obligations package is likely to be considered. More of general development management matter and does not inform particular viability assessment assumptions.	No particular additional assumptions that apply across the range of scheme types.
DM2 - Epping Forest SAC and the Lee Valley SPA	Y - as per DM1 above	
DM3 - Landscape character, ancient landscapes and Geodiversity	Y - as per DM1 above	
DM4 - Green Belt and Development	Y - Planning / design issue rather than direct cost impact except in exceptional /abnormal circumstances.	No particular additional assumptions that apply across the range of scheme types.



EFDC - Local Plan (Consultation 2016 Version with Reg 19 amendments) - Policy Analysis					
Policy No. / Name	Addressed where applicable through specific study approach / assumptions - Y/N - and associated commentary	Cost / specific allowance?			
DM5 - Green and Blue Infrastructure	Y - considered through range of s.106/other costs sensitivity testing. In practice a range of sites will trigger mitigation requirements (localised works or contributions) but those will vary sites will vary with the site-specific details.	DSP's view and experience is that say £3,000/dwelling forms an appropriate sum, effectively as a contingency, for such measures. It follows that for all tests at £3,000 per dwelling, the immediate/essential highways mitigation/s.278 works are assumed			
DM6 - Designated and undesignated open spaces	Y - considered through a specific land area allowance forming part of our assumptions base. In practice a range of sites will trigger mitigation requirements (localised works or contributions) but those will vary sites will vary with the site-specific details.	DSP adopt specific land allowance based on experience and/or advice from EFDC.			
DM7 - Heritage Assets	Y - Planning / design issue rather than direct cost impact except in exceptional circumstances. Any costs included within fees assumptions.	No particular additional assumptions that apply across the range of scheme types.			
DM8 - Heritage at Risk	Y - as per DM7 above				
DM9 - High Quality Design	Y - Firstly in respect of the general nature and quality of development expected to come forward and be supportable through the usual planning application and development management process. Therefore reflected in the nature of the build and related costs assumptions used for all appraisals. Secondly, additional cost allowances have been made in relation to sustainability to meet Part L of the Building Regulations, Lifetime Homes (now under Part M) - see Appendix I Residential Assumptions	Reflected in assumptions - assumed development appropriate as would be permitted under the range of development management criteria. Additional sustainability requirements included as part of build cost assumptions			
DM10 - Housing Design and Quality	Y - as per DM9 above				
DM11 - Waste recycling facilities on new development	Y - Allowed for within build costs and fees so far as normal works extent is concerned. However could have very site specific impacts and as such would need to be treated as abnormal costs in weighing-up the overall viability position on a particular site. However basic SUDS requirements - assumed within build costs; standard FRA within fees. The assumptions also include contingencies.	No particular additional assumptions that apply across the range of scheme types.			
DM12 - Subterranean, basement development and light wells	Y - Although considered a planning / design issue initially, a specific scenario will be sensitivity tested within the residential appraisal modelling with specific increased costs to allow for basement construction.	Additional cost allowance for basement construction allowed for within specific residential scenario (sensitivity test) - See report text and Appendix I for detail.			
DM13 - Advertisements	N/A - more of a planning and land use implication than for viability consideration.	N/A			
DM14 - Shopfronts and on street dining	N/A - more of a planning and land use implication than for viability consideration.	N/A			
DM15 - Managing and reducing flood risk	Y - Allowed for within build costs and fees so far as normal works extent is concerned. However could have very site specific impacts and as such would need to be treated as abnormal costs in weighing-up the overall viability position on a particular site.	No particular additional assumptions that apply across the range of scheme types.			
DM16 - Sustainable Drainage Systems	Y - as per DM15 above				
DM17 - Protecting and enhancing watercourses and flood	Y - as per DM15 above				
defences DM18 - On site management of waste water and water	Y - as per DM15 above				
supply DM19 - Sustainable Water Use	Y - as per DM15 above - 110 l/p/d assumed within development appraisals.				
DM20 - Low Carbon and Renewable Energy	Y - Allowed for within build costs and fees so far as normal works extent is concerned and additional cost allowances included as part of meeting the building regulations requirements (Part L).  Policy also requires all major development to incorporate infrastructure for District Heating. Any requirement to connect to a common system is considered to be more of an early design stage implication rather than necessarily meaning additional cost; savings against usual connections or a balancing out with those would be expected so far as we can see. In terms of site-specific schemes, any costs would need to be considered as part of a more detailed delivery stage viability review in the usual way (treated in the same way as the extent of achievable planning obligations package alongside abnormal costs etc.)	No particular additional assumptions that apply across the range of scheme types.			
DM21 - Local environmental impacts, pollution and land contamination	Y - Generally more of a planning/design related issue but any cost allowance covered by standard build costs and fees so far as normal works extent is concerned. However could have very site specific impacts / mitigation requirements, and as such would need to be treated as abnormal costs in weighing-up the overall viability position on a particular site.	No particular additional assumptions that apply across the range of scheme types.			
DM22 - Air Quality	Y - Generally more of a planning/design related issue but any cost allowance covered by standard build costs and fees so far as normal works extent is concerned. However could have very site specific impacts / mitigation requirements, and as such would need to be treated as abnormal costs in weighing-up the overall viability position on a particular site.	No particular additional assumptions that apply across the range of scheme types.			
P1 - Epping	Y - A variety of residential and commercial (non-residential) scenarios have been modelled, also covering a range of values levels overall representing the variety relevant in different areas of the District, all in accordance with the emerging Plan. Affordable housing has been tested at alternative trial levels as part of informing the Plan development. (See Appendix I - Development Assumptions).	results - influence on recommendations.			



EFDC - Local Plan (Consultation 2016 Version with Reg 19 amendments) - Policy Analysis					
Policy No. / Name	Addressed where applicable through specific study approach / assumptions - Y/N - and associated commentary	Cost / specific allowance?			
P2 - Loughton/Loughton Broadway	Y - as per P1 above				
P3 - Waltham Abbey	Y - as per P1 above				
P4 - Chipping Ongar	Y - as per P1 above				
P5 - Buckhurst Hill	Y - as per P1 above				
P6 - North Weald Bassett	Y - as per P1 above				
P7 - Chigwell	Y - as per P1 above				
P8 - Theydon Bois	Y - as per P1 above				
P9 - Roydon	Y - as per P1 above				
P10 - Nazeing	Y - as per P1 above				
P11 - Thornwood	Y - as per P1 above				
P12 - Coopersale, Fyfield, High Ongar, Lower Sheering,					
Moreton, Sewardstonebury, Sheering and Stapleford,	Y - as per P1 above				
Abbotts					
D1 - Delivery of Infrastructure	Y - considered through range of s.106/other costs sensitivity testing. In practice a range of sites will trigger mitigation requirements (localised works or contributions) but those will vary sites will vary with the site-specific details.	DSP's view and experience is that say £3,000/dwelling forms an appropriate sum, effectively as a contingency, for such measures. It follows that for all tests at £3,000 per dwelling, the immediate/essential highways mitigation/s.278 works are assumed to be specifically allowed for.			
D2 - Essential Facilities and Services	Y - generally within build costs and externals / Planning obligations cost assumptions. In practice larger sites will trigger mitigation/contribution requirements (localised works or contributions) for these education and health services but those will vary with the site-specific details.	No particular additional assumptions that apply across the range of scheme types.			
D3 - Utilities	Y - study allows for appropriate development densities, design, build costs and external works costs and S106 cost assumptions within the development scenarios modelled.	Reflected in the scenarios assumptions on a range of inputs; most directly relevant the build costs assumptions including by means of additions for external and other works - see Appendix I			
D4 - Community, Leisure and Cultural Facilities	Y - Non-residential scenarios of various types have been considered at an appropriate high level for the study purpose (See report text for detail)	Reflected in values and costs assumptions used within relevant high level appraisal scenarios. See report text for detail.			
D5 - Communications Infrastructure	Y - study allows for appropriate development densities, design, build costs and external works costs and S106 cost assumptions within the development scenarios modelled.	Reflected in the scenarios assumptions on a range of inputs; most directly relevant the build costs assumptions including by means of additions for external and other works - see Appendix I			
D6 - Neighbourhood Planning	N/A - not relevant for viability consideration for the study purpose. Only relevance in so far as the range of development scenarios modelled / considered are representative of relevant planning strategy / policy documents.	N/A			
D7 - Monitoring and Enforcement	N/A - not relevant for viability consideration for the study purpose.	N/A			



EFDC - Local Plan 2016 with Reg 19 Version amendments

Residential Site Allocations Analysis

Policy	Allocation Ref	Site Selection Ref	Name/Address	Approx. No. dwellings	Greenfield (GF) / PDL
		SP4.1	Latton Priory and Ridings Lane South of Harlow	1050	PDL
SP4 Development & Delivery of Garden Communities in he Harlow and		SP4.2	West of Harlow (West Sumners and West Katherines combined)	2100	GF
Gliston Garden Town area		SP4.3	East of Harlow	750	GF
		SP4.4	Gliston	3000	PDL
		SR0069	Land at Ivy Chimneys Road	79	PDL
		SR0069/33	Land South of Epping	255	GF
		SR0071 SR0113B	Land at Stonards Hill	115	GF GF
		SR0133Ci	Land South of Brook Road Epping Sports Club & Land West of Bury Lane	224 49	PDL
		SR0152Ci SR0153	Land North of Stewards Green Road	305	PDL
		SR0208	Theydon Place	66	PDL
	EPP.R3	SR0229	Epping London Undergrounds Car Park & Land adjacent to Epping Station	89	PDL
Note: All remaining site allocations		SR0333Bi	Epping South-West area	24	GF
are subject to change/tbc according	EPP.R5	SR0347	Epping Sports Centre, Nicholl Road	43	PDL
to Alison's email of 31.10.17	EPP.R6	SR0348	Cottis Lane Car Park	47	PDL
P1 - Epping	EPP.R7	SR0349	Bakers Lane Car Park	31	PDL
		SR0445	Greenacres, Ivy Chimneys Road	23	PDL
		SR0555	St Margaret's Hospital Site	181	PDL
	EPP.R8	SR0556	Land and part of Civic Offices	44	PDL
	EPP.R9	SR0587	Land at Bower Vale	50	PDL
	EPP.R2 EPP.R1	EPP.RXXX EPP.RXXX	Land S of Epping - East Land S of Epping - West	500 450	GF GF
	EPP.R4	SR0261N	Land at St Johns Rd	34	PDL
	EPP.R10	SR1021	Land r/o High Street	6	GF
	EPP.R11	SR1035	Epping Library	11	PDL
		SR0226N	Loughton London Underground Car Park	165	PDL
	LOU.R2	SR0227	Debden London Underground Car Park & Land adjacent Station	192	PDL
	LOU.R3	SR0289	Land at Vere Road	9	GF
	LOU.R4	SR0356	Borders Land Playing Fields	217	GF
		SR0358	Sandford Ave/Westall Road Amenity Open Space	53	PDL
	LOU.R5	SR0361	-Land at Jessel Green	154	GF
		SR0526	Golden Lion PH	30	PDL
	LOU.R6	SR0527	Royal Oak PH	10	PDL
P2 - Loughton	101157	SR0548	Loughton Resource Centre	35	PDL
	LOU.R7	SR0565N	Loughton Library	20	PDL
	LOU.R8	SR0834	Land West of High Rd	29	PDL
	LOU.R9	SR0835	Land at Station Road	111	PDL
	LOU.R10 LOU.R17	SR0878 EPF/0055/17	-Land at Station Road	12 12	PDL PDL
	LOU.R17	SR0974	Land r/o High Rd Land West of Roding Rd	9	PDL
	LOU.R12	SR0974 SR0984	Land at 63 Wellfields	10	PDL
	LOU.R13	SR0986	Land at 70 Wellfields	6	PDL
	LOU.R14	SR1026	Land at Alderton Hill	33	PDL
	LOU.R16	SR1032	St Thomas More RC Church	18	PDL
		SR0099	Lea Valley Nursery	463	PDL
	WAL.R3	SR0104	Land adjoining Parklands	131	GF
	WAL.R4	SR0219	Fire Station at Sewardstone Road	16	GF
D2 Malekan Alak		SR0381	Darby Drive/Abbey Gardens Car Park	17	PDL
P3 - Waltham Abbey	WAL DE	SR0385 SR0541	Ninefields, Land at Hillhouse	60 67	GF PDL
	WAL.R5 WAL.R6	SR0541 SR0903	Waltham Abbey Community Centre Land at Roundhills	27	PDL
					+
	WAL.R1	SR0089A	Land West of Galley Hill Rd	296	l GF



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Policy	Allocation Ref	Site Selection Ref	Name/Address	Approx. No. dwellings	Greenfield (GF) / PDL
	CHIP.R1	SR00671i	Land west of Chipping Ongar	99	PDL
	CHIP.R2	SR0102	Land to R/O 57a and 57b Fyfield Rd	27	GF
	CHIP.R3	SR0120	Bowes Field	135	GF
	CHIP.R4	SR0184	Land adjacent to High Ongar Rd	29	GF
	CHIP.R5	SR0185	Land adjacent to High Ongar Rd	123	GF
	CHIP.R6	SR0186	Land adj Chelmsford Rd	11	GF
P4 - Chipping Ongar	CHIP.R7	SR0390	Land at Greenstead Rd	107	PDL
	CHIP.R9	SR0842	Car park at The Stag PH	9	PDL
		SR0848	Chipping Ongar Leisure Centre	24	PDL
	CHIP.R8	SR0391	Land between Stanford Rivers Rd and Brentwood Rd	33	PDL
	CHIP.R10	SR0989-Z	Land S of Hunters Chase and West of Brentwood Rd	17	GF
	BUCK.R1	SR0176	St Just, Powell Rd	40	GF
P5 - Buckhurst Hill	BUCK.R2	SR0225	Lower Queens Rd Car Park	41	PDL
	BUCK.R3	SR0813	stores at Lower Queens Rd	15	PDL
		SR0003	fields east and west of Church Lane	276	GF
	NWB.R1	SR0036	Land at Blumans Farm	222	GF
	NWB.R2	SR0072	Land at Tylers Farm	20	PDL
		SR0119	Land at North Weald Airfield	225	PDL
P6 - North Weald Bassett	NWB.R3	SR0158A	Land South of Vicarage Lane	727	PDL
To North Wedia Bussett		SR0417	Land East of Church Lane/West of Harrison Drive	49	GF
	NWB.R4	SR0455	Land at Chase Farm	27	PDL
		SR0512	St Clements, Vicarage Lane West	11	PDL
	NWB.R5	SR0991	Land at The Acorns, Chase Farm	51	PDL
		SR0433	Former Beis Shammai School	29	PDL
	CHIG.R6	SR478B	Land at Chigwell Nurseries	65	PDL
	CHIG.R7	SR0557	The Limes Estate	100	PDL
	CHIG.R8	SR0588	Land at Chigwell Convent and The Gate Lodge	28	PDL
		SR0601	Land at former Grange Farm	30	PDL
		SR0894	Land at Manor Rd	12	GF
P7 - Chigwell	CHIG.R9	SR0895	Land at Fencepiece Rd	6	PDL
		SR0896	Land at Manor Rd	10	GF
	CHIG.R10	SR0898	Land at Grange Court, High Rd	8	PDL
	CHIG.R4	SR0317-N	Land between Froghall Lane and Railway Line	105	PDL
	CHIG.R5	SR0318	Land adj to Vicarage Lane	32	GF
	CHIG.R12	SR1010	Land at Hainault Rd	7	PDL
	CHIG.R11	SR0916	The Maypole	11	PDL
		SR0026B	Land East of Central Line/North of Abridge Rd	133	GF
		SR0026C	Part of the Thrifts Hall Farm	121	PDL
	THYB.R1	SR0070	Land at Forest Drive	39	GF
P8 - Theydon Bois	THYB.R2	SR0228i	Theydon Bois London Underground Car Park and commercial yard	12	PDL
		SR0228ii	Theydon Bois London Underground Car Park and commercial yard	19	PDL
	THYB.R3	SR1020	Land at Coppice Row	6	PDL
	כעימוניו	SR0035		6	GF
		SR0035 SR0169	Land at Epping Rd The Old Coal Yard	8	PDL
		SR0169 SR0197		10	PDL
		SR0197 SR0890	Land adjacent to Kingsmead	15	GF
P9 - Roydon	ROYD.R1	SR0890 SR0169	Land at Epping Rd The Old Coal Yard	7	PDL
	ROYD.R1	SR0169 SR0197N		21	GF
		SR0197N SR0890	Land at Kingsmead School		
	ROYD.R3		Land at Epping Rd	14	PDL
	ROYD.R4	SR0976	Land at Parklands Nursery	20	GF
	NAZE.R1	SR0011	Land at Perry Hill	63	GF
	NAZE.R2	SR0150	The Fencing Centre	32	GF
·		SR0300a	Land South of Nazeing	29	GF
P10 - Nazeing / Lower Nazeing		SR0300b	Land South of Nazeing	21	GF
	NAZE.R3	SR0300c	Land South of Nazeing	39	PDL
		ST0473	St Leonards Farm	33	PDL
	NAZE.R4	SR0473	Land at St Leonards Farm	21	GF
P11 - Thornwood	THOR.R1	SR0149	Land at Tudor House	124	GF
TII - HIOHIWOOD	THOR.R2	SR0410	Land East of High Rd	48	GF



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Policy	Allocation Ref	Site Selection Ref	Name/Address	Approx. No. dwellings	Greenfield (GF) / PDL
		SR0404	Institute Road Allotments	27	PDL
		SR0405	Coopersale Cricket Club	19	GF
		SR0049	Land South East of Chipping Ongar Road	85	GF
	HONG.R1	SR0181	Land at Mill Lane	10	GF
D12 Cooperate Fuficial High	LSHR.R1	SR0032	Land at Lower Sheering	14	PDL
P12 - Coopersale, Fyfield, High Ongar, Lower Sheering, Moreton, Sewardstonebury, Sheering and Stapleford Abbotts	SHR.R1	SR0033	Land at Daubenys Farm	10	PDL
	SHR.R2	SR0073	Land to the East of M11	62	GF
	SHR.R3	SR0311	Land-North of Primley Lane	12	PDL
		SR0873	Rear of Mountford and Bishops Brow	10	PDL
	COOP.R1	SR0987	Land at Parklands	6	PDL
	FYF.R1	SR0935	Land at Gypsy Mead	14	PDL
	STAP.R1	SR0242N	Land at Oakfield Rd	33	PDL
	STAP.R2	SR0873	Land r/o Mountford & Bishops Bron	6	PDL

Total no. sites	125	
No. PDL Sites	80	64.00%
No. GF Sites	45	36.00%

<sup>\*</sup>Committed sites removed

## Breakdown of latest site allocation data by settlement\*

Settlement	PDL	GF
Buckhurst Hill	66.67%	33.33%
Chigwell	88.89%	11.11%
Chipping Ongar	30.00%	63.64%
Coopersale	100.00%	0.00%
Epping	90.00%	9.09%
Fyfield	100.00%	0.00%
Harlow	50.00%	50.00%
High Ongar	0.00%	100.00%
Loughton	80.00%	20.00%
Lower Nazeing	25.00%	75.00%
Lower Sheering	100.00%	0.00%
North Weald Bassett	80.00%	20.00%
Roydon	50.00%	50.00%
Sheering	66.67%	33.33%
Stapleford Abbotts	100.00%	0.00%
Theydon Bois	66.67%	33.33%
Thornwood	0.00%	100.00%
Waltham Abbey	50.00%	50.00%

<sup>\*</sup>latest site allocation data rec. 31/10. Committed

sites removed