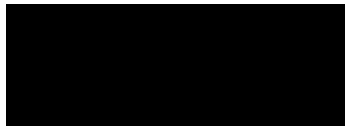

Project	Bicester Eco Town Phases 3 and 4
PRP Reference	AE4989C
Report Scope	Daylight calculation summary (Condition 2) Code for Sustainable Homes
Number of Units	228
Other	None

Issue 01

Date 13 December 2017

Author Marylis Ramos

Signature



Summary

Daylight calculations have been undertaken on all property types within Phases 3 & 4 to determine the number of daylight credits that can be awarded under the Code for Sustainable Homes (November 2010). The results are shown in Tables 1 and 2 below.

All the dwellings achieved minimum 2 credits under Code for Sustainable Homes, having either achieved a minimum 2% daylight factor for kitchens or 1.5% for the study and the living room, or having at least 80% of the working plane in each kitchen, living room and study receiving direct light from the sky (view of sky calculation).

A full list of all the 228 units is shown in Table 2, which shows what sample representative unit type was used for the assessment and whether that type achieved the 2 credit target.

In conclusion, all dwellings have been shown to gain 2 credits for Hea 1 (daylighting) under the Code for Sustainable Homes, fulfilling the requirements for the discharge of planning condition 8, which is detailed below:

"Prior to work commencing on each phase, as identified in condition 2, details of how each dwelling within that phase achieves good day lighting by achieving at least 2 points of the Code for Sustainable Homes level 5 for day lighting shall be submitted to and approved in writing by the LPA. The development shall thereafter be carried out in accordance with the approved details and such that each dwelling achieves good day lighting."

Table 1. Summary Results Daylight Calculations (Hea1) for each sample unit type

Summary of daylight factor - Bicester ECO Town AE4989 Ph. 3 & 4									
	Dwelling Type	Plot	Repeats	Tenure	View of Sky*	Kitchen	Living room	Home Office	Daylight credits
						2.00%	1.50%	1.50%	
					1 credit	1 credit	1 credit		
A	2B4P	7	40	Private		2.98%	2.98%	2.20%	2
B	2B4P	39	18	Affordable	yes	0.80%	2.42%	2.42%	2
C	2B4P with bay	78	4	Private	yes	1.24%	3.58%	2.01%	2
D	3B5P	38	31	Affordable	yes	1.10%	3.30%	1.59%	2
E	3B5P	6	46	Private	yes	1.10%	3.30%	1.67%	2
F	3B5P with bay	13	6	Private	yes	0.80%	4.30%	1.65%	2
G	4B6P	3	52	Private		2.37%	2.24%	1.51%	2
H	4B6P with garage	221	1	Private		2.37%	2.24%	1.51%	2
I	4B7P v1	66	9	Affordable	yes	0.69%	2.42%	1.52%	2
J	5B9P with garage v1	1	5	Private		2.47%	4.12%	4.49%	2
K	5B9P with garage v2	49	8	Private		2.62%	1.50%	4.49%	2
L	5B9P with garage	209	4	Private		2.94%	2.94%	2.69%	2
M	5B10P	30	4	Private		4.22%	2.64%	2.26%	2
		Total	228						
									1 credit
									0 credits

¹ Condition 8 - Notice of Decision Application No. 10/01780/HYBRID

Table 2. CfSH Daylight credits for each property in Phases 3 & 4

Unit Number	Occupancy	Tenure	No. of credits achieved			Total Number of credits (CfSH)	Condition discharged?
			View of Sky	Kitchen	Living Room/ Home Office		
1	5B9P with garage v1	Private	1		1	2	YES
2	5B9P with garage v1	Private	1		1	2	YES
3	4B6P with garage	Private	1		1	2	YES
4	4B6P with garage	Private	1		1	2	YES
5	4B6P with garage	Private	1		1	2	YES
6	3B5P	Private	1		1	2	YES
7	2B4P	Private	1		1	2	YES
8	2B4P	Private	1		1	2	YES
9	3B5P	Private	1		1	2	YES
10	3B5P	Private	1		1	2	YES
11	2B4P	Private	1		1	2	YES
12	2B4P	Private	1		1	2	YES
13	3B5P with bay	Private	1		1	2	YES
14	4B6P with garage	Private	1		1	2	YES
15	4B6P with garage	Private	1		1	2	YES
16	4B6P with garage	Private	1		1	2	YES
17	4B6P with garage	Private	1		1	2	YES
18	4B6P with garage	Private	1		1	2	YES
19	4B6P with garage	Private	1		1	2	YES
20	3B5P with bay	Private	1		1	2	YES
21	2B4P	Private	1		1	2	YES
22	2B4P	Private	1		1	2	YES
23	2B4P	Private	1		1	2	YES
24	2B4P	Private	1		1	2	YES
25	3B5P with bay	Private	1		1	2	YES
26	4B6P with garage	Private	1		1	2	YES
27	4B6P with garage	Private	1		1	2	YES
28	4B6P with garage	Private	1		1	2	YES
29	4B6P with garage	Private	1		1	2	YES
30	5B10P	Private	1	1	1	3	YES
31	4B6P with garage	Private	1		1	2	YES
32	4B6P with garage	Private	1		1	2	YES
33	4B6P with garage	Private	1		1	2	YES
34	5B9P with garage v1	Private	1		1	2	YES
35	5B9P with garage v1	Private	1		1	2	YES
36	4B6P with garage	Private	1		1	2	YES
37	4B6P with garage	Private	1		1	2	YES
38	3B5P	Affordable	1		1	2	YES
39	2B4P	Affordable	1		1	2	YES
40	2B4P	Affordable	1		1	2	YES
41	2B4P	Private	1		1	2	YES
42	2B4P	Private	1		1	2	YES
43	3B5P with bay	Private	1		1	2	YES
44	4B6P with garage	Private	1		1	2	YES
45	4B6P with garage	Private	1		1	2	YES
46	4B6P with garage	Private	1		1	2	YES
47	4B6P with garage	Private	1		1	2	YES
48	4B6P with garage	Private	1		1	2	YES
49	5P9P with garage v2	Private	1		1	2	YES
50	5P9P with garage v2	Private	1		1	2	YES

Unit Number	Occupancy	Tenure	No. of credits achieved			Total Number of credits (CfSH)	Condition discharged?
			View of Sky	Kitchen	Living Room/ Home Office		
51	4B6P with garage	Private	1		1	2	YES
52	4B6P with garage	Private	1		1	2	YES
53	4B6P with garage	Private	1		1	2	YES
54	4B6P with garage	Private	1		1	2	YES
55	3B5P	Private	1		1	2	YES
56	3B5P	Affordable	1		1	2	YES
57	3B5P	Affordable	1		1	2	YES
58	3B5P	Affordable	1		1	2	YES
59	3B5P	Affordable	1		1	2	YES
60	3B5P	Affordable	1		1	2	YES
61	2B4P	Affordable	1		1	2	YES
62	2B4P	Affordable	1		1	2	YES
63	2B4P	Private	1		1	2	YES
64	2B4P	Private	1		1	2	YES
65	3B5P	Private	1		1	2	YES
66	4B7P v1	Affordable	1		1	2	YES
67	2B4P	Affordable	1		1	2	YES
68	2B4P	Affordable	1		1	2	YES
69	3B5P	Affordable	1		1	2	YES
70	3B5P	Affordable	1		1	2	YES
71	3B5P	Affordable	1		1	2	YES
72	4B7P v1	Affordable	1		1	2	YES
73	4B7P v1	Affordable	1		1	2	YES
74	2B4P	Affordable	1		1	2	YES
75	3B5P	Affordable	1		1	2	YES
76	3B5P with bay	Private	1		1	2	YES
77	4B7P v1	Affordable	1		1	2	YES
78	2B4P with bay	Private	1		1	2	YES
79	3B5P	Private	1		1	2	YES
80	2B4P	Private	1		1	2	YES
81	3B5P	Private	1		1	2	YES
82	2B4P	Private	1		1	2	YES
83	4B6P with garage	Private	1		1	2	YES
84	4B6P with garage	Private	1		1	2	YES
85	3B5P	Private	1		1	2	YES
86	3B5P	Private	1		1	2	YES
87	2B4P	Private	1		1	2	YES
88	2B4P	Private	1		1	2	YES
89	3B5P	Private	1		1	2	YES
90	2B4P	Private	1		1	2	YES
91	3B5P	Private	1		1	2	YES
92	2B4P	Private	1		1	2	YES
93	2B4P	Private	1		1	2	YES
94	3B5P	Private	1		1	2	YES
95	2B4P	Private	1		1	2	YES
96	3B5P	Private	1		1	2	YES
97	2B4P	Private	1		1	2	YES
98	3B5P	Private	1		1	2	YES
99	2B4P	Private	1		1	2	YES
100	3B5P	Private	1		1	2	YES
101	3B5P	Private	1		1	2	YES

Unit Number	Occupancy	Tenure	No. of credits achieved			Total Number of credits (CfSH)	Condition discharged?
			View of Sky	Kitchen	Living Room/ Home Office		
102	3B5P	Private	1		1	2	YES
103	3B5P	Private	1		1	2	YES
104	2B4P	Private	1		1	2	YES
105	3B5P	Private	1		1	2	YES
106	2B4P	Affordable	1		1	2	YES
107	3B5P	Affordable	1		1	2	YES
108	3B5P	Private	1		1	2	YES
109	3B5P	Private	1		1	2	YES
110	3B5P	Private	1		1	2	YES
111	2B4P	Private	1		1	2	YES
112	2B4P	Private	1		1	2	YES
113	3B5P	Private	1		1	2	YES
114	2B4P	Private	1		1	2	YES
115	3B5P	Private	1		1	2	YES
116	3B5P	Private	1		1	2	YES
117	3B5P	Private	1		1	2	YES
118	2B4P	Private	1		1	2	YES
119	2B4P	Private	1		1	2	YES
120	3B5P with bay	Private	1		1	2	YES
121	3B5P	Private	1		1	2	YES
122	3B5P	Private	1		1	2	YES
123	2B4P with bay	Private	1		1	2	YES
124	3B5P	Affordable	1		1	2	YES
125	3B5P	Affordable	1		1	2	YES
126	3B5P	Affordable	1		1	2	YES
127	3B5P	Affordable	1		1	2	YES
128	2B4P	Affordable	1		1	2	YES
129	2B4P	Affordable	1		1	2	YES
130	2B4P	Affordable	1		1	2	YES
131	2B4P	Affordable	1		1	2	YES
132	3B5P	Affordable	1		1	2	YES
133	3B5P	Affordable	1		1	2	YES
134	3B5P	Affordable	1		1	2	YES
135	3B5P	Private	1		1	2	YES
136	3B5P	Private	1		1	2	YES
137	4B6P with garage	Private	1		1	2	YES
138	4B6P with garage	Private	1		1	2	YES
139	3B5P	Affordable	1		1	2	YES
140	3B5P	Affordable	1		1	2	YES
141	3B5P	Affordable	1		1	2	YES
142	3B5P	Affordable	1		1	2	YES
143	3B5P	Affordable	1		1	2	YES
144	3B5P	Affordable	1		1	2	YES
145	2B4P with bay	Private	1		1	2	YES
146	2B4P	Private	1		1	2	YES
147	2B4P	Private	1		1	2	YES
148	3B5P	Private	1		1	2	YES
149	2B4P	Private	1		1	2	YES
150	2B4P	Private	1		1	2	YES
151	3B5P	Private	1		1	2	YES
152	2B4P	Private	1		1	2	YES

Unit Number	Occupancy	Tenure	No. of credits achieved			Total Number of credits (CfSH)	Condition discharged?
			View of Sky	Kitchen	Living Room/ Home Office		
153	4B7Pv1 mirror	Affordable	1		1	2	YES
154	4B7Pv1 mirror	Affordable	1		1	2	YES
155	4B7Pv1 mirror	Affordable	1		1	2	YES
156	2B4P	Affordable	1		1	2	YES
157	2B4P	Affordable	1		1	2	YES
158	3B5P	Affordable	1		1	2	YES
159	3B5P	Private	1		1	2	YES
160	2B4P	Private	1		1	2	YES
161	2B4P	Private	1		1	2	YES
162	3B5P	Private	1		1	2	YES
163	3B5P	Private	1		1	2	YES
164	2B4P	Private	1		1	2	YES
165	4B6P with garage	Private	1		1	2	YES
166	4B6P with garage	Private	1		1	2	YES
167	4B6P with garage	Private	1		1	2	YES
168	2B4P	Affordable	1		1	2	YES
169	2B4P	Affordable	1		1	2	YES
170	2B4P	Affordable	1		1	2	YES
171	2B4P	Affordable	1		1	2	YES
172	3B5P (mirror)	Private	1		1	2	YES
173	2B4P	Private	1		1	2	YES
174	3B5P (mirror)	Private	1		1	2	YES
175	3B5P	Private	1		1	2	YES
176	3B5P	Private	1		1	2	YES
177	2B4P	Private	1		1	2	YES
178	3B5P	Private	1		1	2	YES
179	3B5P	Private	1		1	2	YES
180	2B4P	Private	1		1	2	YES
181	3B5P	Affordable	1		1	2	YES
182	3B5P	Affordable	1		1	2	YES
183	3B5P	Affordable	1		1	2	YES
184	4B6P with garage	Private	1		1	2	YES
185	4B6P with garage	Private	1		1	2	YES
186	4B6P with garage	Private	1		1	2	YES
187	4B6P with garage	Private	1		1	2	YES
188	3B5P	Private	1		1	2	YES
189	3B5P	Private	1		1	2	YES
190	4B7P v1	Affordable	1		1	2	YES
191	4B7P v1	Affordable	1		1	2	YES
192	3B5P (mirror)	Affordable	1		1	2	YES
193	3B5P	Affordable	1		1	2	YES
194	3B5P	Affordable	1		1	2	YES
195	5B10P	Private	1	1	1	3	YES
196	4B6P with garage	Private	1		1	2	YES
197	4B6P with garage	Private	1		1	2	YES
198	4B6P with garage	Private	1		1	2	YES
199	4B6P with garage	Private	1		1	2	YES
200	2B4P with bay	Private	1		1	2	YES
201	3B5P	Private	1		1	2	YES
202	3B5P	Private	1		1	2	YES
203	2B4P	Private	1		1	2	YES

Unit Number	Occupancy	Tenure	No. of credits achieved			Total Number of credits (CfSH)	Condition discharged?
			View of Sky	Kitchen	Living Room/ Home Office		
204	3B5P	Private	1		1	2	YES
205	4B6P with garage	Private	1		1	2	YES
206	4B6P with garage	Private	1		1	2	YES
207	4B6P with garage	Private	1		1	2	YES
208	5P9P with garage v2	Private	1		1	2	YES
209	5B9P with garage	Private	1	1	1	3	YES
210	5B9P with garage	Private	1	1	1	3	YES
211	5B9P with garage v1	Private	1		1	2	YES
212	4B6P with garage	Private	1		1	2	YES
213	4B6P with garage	Private	1		1	2	YES
214	5P9P with garage v2	Private	1		1	2	YES
215	4B6P with garage	Private	1		1	2	YES
216	4B6P with garage	Private	1		1	2	YES
217	5P9P with garage v2	Private	1		1	2	YES
218	5B9P with garage	Private	1	1	1	3	YES
219	5P9P with garage v2	Private	1		1	2	YES
220	5P9P with garage v2	Private	1		1	2	YES
221	4B6P with garage	Private	1		1	2	YES
222	4B6P with garage	Private	1		1	2	YES
223	4B6P with garage	Private	1		1	2	YES
224	4B6P with garage	Private	1		1	2	YES
225	5P9P with garage v2	Private	1		1	2	YES
226	5B10P	Private	1	1	1	3	YES
227	5B10P	Private	1	1	1	3	YES
228	5B9P with garage	Private	1	1	1	3	YES