



Eden District Council

Economic Viability Appraisal Appendices



October 2009

DTZ
No 1 Marsden Street
Manchester
M2 1HW



For Further Details Please Contact

Derek Nesbitt MRICS
No 1 Marsden Street
Manchester
M2 1HW
derek.nesbitt@dtz.com
0161 236 9595

Or

Jenny Purple MRICS
DTZ
St Paul's House
23 Park Square South
Leeds
LS1 2ND

jenny.purple@dtz.com

0113 2461161



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Quality Assurance Record	
Checked By:	<i>apiple</i>
Date:	26 ^h October 2009
Authorised By:	<i>J. R. K. 8611</i>
Date:	26th October 2009
Ref: 09099951	

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Appendix 1

Economic Viability Baseline Assumptions



	Proposed Assumptions	Comments	Final Assumption																																																																		
1	Study Areas 1. Eden Valley North 2. Alston Moor 3. Eden Valley South 4. Penrith	All agreed as proposed	1. Eden Valley North 2. Alston Moor 3. Eden Valley South 4. Penrith																																																																		
2	Proposed Sites	All agreed as proposed	As proposed																																																																		
	Eden District EVA Site Identification.																																																																				
	<table><tr><td></td><td colspan="3">Small</td><td colspan="3">Medium</td><td colspan="3">Large</td></tr><tr><td></td><td>High Density</td><td>Medium Density</td><td>Low Density</td><td>High Density</td><td>Medium Density</td><td>Low Density</td><td>High Density</td><td>Medium Density</td><td>Low Density</td></tr><tr><td>Penrith</td><td>PSHD</td><td>PSMD</td><td>PSLD</td><td>PMHD</td><td>PMMD</td><td>PMLD</td><td>PLHD</td><td>PLMD</td><td>PLLD</td></tr><tr><td>Alston</td><td>n/a</td><td>ASMD</td><td>ASLD</td><td>n/a</td><td>AMMD</td><td>AML</td><td>n/a</td><td>ALMD</td><td>ALLD</td></tr><tr><td>Eden Valley North</td><td>n/a</td><td>EVNSMD</td><td>EVNSLD</td><td>n/a</td><td>EVNMMD</td><td>EVNMLD</td><td>n/a</td><td>EVNLMD</td><td>EVNLLD</td></tr><tr><td>Eden Valley South</td><td>n/a</td><td>EVSSMD</td><td>EVSSLD</td><td>n/a</td><td>EVSMMD</td><td>EVSMLD</td><td>n/a</td><td>EVSLMD</td><td>EVSLLD</td></tr></table>										Small			Medium			Large				High Density	Medium Density	Low Density	High Density	Medium Density	Low Density	High Density	Medium Density	Low Density	Penrith	PSHD	PSMD	PSLD	PMHD	PMMD	PMLD	PLHD	PLMD	PLLD	Alston	n/a	ASMD	ASLD	n/a	AMMD	AML	n/a	ALMD	ALLD	Eden Valley North	n/a	EVNSMD	EVNSLD	n/a	EVNMMD	EVNMLD	n/a	EVNLMD	EVNLLD	Eden Valley South	n/a	EVSSMD	EVSSLD	n/a	EVSMMD	EVSMLD	n/a	EVSLMD	EVSLLD
		Small			Medium			Large																																																													
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Eden Valley North	n/a	n/a	n/a	n/a	n/a	n/a																																																															
Eden Valley South	n/a	EVSLMD	EVSL	n/a	n/a	n/a																																																															
Total 36 sites																																																																					

3	<p>Proposed Site Sizes</p> <p>Penrith Sizes</p> <table><tr><td>Small</td><td>0.25ha</td></tr><tr><td>Medium</td><td>0.5 ha</td></tr><tr><td>Large</td><td>1 ha</td></tr><tr><td>Extra Large</td><td>2 ha</td></tr><tr><td>Urban Extension</td><td>5+ha</td></tr></table>	Small	0.25ha	Medium	0.5 ha	Large	1 ha	Extra Large	2 ha	Urban Extension	5+ha	<p>All agreed as proposed</p> <p>All Other Area Sizes</p> <table><tr><td>Small</td><td>0.25ha</td></tr><tr><td>Medium</td><td>0.5 ha</td></tr><tr><td>Large</td><td>1 ha</td></tr><tr><td>Extra Large</td><td>2+ ha</td></tr></table>	Small	0.25ha	Medium	0.5 ha	Large	1 ha	Extra Large	2+ ha	As proposed
Small	0.25ha																				
Medium	0.5 ha																				
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Urban Extension	5+ha																				
Small	0.25ha																				
Medium	0.5 ha																				
Large	1 ha																				
Extra Large	2+ ha																				
4	<p>Proposed Site Densities</p> <p>Penrith High Density = 40dph</p> <p>Penrith Med Density = 35dph</p> <p>Penrith Low Density = 30dph</p> <p>Other High Density = not applicable</p> <p>Other Med Density = 35dph</p> <p>Other Low Density = 30dph</p>	<p>Many stakeholders disagreed with site densities stating that in rural areas in particular, densities usually fall well below 30 dph. However, national guidance requires local authorities to aim to deliver a minimum of 30 dph on all schemes and consultation with Eden District Council has shown the that whilst they are aware not every development permitted will be over 30dph this is the starting point for negotiations in accordance with national policy. To vary this, EDC would be looking for strong justification from the applicant to permit below that threshold, such as topography, irregular shape of site and those sort of issues, and the viability of these abnormal site conditions would be assessed by the individual site viabilities to be submitted by the developer as part of Policy CS10. As we are considering hypothetical sites in this approach an removing abnormal concerns we are of the opinion an assumptions of a minimum 30dph is justifiable.</p>	As proposed																		

5	Valuation Date - June 2009	All feedback in support	As proposed
6	All sites have full planning permission	All feedback in support	As proposed
7	All sites are clear and ready to develop	All feedback in support	As proposed
8	For developments less than 10 dwellings min return 16% on GDV is viable	Noted that this return is net of finance and central overhead costs and therefore general agreement with these figures - although many stated this would be the minimum return required. On average developers expect to see a return on 20-25% gross profit.	As proposed
9	For developments more than 10 dwellings min return 18% on GDV is viable		
10	Land Values = 5-10% of GDV	These figures have been revised upwards following stakeholder consultation. Whilst stakeholders responded providing range of between 10% to 30% of GDV, the upper of these figures reflects the level of land value which would have typically been paid in the height of the market. For rural sites the impact of reality that schemes often provide less than 30 dph drives land value proportion of GDV higher than what would be calculated if schemes comprised 30 dph as a minimum. Likely brownfield sites will provide at least 30 dph hence higher land to GDV ratio is achieved. For both rural and brownfield consideration also given for deferred / staged land payments making the actual land price payable to the land owner less valuable than if payments were made up front.	Land Values = 10% of GDV for rural land and 20% of GDV for brownfield land.
11	Sales Rates – one per month (small sites) two per month (large sites)	No change - feedback broadly in agreement	As proposed

12	Interest Rates – as at June 2009 (2% above LIBOR)	This assumptions has been increased following stakeholder consultation. Interest rate to be assumed at 7.5%. Reflects comments from stakeholders regarding interest cost incurred in order to acquire development finance.	Interest Rate - 7.5%
13	All in Build Costs – assumes CSH level 3		
	Flats = £80 psf (£89 psf NSA including prof fees and contingency)	Due to lower required spec, costs unchanged for Penrith. However due to likely high build standards outside Penrith have been increased to £94 psf for apartments and £83 psf NSA for houses (which include contingency and professional fees).	As explained
	Houses = £70 psf (£78 psf NSA including prof fee and contingency)		
14	Local Occupancy	No firm opinion from stakeholders as to how it impacts sales values (suggested range 5-40% most between 10-20%). However general consensus that it does have impact. As such DTZ will model viability scenarios based on 15% fall in sales values for units to reflect the fall back in sales revenue for local occupancy restriction.	As explained
15	Unit Values - see second tab	General Agreement with these figures. Some feedback felt figures in Penrith are too higher, however as a scenario testing will be undertaken to vary revenues most stakeholders agreed with this as a starting point	As proposed
16	Affordable Housing intermediate 65% MV - Social Rented 45% MV	Most feedback suggested that these figures are too high. Indeed some feedback points to the fact that affordable housing value is normally calculated as a multiple of lower quartile income and does not reflect changes in market values.	Revised to 50% MV for Intermediate and 35% MV for Social Rented

17	Other Contributions including s106, 278 and EM18	This was not originally presented to stakeholders but was always a consideration of the modelling. It is proposed to model variance in other contributions alongside variance in affordable housing in order to determine the impact of this on viability. In the market circumstances we now find ourselves the provision of additional section 106 costs makes a real impact on development viability.	Increasing levels at £1,000, £2,500, £5,000 and £7,500 per unit
18	Housing Mix - please see appendix 2 below	Following stakeholder feedback the number of larger units has been reduced and 5 bedroom dwellings scaled back to 10% of the housing mix.	Housing Mix - please see appendix 2 below



Appendix 2

Dwelling Mix





Appendix 2 Dwelling Mix – Original Proposal

Site Description	Unit Type	Percentage
Penrith	2 Bed Apartment	10%
High Density	2 Bed House	50%
45dph	3 Bed House	40%
		100%
Penrith	2 Bed House	25%
Medium Density	3 Bed House	40%
35dph	4 Bed House	35%
	5 Bed House	0%
		100%
Penrith	2 Bed House	25%
Low Density	3 Bed House	40%
30dph	4 Bed House	35%
	5 Bed House	0%
		100%

Site Description	Unit Type	Percentage
Alston	2 Bed House	25%
Medium Density	3 Bed House	35%
35 dph	4 Bed House	20%
	5 Bed House	20%
		100%
Alston	2 Bed House	20%
Low Density	3 Bed House	35%
30 dph	4 Bed House	25%
	5 Bed House	20%
		100%

Site Description	Unit Type	Percentage
Eden Valley South	2 Bed House	25%
Medium Density	3 Bed House	35%
35 dph	4 Bed House	20%
	5 Bed House	20%
		100%
Eden Valley South	2 Bed House	20%
Low Density	3 Bed House	35%
30 dph	4 Bed House	25%
	5 Bed House	20%
		100%

Site Description	Unit Type	Percentage
Eden Valley North	2 Bed House	25%
Medium Density	3 Bed House	35%
35 dph	4 Bed House	20%
	5 Bed House	20%
		100%
Eden Valley North	2 Bed House	20%
Low Density	3 Bed House	35%
30 dph	4 Bed House	25%
	5 Bed House	20%
		100%



Appendix 2 Dwelling Mix – Revised Proposal

Site Description	Unit Type	Percentage
Penrith	2 Bed Apartment	10%
High Density	2 Bed House	50%
40ph	3 Bed House	40%
		100%
Penrith	2 Bed House	25%
Medium Density	3 Bed House	40%
35dph	4 Bed House	35%
	5 Bed House	0%
		100%
Penrith	2 Bed House	25%
Low Density	3 Bed House	40%
30dph	4 Bed House	35%
	5 Bed House	0%
		100%

Site Description	Unit Type	Percentage
Alston	2 Bed House	25%
Medium Density	3 Bed House	40%
35 dph	4 Bed House	25%
	5 Bed House	10%
		100%
Alston	2 Bed House	25%
Low Density	3 Bed House	40%
30 dph	4 Bed House	25%
	5 Bed House	10%
		100%

Site Description	Unit Type	Percentage
Eden Valley North	2 Bed House	25%
Medium Density	3 Bed House	40%
35 dph	4 Bed House	25%
	5 Bed House	10%
		100%
Eden Valley North	2 Bed House	25%
Low Density	3 Bed House	40%
30 dph	4 Bed House	25%
	5 Bed House	10%
		100%

Site Description	Unit Type	Percentage
Eden Valley South	2 Bed House	25%
Medium Density	3 Bed House	40%
35 dph	4 Bed House	25%
	5 Bed House	10%
		100%
Eden Valley South	2 Bed House	25%
Low Density	3 Bed House	40%
30 dph	4 Bed House	25%
	5 Bed House	10%
		100%



Appendix 3

House Price Analysis





Private Revenue Assumptions

Unit Type	Value	Area sq ft	Alston		Eden Valley North		Eden Valley South	
			Values	£psf	Values	£psf	Values	£psf
2 Bed House	High	900	£150,000	£167	£180,000	£200	£180,000	£200
	Mid		£135,000	£150	£165,000	£183	£150,000	£167
	Low		£120,000	£133	£155,000	£172	£120,000	£133
3 Bed House	High	1300	£210,000	£162	£250,000	£192	£255,000	£196
	Mid		£185,000	£142	£225,000	£173	£210,000	£162
	Low		£165,000	£127	£215,000	£165	£165,000	£127
4 Bed House	High	1850	£265,000	£143	£315,000	£170	£310,000	£168
	Mid		£245,000	£132	£290,000	£157	£250,000	£135
	Low		£210,000	£114	£270,000	£146	£200,000	£108
5 Bed House	High	2200	£300,000	£136	£400,000	£182	£355,000	£161
	Mid		£275,000	£125	£370,000	£168	£300,000	£136
	Low		£240,000	£109	£340,000	£155	£230,000	£105

Unit Type	Value	Area sq ft	Penrith	
			Values	£ psf
2 Bed Flat	High	650	£130,000	£200
	Mid		£115,000	£177
	Low		£97,000	£149
2 Bed House	High	750	£150,000	£200
	Mid		£130,000	£173
	Low		£115,000	£153
3 Bed House	High	950	£220,000	£232
	Mid		£190,000	£200
	Low		£165,000	£174
4 Bed House	High	1100	£240,000	£218
	Mid		£220,000	£200
	Low		£180,000	£164



Revenues Generated from New Social Rented Homes

Unit Type	Value	Area sq ft	Alston		Eden Valley North		Eden Valley South	
			Values	£psf	Values	£psf	Values	£psf
2 Bed House	High	900	£52,500	£58	£63,000	£70	£63,000	£70
	Mid		£47,250	£53	£57,750	£64	£52,500	£58
	Low		£42,000	£47	£54,250	£60	£42,000	£47
3 Bed House	High	1300	£73,500	£57	£87,500	£67	£89,250	£69
	Mid		£64,750	£50	£78,750	£61	£73,500	£57
	Low		£57,750	£44	£75,250	£58	£57,750	£44
4 Bed House	High	1850	£92,750	£50	£110,250	£60	£108,500	£59
	Mid		£85,750	£46	£101,500	£55	£87,500	£47
	Low		£73,500	£40	£94,500	£51	£70,000	£38
5 Bed House	High	2200	£105,000	£48	£140,000	£64	£124,250	£56
	Mid		£96,250	£44	£129,500	£59	£105,000	£48
	Low		£84,000	£38	£119,000	£54	£80,500	£37

Unit Type	Value	Area sq ft	Penrith	
			Values	£ psf
2 Bed Flat	High	650	£45,500	£70
	Mid		£40,250	£62
	Low		£33,950	£52
2 Bed House	High	750	£52,500	£70
	Mid		£45,500	£61
	Low		£40,250	£54
3 Bed House	High	950	£77,000	£81
	Mid		£66,500	£70
	Low		£57,750	£61
4 Bed House	High	1100	£84,000	£76
	Mid		£77,000	£70
	Low		£63,000	£57



Revenues Generated from New Intermediate Homes

Unit Type	Value	Area sq ft	Alston		Eden Valley North		Eden Valley South	
			Values	£psf	Values	£psf	Values	£psf
2 Bed House	High	900	£75,000	£83	£90,000	£100	£90,000	£100
	Mid		£67,500	£75	£82,500	£92	£75,000	£83
	Low		£60,000	£67	£77,500	£86	£60,000	£67
3 Bed House	High	1300	£105,000	£81	£125,000	£96	£127,500	£98
	Mid		£92,500	£71	£112,500	£87	£105,000	£81
	Low		£82,500	£63	£107,500	£83	£82,500	£63
4 Bed House	High	1850	£132,500	£72	£157,500	£85	£155,000	£84
	Mid		£122,500	£66	£145,000	£78	£125,000	£68
	Low		£105,000	£57	£135,000	£73	£100,000	£54
5 Bed House	High	2200	£150,000	£68	£200,000	£91	£177,500	£81
	Mid		£137,500	£63	£185,000	£84	£150,000	£68
	Low		£120,000	£55	£170,000	£77	£115,000	£52

Unit Type	Value	Area sq ft	Penrith	
			Values	£ psf
2 Bed Flat	High	650	£65,000	£100
	Mid		£57,500	£88
	Low		£48,500	£75
2 Bed House	High	750	£75,000	£100
	Mid		£65,000	£87
	Low		£57,500	£77
3 Bed House	High	950	£110,000	£116
	Mid		£95,000	£100
	Low		£82,500	£87
4 Bed House	High	1100	£120,000	£109
	Mid		£110,000	£100
	Low		£90,000	£82





Appendix 4

Economic Viability Summary Appraisal Results



Baseline Results – without Local Occupancy

70% Social Rented 30% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	100%	0%	100%
20%	94%	3%	97%
30%	75%	5%	80%
40%	15%	23%	38%
50%	9%	4%	13%

50% Social Rented 50% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	100%	0%	100%
20%	89%	9%	98%
30%	75%	9%	84%
40%	25%	14%	39%
50%	9%	4%	13%

30% Social Rented 70% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	100%	0%	100%
20%	89%	9%	98%
30%	75%	9%	84%
40%	19%	22%	41%
50%	9%	4%	13%

Baseline Results with Local Occupancy

70% Social Rented 30% Intermediate

Affordable Housing	Green	Amber	Total
0%	82%	18%	100%
10%	82%	6%	88%
20%	62%	12%	74%
30%	20%	8%	28%
40%	6%	0%	6%
50%	0%	0%	0%

50% Social Rented 50% Intermediate

Affordable Housing	Green	Amber	Total
0%	82%	18%	100%
10%	82%	6%	88%
20%	67%	7%	74%
30%	15%	25%	40%
40%	3%	6%	9%
50%	0%	0%	0%

30% Social Rented 70% Intermediate

Affordable Housing	Green	Amber	Total
0%	82%	18%	100%
10%	82%	9%	91%
20%	62%	17%	79%
30%	20%	20%	40%
40%	9%	3%	12%
50%	3%	0%	3%

Additional Contributions

Additional Contribution = £1,000

70% Social Rented 30% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	94%	6%	100%
20%	79%	3%	82%
30%	40%	23%	63%
40%	9%	6%	15%
50%	9%	0%	9%

50% Social Rented 50% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	97%	3%	100%
20%	82%	0%	82%
30%	46%	21%	67%
40%	12%	6%	18%
50%	6%	3%	9%

30% Social Rented 70% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	97%	3%	100%
20%	79%	3%	82%
30%	42%	26%	68%
40%	12%	8%	20%
50%	9%	0%	9%

Additional Contribution = £2,500

70% Social Rented 30% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	90%	8%	98%
20%	71%	5%	76%
30%	36%	23%	59%
40%	7%	8%	15%
50%	6%	3%	9%

50% Social Rented 50% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	90%	10%	100%
20%	71%	8%	79%
30%	36%	25%	61%
40%	7%	8%	15%
50%	6%	3%	9%

30% Social Rented 70% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	92%	8%	100%
20%	71%	8%	79%
30%	38%	23%	61%
40%	7%	8%	15%
50%	6%	3%	9%



Additional Contribution = £5,000

70% Social Rented 30% Intermediate

Affordable Housing	Green	Amber	Total
0%	96%	0%	96%
10%	82%	4%	86%
20%	63%	5%	68%
30%	28%	20%	48%
40%	6%	6%	12%
50%	3%	0%	3%

50% Social Rented 50% Intermediate

Affordable Housing	Green	Amber	Total
0%	96%	0%	96%
10%	82%	6%	88%
20%	63%	6%	69%
30%	26%	26%	52%
40%	6%	6%	12%
50%	3%	0%	3%

30% Social Rented 70% Intermediate

Affordable Housing	Green	Amber	Total
0%	96%	0%	96%
10%	84%	4%	88%
20%	65%	6%	71%
30%	28%	24%	52%
40%	6%	6%	12%
50%	3%	0%	3%

Additional Contribution = £7,500

70% Social Rented 30% Intermediate

Affordable Housing	Green	Amber	Total
0%	96%	0%	96%
10%	80%	4%	84%
20%	57%	2%	59%
30%	20%	11%	31%
40%	4%	2%	6%
50%	0%	0%	0%

50% Social Rented 50% Intermediate

Affordable Housing	Green	Amber	Total
0%	96%	0%	96%
10%	80%	6%	86%
20%	58%	2%	60%
30%	22%	11%	33%
40%	4%	2%	6%
50%	0%	0%	0%

30% Social Rented 70% Intermediate

Affordable Housing	Green	Amber	Total
0%	96%	0%	96%
10%	82%	4%	86%
20%	58%	4%	62%
30%	22%	13%	35%
40%	4%	2%	6%
50%	0%	0%	0%



Change in Revenue

70% Social Rented 30% Intermediate

Change in Revenue	Level of Affordable Housing														
	10%			20%			30%			40%			50%		
	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total
5% Increase	100%	0%	100%	94%	0%	94%	80%	9%	89%	54%	5%	59%	24%	14%	38%
10% Increase	100%	0%	100%	100%	0%	100%	88%	6%	94%	59%	18%	77%	30%	19%	49%
15% Increase	10%	0%	10%	100%	0%	100%	91%	6%	97%	68%	15%	83%	38%	11%	49%
20% Increase	100%	0%	100%	100%	0%	100%	97%	3%	100%	79%	12%	91%	49%	22%	71%
5% Decrease	100%	0%	100%	84%	6%	90%	60%	20%	80%	15%	21%	36%	9%	4%	13%
10% Decrease	94%	6%	100%	84%	0%	84%	34%	24%	58%	15%	4%	19%	7%	4%	11%
15% Decrease	82%	6%	88%	62%	12%	74%	20%	8%	28%	6%	0%	6%	0%	0%	0%
20% Decrease	84%	0%	84%	31%	32%	63%	8%	8%	16%	0%	0%	0%	0%	0%	0%

50% Social Rented 50% Intermediate

Change in Revenue	Level of Affordable Housing														
	10%			20%			30%			40%			50%		
	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total
5% Increase	100%	0%	100%	100%	0%	100%	71%	18%	89%	42%	13%	55%	30%	8%	38%
10% Increase	100%	0%	100%	100%	0%	100%	85%	6%	91%	59%	9%	68%	36%	4%	40%
15% Increase	100%	0%	100%	100%	0%	100%	88%	6%	94%	59%	27%	86%	41%	5%	46%
20% Increase	100%	0%	100%	100%	0%	100%	94%	8%	102%	82%	6%	88%	46%	2%	48%
5% Decrease	100%	0%	100%	79%	6%	85%	60%	15%	75%	22%	14%	36%	6%	4%	10%
10% Decrease	88%	12%	100%	47%	3%	50%	42%	20%	62%	22%	9%	31%	0%	6%	6%
15% Decrease	82%	6%	88%	67%	7%	74%	15%	25%	40%	3%	6%	9%	0%	0%	0%
20% Decrease	82%	0%	82%	26%	35%	61%	17%	0%	17%	0%	6%	6%	0%	0%	0%

30% Social Rented 70% Intermediate

Change in Revenue	Level of Affordable Housing														
	10%			20%			30%			40%			50%		
	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total
5% Increase	100%	0%	100%	94%	6%	100%	74%	11%	85%	55%	8%	63%	36%	2%	38%
10% Increase	100%	0%	100%	100%	0%	100%	88%	6%	94%	62%	19%	81%	42%	13%	55%
15% Increase	100%	0%	100%	100%	0%	100%	91%	6%	97%	68%	15%	83%	50%	5%	55%
20% Increase	100%	0%	100%	100%	0%	100%	97%	3%	100%	84%	12%	96%	56%	3%	59%
5% Decrease	100%	0%	100%	82%	9%	91%	63%	15%	78%	21%	7%	28%	9%	0%	9%
10% Decrease	91%	0%	91%	82%	0%	82%	41%	19%	60%	16%	6%	22%	7%	2%	9%
15% Decrease	82%	9%	91%	62%	17%	79%	20%	20%	40%	9%	3%	12%	3%	0%	3%
20% Decrease	82%	0%	82%	32%	31%	63%	26%	2%	28%	18%	0%	18%	0%	0%	0%



Change in Build Cost

70% Social Rented 30% Intermediate

Change in Build Cost	Level of Affordable Housing														
	10%			20%			30%			40%			50%		
	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total
5% Increase	100%	0%	100%	82%	9%	91%	57%	20%	77%	28%	6%	34%	7%	4%	11%
10% Increase	91%	9%	100%	82%	0%	82%	40%	23%	63%	16%	6%	22%	0%	4%	4%
15% Increase	88%	9%	97%	76%	6%	82%	28%	24%	52%	7%	7%	14%	0%	0%	0%
20% Increase	82%	6%	88%	45%	31%	76%	26%	8%	34%	0%	0%	0%	0%	0%	0%
5% Decrease	100%	0%	100%	94%	6%	100%	79%	9%	88%	54%	5%	59%	30%	8%	38%
10% Decrease	100%	0%	100%	100%	0%	100%	88%	6%	94%	59%	18%	77%	38%	14%	52%
15% Decrease	100%	0%	100%	100%	0%	100%	84%	3%	87%	76%	9%	85%	52%	5%	57%
20% Decrease	100%	0%	100%	94%	6%	100%	94%	6%	100%	85%	9%	94%	62%	15%	77%

50% Social Rented 50% Intermediate

Change in Build Cost	Level of Affordable Housing														
	10%			20%			30%			40%			50%		
	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total
5% Increase	100%	0%	100%	76%	9%	85%	57%	9%	66%	30%	4%	34%	9%	0%	9%
10% Increase	97%	3%	100%	82%	0%	82%	49%	18%	67%	21%	12%	33%	9%	0%	9%
15% Increase	88%	12%	100%	76%	8%	84%	31%	27%	58%	21%	9%	30%	0%	0%	0%
20% Increase	82%	8%	90%	45%	32%	77%	26%	8%	34%	7%	18%	25%	0%	0%	0%
5% Decrease	100%	0%	100%	97%	3%	100%	74%	15%	89%	51%	8%	59%	30%	8%	38%
10% Decrease	100%	0%	100%	100%	0%	100%	88%	9%	97%	60%	18%	78%	38%	15%	53%
15% Decrease	100%	0%	100%	100%	0%	100%	91%	3%	94%	68%	21%	89%	43%	16%	59%
20% Decrease	100%	0%	100%	100%	0%	100%	94%	6%	100%	82%	12%	94%	62%	15%	77%

30% Social Rented 70% Intermediate

Change in Build Cost	Level of Affordable Housing														
	10%			20%			30%			40%			50%		
	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total	Green	Amber	Total
5% Increase	100%	0%	100%	82%	10%	92%	60%	19%	79%	26%	11%	37%	9%	3%	12%
10% Increase	97%	3%	100%	82%	2%	84%	49%	18%	67%	26%	8%	34%	9%	0%	9%
15% Increase	88%	12%	100%	76%	9%	85%	31%	27%	58%	26%	2%	28%	0%	0%	0%
20% Increase	82%	9%	91%	45%	33%	78%	26%	8%	34%	26%	0%	26%	0%	0%	0%
5% Decrease	100%	0%	100%	97%	3%	100%	74%	15%	89%	51%	8%	59%	30%	8%	38%
10% Decrease	100%	0%	100%	100%	0%	100%	88%	9%	97%	60%	18%	78%	38%	15%	53%
15% Decrease	100%	0%	100%	100%	0%	100%	91%	3%	94%	68%	21%	89%	43%	16%	59%
20% Decrease	100%	0%	100%	100%	0%	100%	94%	6%	100%	82%	12%	94%	62%	15%	77%

Height of the Market Scenario

70% Social Rented 30% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	100%	0%	100%
20%	94%	6%	100%
30%	68%	10%	78%
40%	32%	18%	50%
50%	15%	14%	29%

50% Social Rented 50% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	100%	0%	100%
20%	93%	7%	100%
30%	68%	12%	80%
40%	50%	9%	59%
50%	14%	15%	29%

30% Social Rented 70% Intermediate

Affordable Housing	Green	Amber	Total
0%	100%	0%	100%
10%	100%	0%	100%
20%	94%	6%	100%
30%	74%	15%	89%
40%	55%	21%	76%
50%	19%	10%	29%

Appendix 5

List of Stakeholder Consultees and Attendees for both events

Eden EVA Stakeholder Workshop – Invitee List

Developers

1. **Story Homes,**
2. **Cumbrian Homes,**
3. **Russell Armer,**
4. **Persimmon Homes,**
5. **Atkinson Homes,**

Estate Agents

6. **PFK Estate Agents -**
7. **Eden Estate Agents –**
8. **Wilkes Green & Hill**

Planning / Land Consultants (on behalf of smaller land owners and builders)

9. **PFK Land Agency**
10. **Bruce Armstrong Payne**
11. **DPS**
12. **Taylor and Hardy**
13. **WYG Planning & Design**

Housing Associations

14. **Eden Housing Association,**
15. **Impact Housing Association,**
16. **Home Housing Association**

List of Attendees – 25th August 2009.**Name****Organisation**

Rachael Lightfoot

Story Homes

Stephen Lancaster

Persimmon Homes

John Jackson

Persimmon Homes

Steve Atkinson

Atkinson Homes

Kyle Blue

PKF

Peter Winter

PKF Land

Lynne Mckenzie

Eden Housing Association

Daniel Barton

Eden District Council

Roger Hopcraft

Eden District Council

Anne Rogers

Eden District Council

Councillor Richard Turner

Portfolio Holder Eden District Council

Duncan Lowis

Cumbrian Homes

Nick Miller

Eden Estate Agents

Jenny Purple

DTZ

Michal Skotny

DTZ

Appendix 6

Presentations from Consultation 25th October 2009

Economic Viability Testing

Approach and Assumptions

Michal Skotny
DTZ Residential
Associate Director

Jenny Purple
DTZ Residential
Senior Surveyor





Session Outline

Background

Aim

Approach

Variables and Assumptions

Next Steps



Eden District Council Economic Viability

Background

- Appointed following the exploratory meeting in the public examination into Eden District Council's Core Strategy
- Eden's Core Strategy was submitted to the Secretary of State for examination in April 2009
- At the Pre-Hearing meeting held on the 8th July 2009, the Council agreed with the Inspector to provide an Economic Viability Assessment in support of the Council's affordable housing policy (CS10)
- Hearing session reschedule on this policy to 18th December 2009
- The completed study will form part of the examination evidence base and will be a primary consideration to both the Council and Inspector in support of the Council's affordable housing policy.



Eden District Council Economic Viability

Aim

- Robust analysis of Economic Viability of delivering affordable housing across Eden
- Contribute to a policy which is realistic and credible
- Take account of the local housing market, house prices, supply, demand and need
- Based on a range of agreed assumptions and inputs
- Ensure that policy proposals are not so onerous that they prevent development



Approach

- Independent test of the viability of different types of sites in different locations
- Allow different policy options to be tested in a consistent manner across a range of likely development scenarios
- Model will determine Residual Land Value and Developers Profit
- Determine whether
 1. The level of affordable housing and the balance of tenure proposed is viable
 2. Whether a particular level of affordable housing will inhibit development generally
 3. The impact of local occupancy requirement on economic viability
 4. What level of affordable housing can be considered, with and without subsidy



3 Stage Approach

1. Market research to determine assumptions
 - a) Valuation Date and approach to reflect changing market.
 - b) Study Areas
 - c) General Assumptions
 - d) Land Values
 - e) Unit Size
 - f) Unit Mix
 - g) Unit Values – market and affordable
 - h) Levels of return
 - i) Impact of Local Occupancy Requirement
2. Consultation on the assumptions and agreement of final inputs
3. Series of modelling to test the viability of different development scenarios

Study Areas

Will follow SHMA Areas with the exception of North Lakes as Eden Valley is not the Planning Authority for this area.

1. Eden Valley North
2. Alston Moor
3. Eden Valley South
4. Penrith





Eden District Council Economic Viability

Identification of Hypothetical Sites

Eden District EVA Site Identification.

	Small			Medium			Large		
	High Density	Medium Density	Low Density	High Density	Medium Density	Low Density	High Density	Medium Density	Low Density
Penrith	PSHD	PSMD	PSLD	PMHD	PMMD	PMLD	PLHD	PLMD	PLLD
Alston	n/a	ASMD	ASLD	n/a	AMMD	AMLD	n/a	ALMD	ALLD
Eden Valley North	n/a	EVNSMD	EVNSLD	n/a	EVNMMD	EVNMIL	n/a	EVNLMD	EVNLLD
Eden Valley South	n/a	EVSSMD	EVSSLD	n/a	EVSMMD	EVSMIL	n/a	EVSLMD	EVSLLD

	Extra Large			Urban Extension		
	High Density	Medium Density	Low Density	High Density	Medium Density	Low Density
Penrith	PXLHD	PXLMD	PXL	n/a	PUEMD	PUELD
Alston	n/a	AXLMD	AXLLD	n/a	n/a	n/a
Eden Valley North	n/a	n/a	n/a	n/a	n/a	n/a
Eden Valley South	n/a	EVSLMD	EVSLLD	n/a	n/a	n/a

Total 36 sites

Penrith	High Density	45 dph
	Medium Density	35 dph
	Low Density	30 dph
Alston	High Density	n/a
	Medium Density	35 dph
	Low Density	30 dph
Eden Valley North	High Density	n/a
	Medium Density	35 dph
	Low Density	30 dph
Eden Valley South	High Density	n/a
	Medium Density	35 dph
	Low Density	30 dph

Penrith Sizes

Small	0.25ha
Medium	0.5 ha
Large	1 ha
Extra Large	2 ha
Urban Extension	5+ha

All Other Area Sizes

Small	0.25ha
Medium	0.5 ha
Large	1 ha
Extra Large	2+ ha



General Assumptions

- Valuation Date :Jun-09
- All sites have full planning permission
- All sites are clear and ready to develop
- For developments less than 10 dwellings min return 16% Profit on GDV is viable
- For developments more than 10 dwellings min return 18% Profit on GDV is viable
- Land Values = 5-10% GDV - This depends whether it will be greenfield or brownfield.
- Sales Rates – one per month (small sites) two per month (large sites)
- Interest Rates – as at June 2009
- All in Build Costs – assumes CSH level 3
- Flats = £80 psf
- Houses = £70 psf
- Affordable Housing Grant not available



Eden District Council Economic Viability

Unit Sizes

Unit Type	Area sq ft
2 Bed Flat	650
2 Bed House	750
3 Bed House	950
4 Bed House	1100

Penrith

Unit Type	Area sq ft
2 Bed House	900
3 Bed House	1300
4 Bed House	1850
5 Bed House	2200

Other Areas





Eden District Council Economic Viability

Unit Mix

Site Description	Unit Type	Percentage
Penrith	2 Bed Apartment	10%
High Density	2 Bed House	50%
45dph	3 Bed House	40%
		100%
Penrith	2 Bed House	25%
Medium Density	3 Bed House	40%
35dph	4 Bed House	35%
	5 Bed House	0%
		100%
Penrith	2 Bed House	25%
Low Density	3 Bed House	40%
30dph	4 Bed House	35%
	5 Bed House	0%
		100%

Site Description	Unit Type	Percentage
Alston	2 Bed House	25%
Medium Density	3 Bed House	35%
35 dph	4 Bed House	20%
	5 Bed House	20%
		100%
Alston	2 Bed House	20%
Low Density	3 Bed House	35%
30 dph	4 Bed House	25%
	5 Bed House	20%
		100%

Site Description	Unit Type	Percentage
Eden Valley North	2 Bed House	25%
Medium Density	3 Bed House	35%
35 dph	4 Bed House	20%
	5 Bed House	20%
		100%
Eden Valley North	2 Bed House	20%
Low Density	3 Bed House	35%
30 dph	4 Bed House	25%
	5 Bed House	20%
		100%

Site Description	Unit Type	Percentage
Eden Valley South	2 Bed House	25%
Medium Density	3 Bed House	35%
35 dph	4 Bed House	20%
	5 Bed House	20%
		100%
Eden Valley South	2 Bed House	20%
Low Density	3 Bed House	35%
30 dph	4 Bed House	25%
	5 Bed House	20%
		100%



Eden District Council Economic Viability

Unit Values

- Determined Using Hometrack Information, Recent Sold and Asking Prices
- Detail collected by property type for each of the 4 Market Areas
- Analysis undertaken of the high, medium and low value regions across the 5 areas

Eden District Market Values

Unit Type	Value	Area sq ft	Alston		Eden Valley North		Eden Valley South	
			Values	£psf	Values	£psf	Values	£psf
2 Bed House	High	900	£150,000	£167	£180,000	£200	£180,000	£200
	Mid		£135,000	£150	£165,000	£183	£150,000	£167
	Low		£120,000	£133	£155,000	£172	£120,000	£133
3 Bed House	High	1300	£210,000	£162	£250,000	£192	£255,000	£196
	Mid		£185,000	£142	£225,000	£173	£210,000	£162
	Low		£165,000	£127	£215,000	£165	£165,000	£127
4 Bed House	High	1850	£265,000	£143	£315,000	£170	£310,000	£168
	Mid		£245,000	£132	£290,000	£157	£250,000	£135
	Low		£210,000	£114	£270,000	£146	£200,000	£108
5 Bed House	High	2200	£300,000	£136	£400,000	£182	£355,000	£161
	Mid		£275,000	£125	£370,000	£168	£300,000	£136
	Low		£240,000	£109	£340,000	£155	£230,000	£105

Unit Type	Value	Area sq ft	Penrith	
			Values	£psf
2 Bed Flat	High	650	£130,000	£200
	Mid		£115,000	£177
	Low		£97,000	£149
2 Bed House	High	750	£150,000	£200
	Mid		£130,000	£173
	Low		£115,000	£153
3 Bed House	High	950	£220,000	£232
	Mid		£190,000	£200
	Low		£165,000	£174
4 Bed House	High	1100	£240,000	£218
	Mid		£220,000	£200
	Low		£180,000	£164



Unit Values – Affordable

- Intermediate Housing at 65% of Market Value
- Social Housing at 45% of Market Value

Development Scenarios

- Current market conditions – increased and decreased build cost
- Current market conditions – increased and decreased revenues
- Current market conditions – increased and decreased build rates
- Current market conditions – no additional S106 costs
- Market conditions at the time the current affordable housing policies were drafted.



Next Steps

- Feedback to Participants and Other Key Stakeholders on final assumptions
- Financial Modelling
- Scenarios and Sensitivity Analysis
- Results shared and published



Any Questions or Comments?

- a) Valuation Date and approach to reflect changing market.
- b) Study Areas
- c) General Assumptions
- d) Land Values
- e) Unit Size
- f) Unit Mix
- g) Unit Values – market and affordable
- h) Rates of Return
- i) Local Occupancy Requirement



Eden District Council Economic Viability

Contact Details – Final Responses by Friday 4th September

Derek Nesbitt
Director

Mobile: +44 (0)7747 008426
Email: derek.nesbitt@dtz.com
Direct Dial:+44 (0) 161 455 3790

DTZ
No1 Marsden Street
Manchester
M2 1HW

Michal Skotny
Associate Director

Mobile: +44 (0)7702 759 272
Email: michal.skotny@dtz.com
Direct Dial:+44 (0)161 455 3709

DTZ
No1 Marsden Street
Manchester
M2 1HW

Jenny Purple
Senior Surveyor

Mobile: +44 (0)7887 661883
Email: jenny.purple@dtz.com
Direct Dial:+44 (0)113 2338873

DTZ
St Pauls House
23 Park Square South
Leeds
LS1 2ND
