

Daylight and Sunlight Opinion

London Borough of Haringey

Hornsey Town Hall
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29 November 2017

Prepared by

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Executive Summary

- Review of the daylight and sunlight results submitted with the Point 2 Surveyors' Hornsey Town Hall Sunlight and Daylight Assessment (July 2017), shows that the majority of neighbouring properties (95%) will remain compliant with the guidance given in the BRE Report.
- Both the Point 2 Surveyors' Assessment and the BRE Client Report (November 2017) have highlighted the natural light restrictions within the habitable rooms of:
 - 5 to 9 (odds inclusive) Weston Park,
 - 25 to 29 (odds inclusive) Weston Park,
 - Prime Zone Mews B, and
 - 13 Haringey Park.
- Our evaluation of the results for the above properties concludes that; while there are transgressions of the BRE Report guidance the daylight and sunlight amenity retained by the neighbouring properties is appropriate. The evaluation takes into account the proximity of the neighbouring buildings to the development site, the urban location, a review of the current site conditions and our experience of daylight and sunlight amenity typical in urban environments.

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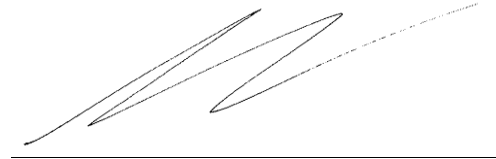
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DATE

29 Nov 2017

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Limitations

This document has been prepared for the stated objective and should not be used for any other purpose without the prior written authority of GL Hearn; we accept no responsibility or liability for the consequences of this document being used for a purpose other than for which it was commissioned.

1 INSTRUCTIONS AND BRIEF

1.1 In accordance with instructions received from the London Borough of Haringey, we have undertaken a review of the daylight and sunlight impacts on the surrounding neighbouring properties caused by the Proposed Development of the Hornsey Town Hall ('the Proposed Development');

1. Review the findings of the daylight, sunlight and overshadowing EIA Report dated July 2017 compiled by Point 2 Surveyors (P2).
2. Review the BRE Client Report dated November 2017 ('Client Report') undertaken on behalf of Dr Paul Toyne of 27 Weston Park.
3. Having regard to the location, express a professional opinion as to whether the Development impacts upon daylight, sunlight and overshadowing amenity to neighbouring receptors.

1.2 We have received the following documents and used them in preparing this report:

- Hornsey Town Hall Sunlight and Daylight Assessment dated July 2017 ('the P2 Report').
- BRE Client Report dated November 2017 ('Client Report').
- Response to the BRE Client Report prepared by P2, dated 13th November 2017 ('the P2 Response').

1.3 Our opinion is based on the information detailed above and the appendices appended to the P2 Report. We have not been instructed to undertake any technical analysis to verify the results submitted.

2 PLANNING POLICY AND GUIDANCE

2.1 The relevant national, regional and local planning policies have been referred to within the submitted planning application documents and are not repeated here.

2.2 Guidance on the interpretation and testing for daylight and Sunlight is given in the Building Research Establishment Report "Site Layout Planning for Daylight and Sunlight: A guide to good practice" Second Edition (2011) (the 'BRE Report'). This guidance for daylight, sunlight and overshadowing is discussed fully within the P2 Report and in the Client Report and are not repeated here.

3 REVIEW

3.1 Neighbouring Receptors

- 3.1.1 The P2 Report discusses daylight, sunlight and overshadowing amenity to the properties neighbouring the Proposed Development. Overall, the chapter shows that overall there will be limited impact on the existing daylight, sunlight and overshadowing of the neighbouring receptors with 95% of the tested windows complying with BRE Report guidance for daylight and sunlight amenity.
- 3.1.2 P2 have tested daylight amenity using the Vertical Sky Component (VSC), No Sky Line/Daylight Distribution (DD) and Average Daylight Factor (ADF) tests and sunlight amenity using the Annual Probable Sunlight Hours (APSH) tests. These assessments are discussed in the BRE Report and, where appropriate, we agree with the tests used.
- 3.1.3 As discussed in the Client Report, the use of ADF tests for existing neighbouring properties is not supported by the BRE Report guidance. As such the findings of the ADF analysis should not carry any weight when determining the effects of the Proposed Development on the neighbouring properties. Our review of the P2 report does not take these ADF findings into account.
- 3.1.4 P2 have provided spreadsheets with the DD values within the rooms served by the tested windows. When discussing daylight amenity within neighbouring properties the BRE Report states that:
- “Where room layouts are known, the impact on the daylighting distribution in the existing building can be found by plotting the ‘no sky line’ in each of the main rooms.”*
- 3.1.5 Despite discussing daylight distribution and providing the analysis spreadsheets, no evidence was provided in the P2 Report showing the interior arrangements of the properties analysed. However, the P2 Response does reference research of the neighbouring properties in key locations.
- 3.1.6 Generally speaking, where the internal arrangements of neighbouring properties cannot be verified through desktop research or internal inspection, DD analysis should not be undertaken. Given the omission of drawings showing the internal arrangements used for the DD analysis the results of this analysis cannot be verified.
- 3.1.7 The P2 Report considers the effect of the Proposed Development in the current site conditions and against the conditions documented for approved planning applications HGY/2013/0694 and HGY/2013/1384 (‘the Consented Development’).

3.1.8 As highlighted in the Client Report the use of the previous Consented Development as an alternative baseline target is not supported by the BRE Report. However, in our opinion, the findings of the comparative exercise should not be wholly dismissed. While the application of a 0.8 retention factor is unjustified, comparison with the impact of the Consented Development particularly the absolute values is helpful.

3.1.9 P2 have applied significance to the results for each property dependent upon both VSC and DD analysis. Their analysis shows that the majority of impacts will be negligible and, given our review of the VSC values submitted with the P2 Report, we would agree with P2s' significance apportionment for the following properties:

- 1 to 19 (odds inclusive) The Broadway,
- 28 to 44 (evens inclusive) The Broadway,
- 1, 2 and 3 Rose Place,
- 31 and 33 Weston Park,
- Prime Zone Mews A,
- 14 Haringey Park,
- 29, 30 and 31 Haringey Park, and
- 2 to 10 (evens inclusive) Hatherley Gardens.

3.1.10 The P2 Report and the P2 Response, together with the Client Report focus on the daylight and sunlight assessments of 5, 7 and 9 Weston Park, 25, 27 and 29 Weston Park, Prime Zone Mews B, and 13 Haringey Park. Our commentary has also been limited to these properties.

3.1.11 Review of the current site conditions shows that the neighbouring properties benefit from the open and low level nature of the Proposed Development site. This leads to the neighbouring windows experiencing daylight levels inconsistent with urban expectations. Historically VSC levels between 15% and 21% are typical experienced in urban environments. Study of the results appended to the P2 Report show that many of the neighbouring windows experience VSC results of 35% or above. This is very close to the 39% maximum VSC values seen for windows with no obstructions. Many of the reductions experienced by the neighbouring properties are due to the disparity between the undeveloped nature of the Proposed Development site and typical urban environments where buildings are closer together.

3.2 5 Weston Park

3.2.1 The P2 Report highlights the following transgressions of the BRE Report guidance:

- VSC transgression to one rear ground floor window, W4/500, assumed to serve a kitchen,
- sunlight transgressions to two windows (W1/500 and W2/500), and
- a reduction in the amount of sunlight striking the garden on the 21 March.

Daylight

- 3.2.2 Window W4/500 will see a reduction in VSC from 27.94% to 18.17%. While the internal arrangement details for this property were not obtained it is clear from the design of the building that the main living spaces will be to the front of the property and will be unaffected by the Proposed Development.
- 3.2.3 Review of online aerial imagery¹ indicates that window W4/500 is one of three serving the kitchen. P2 have not undertaken analysis of these additional windows (refer to Figure 1 below). Given the VSC compliance of the remaining rear windows it is probable that these windows will retain VSC levels commensurate with the remainder of the property. Daylight provision afforded by the additional windows into the kitchen means the daylight amenity within the room is likely to remain at an appropriate level. Using the Environmental Impact Assessment criteria discussed in Appendix I of the BRE Report² we would agree with the P2 Report that the transgression is negligible to minor adverse.



Figure 1: Additional windows serving ground floor kitchen (Bing Maps imagery)

Sunlight

- 3.2.4 APSH transgressions are noted for W1/500 and W2/500 at ground floor. Both of these windows will see a reduction in their winter sunlight amenity, however, annual sunlight amenity will remain at levels (34% and 50%) in excess of the 25% BRE Report guidance.

¹ www.Bing.com/Maps

² BRE Report Appendix I Environmental Impact Assessment, Paragraph I5

3.2.5 Winter sunlight compliance is notoriously difficult in urban areas where there are a greater number of obstructions effecting direct sunlight access in the winter months when the sun is low in the sky. We would consider the values retained to be consistent with urban expectations and considering the compliance levels of the remaining windows consider the effects to be minor adverse.

Overshadowing

3.2.6 The overshadowing assessment of the garden shows a significant reduction in the sunlight availability on 21 March. The reduction is beyond the BRE Report guidance. The P2 Report has studied a comparison of the current site conditions with those that would exist with the Proposed Development in place. Two factors should be considered when assessing the significance of the impacts detailed in the assessment.

3.2.7 Firstly, a study of historic imagery (Figure 2 below) shows that a 2 storey building existed on part of the Proposed Development site adjacent to the boundary wall of 5 Weston Park. This building was removed in 2012. This building would have had a noticeable effect on the area of the garden that could receive direct sunlight on 21 March. It is likely that comparison with the sunlight amenity received pre 2012 would illustrate less change.

3.2.8 Secondly, comparison with the Consented Development shows comparable results. While the percentage reduction is greater, the practical difference, 9% lit to 3.7% lit, would have very little impact on the enjoyment of the space.



Figure 2: Previous building on site (Bing Maps imagery dated 2012)

3.2.9 Given the urban context, the pre 2012 amenity and the comparative results with the Consented Development we would consider the effect on the overshadowing to be minor to moderate adverse.

3.3 7 Weston Park

3.3.1 The P2 Report shows:

- VSC transgression to window W1/510, 26.94% VSC reduced to 17.16%,
- VSC transgression to window W4/510, 24.47% VSC reduced to 15.78%,
- APSH transgressions to windows W1/510 and W4/510, winter sun levels reduced to below BRE Report 5% guidance,
- Overshadowing transgression on 21 March.

3.3.2 Daylight and sunlight effects to 7 Weston Park are considered to be minor adverse. Overshadowing is considered to be moderate adverse.

Daylight

3.3.3 Both VSC transgressions show that the windows studied will retain VSC levels consistent with levels often seen in urban locations. Historically, studies have shown that VSC values between 15% and 21% are common in urban locations. Additionally, online aerial imagery shows that window W4/510, identified in the Client Report as serving a living room, is a glazed door. While internal arrangement details have not been provided by either P2 or BRE it is unlikely that this glazed door is the only natural light source to the living space.

Sunlight

3.3.4 As with 5 Weston Park, the APSH transgressions are limited to winter sunlight access. Once again, APSH winter compliance is difficult in urban environments. We consider the retained sunlight levels to be commensurate with urban expectations.

Overshadowing

3.3.5 As with its neighbour, overshadowing of the rear garden on 21 March will be significant. However, comparison with the Consented Development shows comparable results. While the percentage reduction is greater, 12.8% lit to 3.1% lit, the difference would have very little bearing on the enjoyment of the space.

3.4 9 Weston Park

3.4.1 The P2 Report shows:

- VSC transgression to window W2/520, 28.52% VSC reduced to 14.04%,
- VSC transgression to window W4/520, 27.50% VSC reduced to 15.43%,
- Overshadowing transgression on 21 March.

- 3.4.2 We consider the daylight effects to 9 Weston Park to be negligible to minor adverse. Overshadowing is considered to be moderate adverse.

Daylight

- 3.4.3 Study of the rear elevation of 9 Weston Park shows the ground floor rooms are served by skylights in addition to the windows overlooking the Proposed Development. While there will be reductions to the VSC values of two windows, the daylight amenity afforded by the skylights should ensure the rooms retain appropriate daylight amenity.

Overshadowing

- 3.4.4 The overshadowing analysis shows a significant reduction in sunlight amenity on 21 March. However, comparison with the Consented Development should not be totally ignored. The effects of the Consented Development were considerable. The Proposed Development would lead to a similar effect.

3.5 25, 27 and 29 Weston Park

- 3.5.1 VSC analysis shows only two transgressions. These transgressions occur to two windows serving the ground floor kitchen/diner at 27 Weston Park. However, the room is served by 6 other windows which will comply with the BRE Report guidance. As such the effect on the daylight within the room would be negligible.
- 3.5.2 DD analysis was undertaken for all three properties, however, details of the interior arrangements were only obtained for 27 Weston Park. The analysis for this property shows BRE Report compliance for all but one room. The use of room R1/702 has not been marked on the analysis spreadsheets but it is assumed that the room is a bedroom. The BRE Report considers daylight to bedrooms to be less important than that to living space.
- 3.5.3 DD analysis of the assumed rooms in 25 and 29 Weston Park indicates four rooms that may see minor transgressions to their current daylight penetration values. The results show that the rooms, the majority of which are likely to be bedrooms, will continue to receive direct daylight access to the majority of the space.
- 3.5.4 Daylight effects to 25, 27 and 29 Weston Park are considered to be negligible.

3.6 Prime Zone Mews B

- 3.6.1 The P2 analysis shows that all the bedrooms overlooking the Proposed Development will see significant reductions in their VSC and DD values. Reductions to the sunlight amenity are also noted.
- 3.6.2 Study of the location of this property shows that it is very close, approximately 2 metres, to the boundary of the Proposed Development and will see restrictions to the ground floor rooms in the current conditions due to the height and proximity of the boundary wall.
- 3.6.3 P2 have undertaken analysis comparing the amenity attributable in the 'current' site conditions and those that would occur in the proposed conditions. As stated above, Prime Zone Mews B is very close to the site boundary, as such, it is reliant on the daylight and sunlight amenity afforded by the undeveloped site. The BRE Report provides guidance within section 2.3 and at Appendix F for the setting of alternative target values where this occurs. If this guidance has been followed the results do not form part of the P2 Report.
- 3.6.4 Study of the site shows that the current daylight and sunlight amenity to Prime Zone Mews B will see restrictions not accounted for in the P2 Report. Figure 3 below shows relatively dense foliage and a mature tree along the boundary with the Proposed Development site. While there is no provision within the BRE Report to allow for the effects of this vegetation it would have a practical effect on the current natural light amenity experienced by these properties.



Figure 3: Foliage adjacent to Prime Zone Mews B

- 3.6.5 We understand that this foliage will be removed as part of the Proposed Development. Whilst the Proposed Development will be greater in height than the vegetation it does step back from the boundary. Overall, it is probable that the VSC, DD and APSH values with the Proposed

Development in place will more closely resemble those currently experienced with the vegetation in place.

3.6.6 Whilst the effects would be noteworthy there are a number of points that should be considered when attributing significance:

- The main living space is to the front of each property and will remain unaffected by the Proposed Development,
- Daylight and sunlight to bedrooms is considered to be of lesser importance in the BRE Report,
- The property is in very close proximity to the Proposed Development site and is overly reliant on the light over the site. The guidance contained within the BRE Report for the setting of alternative target values has not been undertaken,
- The effects of current barriers, i.e. the vegetation along the boundary, have not been explored.

3.6.7 Taking the above factors into account we would consider the effects on Prime Zone Mews B to be moderate adverse.

3.7 13 Haringey Park

3.7.1 VSC and APSH analysis has highlighted transgressions to three windows. These windows, W9/80, W7/81 and W6/81 would see reductions in their current amenity beyond BRE Report guidance. However, the retained VSC values are, in our opinion, commensurate with urban expectations. Additionally, windows W7/81 and W6/81 serve rooms where daylight and sunlight provision is provided by additional windows.

3.7.2 APSH analysis shows that all rooms would retain BRE Report compliance.

3.7.3 Overall the effect of the Proposed Development on daylight amenity at 13 Haringey Park would be minor adverse.

4 **CONCLUSION**

4.1 The majority of the neighbouring properties will continue to receive adequate daylight and sunlight amenity with the Proposed Development in place. However, a small number of the surrounding properties, particularly Prime Zone Mews B will experience significant daylight reductions to windows overlooking the Development. Given the attributing factors detailed in paragraph 3.6.6, we consider the overall effect to be moderate adverse.

4.2 P2 have assessed daylight amenity using the DD and ADF tests. However, no drawings showing the no sky line contours or the room assumptions made have been provided and as such it is difficult to comment on the significance or validity of this part of the analysis.

- 4.3 Despite the shortcomings of the DD analysis, the VSC and APSH studies indicate that daylight and sunlight amenity to 95% of the windows studied will remain fully compliant with the guidance given in the BRE Report.