

Addendum

Change of Use at 286 Kings Road

Two planning applications for the commercial building at 286 Kings Road, Reading, have been submitted (181090 & 181077) proposing a change of use to residential use and the provision of additional windows to the east elevation overlooking the adjacent development site.



Figure 1: View of 286 Kings Road from Computer Model

Fabric Building Physics were asked to provide an addendum to the existing Daylighting Impact Assessment for land west of 300 Kings Road to consider the impact of the proposed development on the top floor accommodation proposed for 286 Kings Road.

The top floor accommodation proposed for 286 Kings Road is a one bed flat with open plan living / dining / kitchen. The drawings currently indicate that these habitable rooms will rely on the existing skylights in the commercial property. The bedroom would be served by two skylights and the living room by a further three. Of the living room skylights, two are located above the kitchen and face the adjacent development site to the east and one more facing west.

Average Daylight Factor calculations have been completed to determine the internal daylighting levels in the proposed 286 Kings Road accommodation in the 'existing condition' (no development on the 300 Kings Road carpark) and in the 'proposed condition' with carpark area developed as per the proposals assessed in the main report.

Figure 2 below details the section looking north through 286 Kings Road, the adjacent development site and 300 Kings Road. This illustrates the angle of visible sky from the existing rooflights at 286 Kings Road in both the existing and proposed condition.

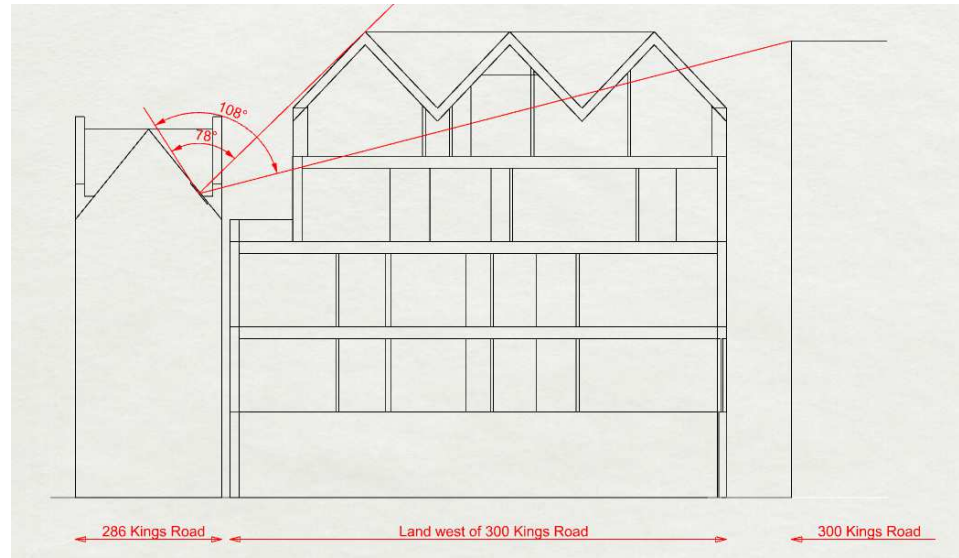


Figure 2: Section AA through development site

Table 1 below summarises the results from the comparative ADF calculations. The results indicate that the development proposals at the land west of 300 Kings Road will reduce the ADF within the proposed accommodation on the top floor of 286 Kings Road.

Condition	Room	Window ID	FLOOR AREA m ²	Net Glass Area	Window ADF	2.00	1.50	1.00
						Kitchen	Living	Bed
Existing	LDK	1	21.83	0.38	0.38	1.15	1.15	-
		2	34.60	0.38	0.38			
		3	34.60	0.38	0.38			
	Bed 1	4	8.63	0.38	1.08	-	-	3.39
		5	8.63	0.38	1.08			
		6	8.63	0.38	1.22			
Proposed	LDK	1	21.83	0.38	0.28	0.83	0.83	-
		2	34.60	0.38	0.28			
		3	34.60	0.38	0.28			
	Bed 1	4	8.63	0.38	0.78	-	-	2.79
		5	8.63	0.38	0.78			
		6	8.63	0.38	1.22			

Table 1: ADF Calculation Results

The following observations can be drawn from the ADF results:

- 1) The predicted ADF in the proposed bedroom at 286 Kings Road would remain above the BRE threshold value of 1% post development of the carpark site at 300 Kings Road.
- 2) The open plan living / kitchen / dining area is predicted to have an ADF of 1.15% in the 'existing' condition which would be reduced to 0.83% following development at 300 Kings Road.
- 3) The existing value in the living areas does not meet the BRE Average Daylight Factor thresholds of 1.5% for living rooms and 2% for kitchens and therefore does not meet the minimum requirements for residential accommodation.