

**POTENTIAL LOSS OF DAYLIGHT TO NEARBY DWELLINGS
FOLLOWING PROPOSED BUILDING WORK
AT DELANCEY STREET & PARKWAY, CAMDEN**

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1. INTRODUCTION

1.1 National Tyres currently occupy a corner site at the junction of Delancey Street and Parkway in Camden. The garage consists of a single storey frontage/reception area with a taller workshop area behind it. The garage site abuts 103 Parkway which has four storeys, the upper three for residential flats, and commercial space on the ground floor. In a NE direction, neighbouring buildings in the Parkway terrace are three to four storeys high with residences on the third storey or above, and office or commercial property below the third storey. Along Delancey Street is a terrace of three storey dwellings, the end terrace of which, nearest to the garage site, has a rear extension. In between the Parkway and Delancey Street terraces, at the rear (east) of the garage site is a three storey office block.

1.2 It is proposed that the garage be replaced with a mixed use development with height varying up to 5 storeys. This report presents an evaluation of the potential loss of light to nearby dwellings following the re-development of the garage site. The report was prepared for AS Leisure Properties Ltd.

1.3 The calculations are based on plans of the buildings provided by RG Surveys Ltd., and measurements made during a site visit on 3 October 2006. The plans were numbered:
RG-06-670: 01A, 02B, 03B, 04B, 05B, 06B, 07A,
and plans of the proposed new buildings on the garage site supplied by Nick Baker Architects, numbered:
SK-001-09.10.07, SK-002-09.10.07, SK-003-09.10.07, FS-121-10, FS-127-06, FS-122-09, FS-123-09, FS-124-04, FS-130-06, FS-135-02.
and the Design Statement provided by sml urban projects.

2. POTENTIAL LOSS OF DAYLIGHT- PLANNING ASPECTS

2.1 Guidance on the loss of light to existing buildings following construction of new development nearby is given in our BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice'. This report was approved by the Department of the Environment and is widely used by local authorities to help determine planning applications.

2.2 To assess the impact on the amount of diffuse daylighting entering existing buildings, the Report recommends the calculation of the vertical sky component. This is the ratio of the direct sky illuminance falling on the outside of a window, to the simultaneous horizontal illuminance under an unobstructed sky. The standard CIE Overcast Sky is used and the ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall. The vertical sky component on a window is a good measure of the amount of daylight entering it.

2.3 We used a special computer programme to calculate it, which has the same basis as the skylight indicators in the BRE Report. The calculation includes other buildings nearby as well as the development.

2.4 The BRE Report sets out two guidelines for vertical sky component:

- a. If the vertical sky component at the centre of the existing window exceeds 27% with the new development in place, then enough sky light should still be reaching the existing window.
- b. If the vertical sky component with the new development is both less than 27% **and** less than 0.8 times its former value, then the area lit by the window is likely to appear more gloomy, and electric lighting will be needed for more of the time.

Daylight distribution

2.5 The BRE report also gives guidance on the distribution of light in the existing buildings, based on the areas of the working plane which can and cannot receive direct skylight before and after. This requires a knowledge of room geometry. As access could not be obtained to the nearby dwellings, this calculation could not be carried out.

3. RESULTS OF DAYLIGHT ANALYSIS

3.1 Figure 1 shows a plan of the site, locating the garage in its context. The plan is extracted from the Design Statement, supplied by sml urban projects, with additions. The effects of the proposed garage development have been calculated and the following sections present the results from each property or block affected.

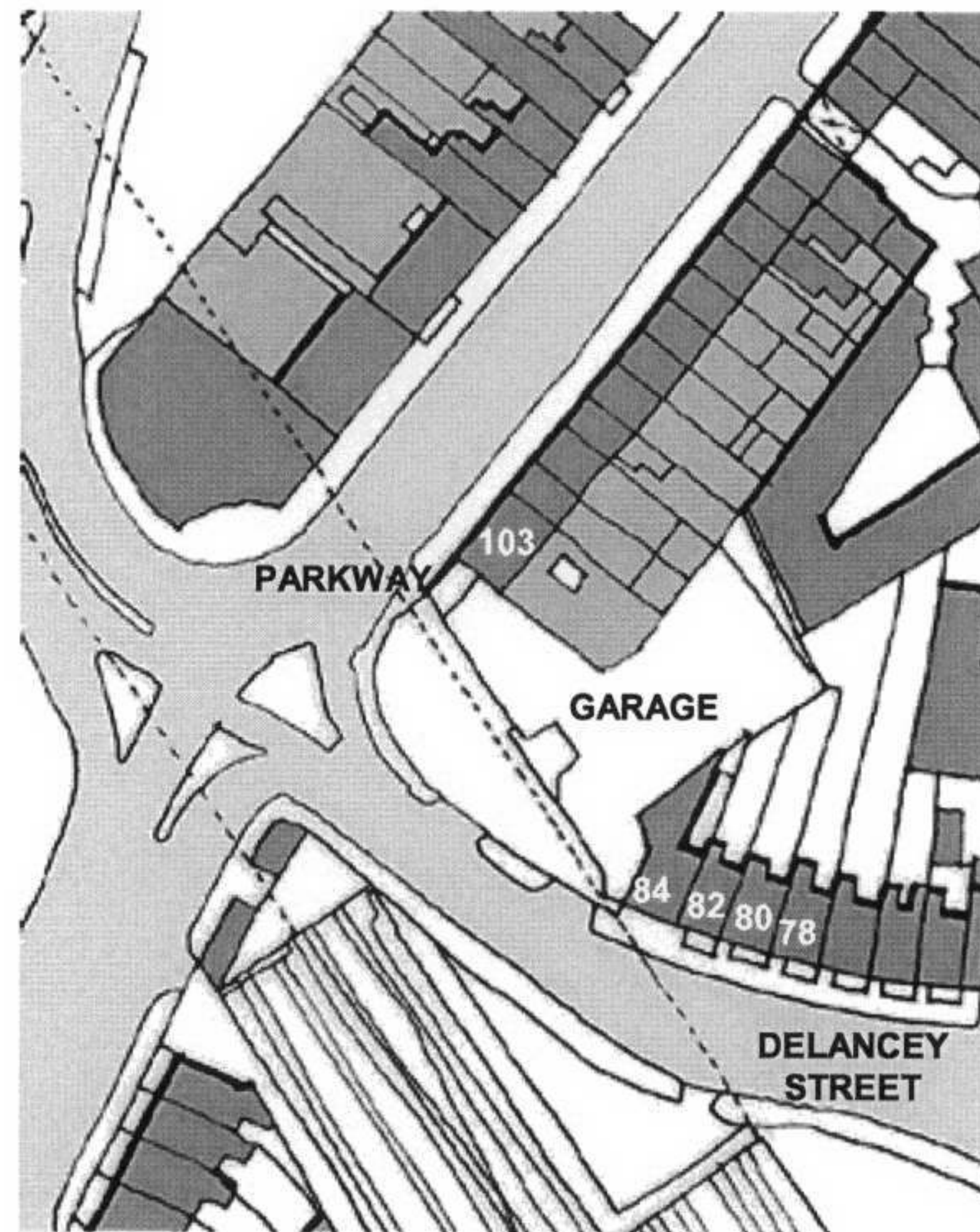


Figure 1. Location of proposed development and surrounding buildings

103 Parkway

3.2 103 Parkway has flats on its upper three storeys. On each floor, four windows face SE towards the garage site. See Figure 2 for window numbering. Two of these are a bedroom (B) and a kitchen (A) and these have been evaluated for the potential loss of light. The other windows are to stairs and bathrooms and need not be analysed. Table 1 shows the effect of the garage redevelopment on 103 Parkway.



Figure 2. 103 Parkway showing the windows evaluated.
The flat roof of the garage is in the foreground

The table shows the vertical sky component for each window, with the existing garage and its redevelopment. The windows are numbered from the bottom of 103 Parkway from left to right along the façade (SW to NE) (columns: A & B).

Table 1. Vertical sky components of 6 windows at rear of 103 Parkway. Effect of garage site redevelopment on 103 Parkway site

Window	Vertical sky Component, %		Ratio after/before
	Before	After	
Window-A1	35.4	24.7	0.70
Window-A2	37.8	28.3	0.75
Window-A3	39.2	32.0	0.82
Window-B1	31.8	24.8	0.78
Window-B2	37.6	32.4	0.86
Window-B3	39.2	35.7	0.91

3.3 Of the 6 windows in the façade, 4 would have a Vertical Sky Component of more than 27% after the development. These windows would, therefore, according to the BRE guidance, receive enough daylight with the new development in place.

3.4 The other 2 windows (A1 & B1) have lower VSCs of 24.7% and 24.8%; this is 0.70 and 0.78 of the existing values respectively. These two windows would therefore have after VSCs less than 0.80 of the existing VSCs, and thus not satisfy the guidance (b) in the BRE report. However, bedroom window (B1)'s loss of light would be only marginally greater than the BRE recommendation.

80-84 Delancey Street

3.5 84 Delancey Street has a rear extension of bedrooms/living rooms in its three storeys. One window on each floor faces the development. The adjacent two properties (Nos. 82 and 80) also have three habitable rooms on their rear façades. In between the window columns for these two houses are stairs, with rear extensions of variable height. See Figure 3 for window numbering. The dormer windows at roof level will have a large vertical sky component and will not be adversely affected by the proposed development.

3.6 Nine windows have been evaluated for the potential loss of light. Table 3 shows the effect of the garage redevelopment on the rear windows of 80-84 Delancey Street.



Figure 3. Delancey Street terrace, with the rear extension of No.84

Table 3. Vertical sky components of 9 windows at rear of 80-84 Delancey Street.

Window	Vertical sky Component, %		Ratio after/before
	Before	After	
Window-A1	22.4	18.4	0.82
Window-A2	34.6	23.5	0.68
Window-A3	38.3	27.4	0.71
Window-B1	23.6	22.2	0.94
Window-B2	32.6	30.4	0.93
Window-B3	37.0	34.9	0.94
Window-C1	22.7	22.3	0.98
Window-C2	35.1	33.7	0.96
Window-C3	38.1	36.9	0.97

3.7 After the proposed development, all but one window (A2) would have a vertical sky component either greater than 27%, or be reduced to more than 0.80 of its current value. For all these windows the loss of light would be small and not significant.

3.8 No. 80 and No. 82 Delancey Street experience very small changes in their daylight availability, and houses beyond this, to the SE, will be affected less.

3.9 The rear extension of 84 Delancey Street is very close to the existing and proposed development. Its ground floor window (A1) is close to an existing wall and is thus less affected by the proposed work. The top window (A3) has a higher VSC (greater than the guideline figure of 27%) after the development.

3.10 Window A2 would have a vertical sky component of 23.5%, after the development. This is less than the BRE guidance of 27% and the reduction is also to less than 0.80 of the existing value. The reduction in daylight availability would therefore exceed the 0.80 guideline of the BRE report. The extension to the terrace has placed this window very close to the boundary wall of the Garage site. The BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice' highlights this issue, stating that an 'important issue is whether the existing building is itself a good neighbour, standing well back from the boundary and taking no more than its fair share of light.' It can be argued that the rear extension of 84 Delancey Street is not a good neighbour in this respect as the rear windows are very close to the boundary and over-dependent on light from over the proposal site.

97-101 Parkway

3.11 In these buildings the residential parts are at or above the third storey. The reduction in daylight availability would be less than at 103 Parkway and would be well within the BRE guidelines.

4. SUNLIGHT

4.1 The BRE Report recommends that for existing buildings sunlight should be checked for all main living rooms of dwellings, and conservatories, if they have a window facing within 90° of due south. Windows to the rear of the houses in Delancey Street face north or north east so do not fall into this category. Windows to the rear of 103 Parkway face south east, and therefore within 90° of due south, but none of these is a living room. Sunlight need not therefore be considered in this analysis of the proposed development.

5. CONCLUSION

5.1 The potential loss of light to nearby dwellings following proposed development of the Garage site at the junction of Delancey Street and Parkway in London has been analysed. The results have been compared with the guidance in the BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice'. A total of 15 windows around the proposed development have been analysed in detail.

5.2 Loss of light to 103 Parkway would satisfy the BRE Guidelines for all but two windows on the first floor (windows A1 and B1). Window B1 falls only marginally outside the guidelines.

5.3 Loss of light to 80-84 Delancey Street would satisfy the BRE guidelines for all but one window – the second floor bedroom window in the rear extension of No. 84 (end of terrace). The extension to the terrace has placed this window very close to the boundary wall of the Garage site.

5.4 The BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice' highlights this issue, stating that an 'important issue is whether the existing building is itself a good neighbour, standing well back from the boundary and taking no more than its fair share of light.' It can be argued that the rear extension of 84 Delancey Street is not a good neighbour in this respect as the rear windows are very close to the boundary and over-dependent on light from over the proposal site.

5.5 Other dwellings in Parkway and Delancey Street would not be significantly affected by the development.

5.6 Loss of sunlight has not been considered as no property around the site has a living room facing within 90° of due south that would be affected by the proposed development.

5.7 The guidance in 'Site layout planning for daylight and sunlight: a guide to good practice' is not mandatory and the Report itself states 'although it gives numerical guidelines these should be interpreted flexibly because natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values.' This could be justified if there were other significant benefits of the proposed development.

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