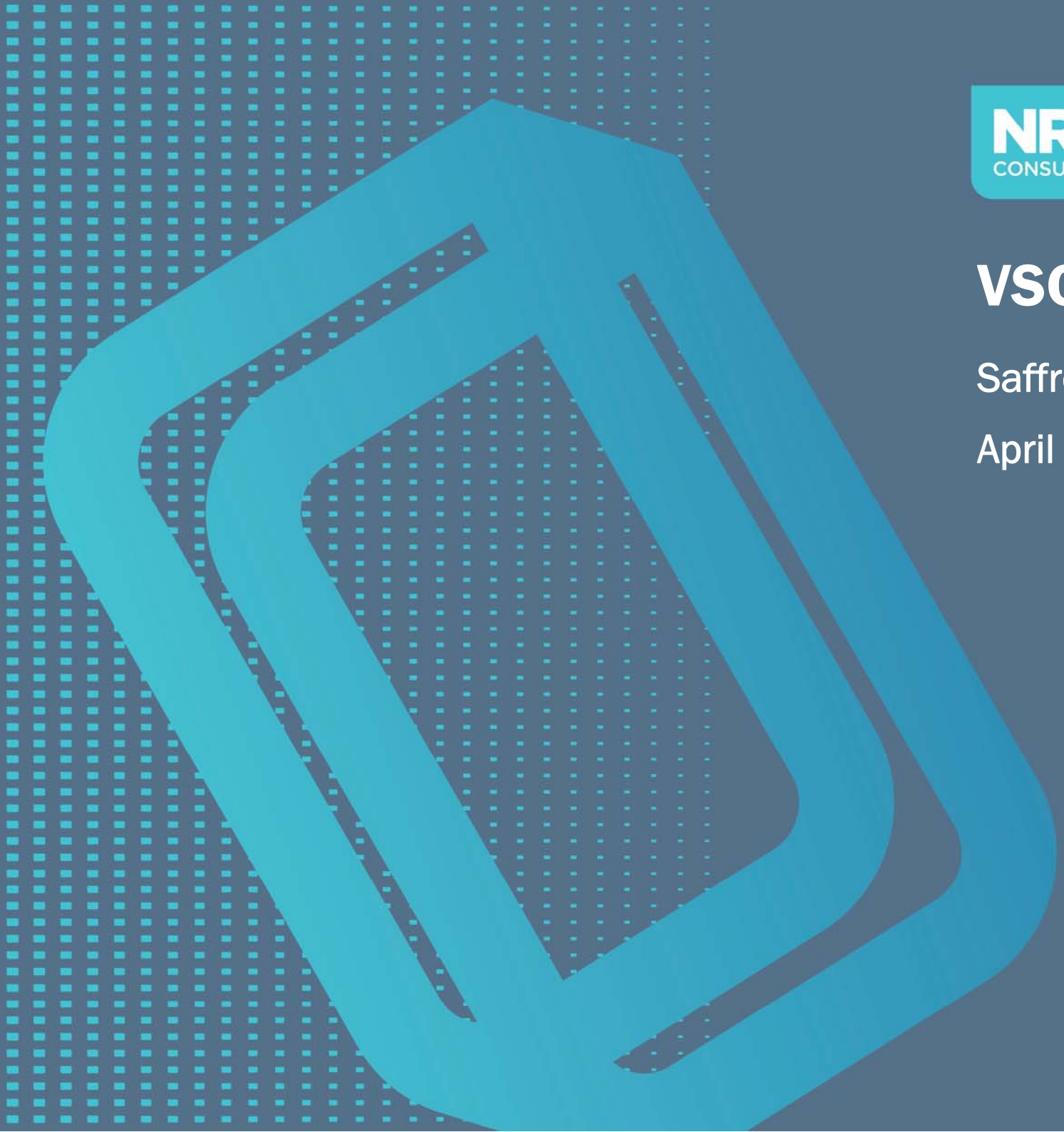

NRG CONSULTING

VSC Analysis

Saffron Hill

April 2019

1. EXECUTIVE SUMMARY

1.1 NRG Consulting have been appointed by Nyraff Ltd to carry out a VSC analysis to support a proposed extension to create 8 flats at 67-74 Saffron Hill, EC1N 8QX, London.

1.2 The analysis demonstrates that there is a minimal change between the access to daylight to the neighbouring windows of the Ziggurat Building before and after the proposed development.

1.3 Of the various windows analysed none were adversely affected by the proposed development and all comfortably comply with BRE guidelines for the recommended levels of adequate daylighting.

1.4 It should be noted that the BRE advise that *"it is not always necessary to do a full calculation to check sunlight potential"* notably in cases where *"obstructions are within 90° due north of the existing window,"* which is the case with the Saffron Hill extension.

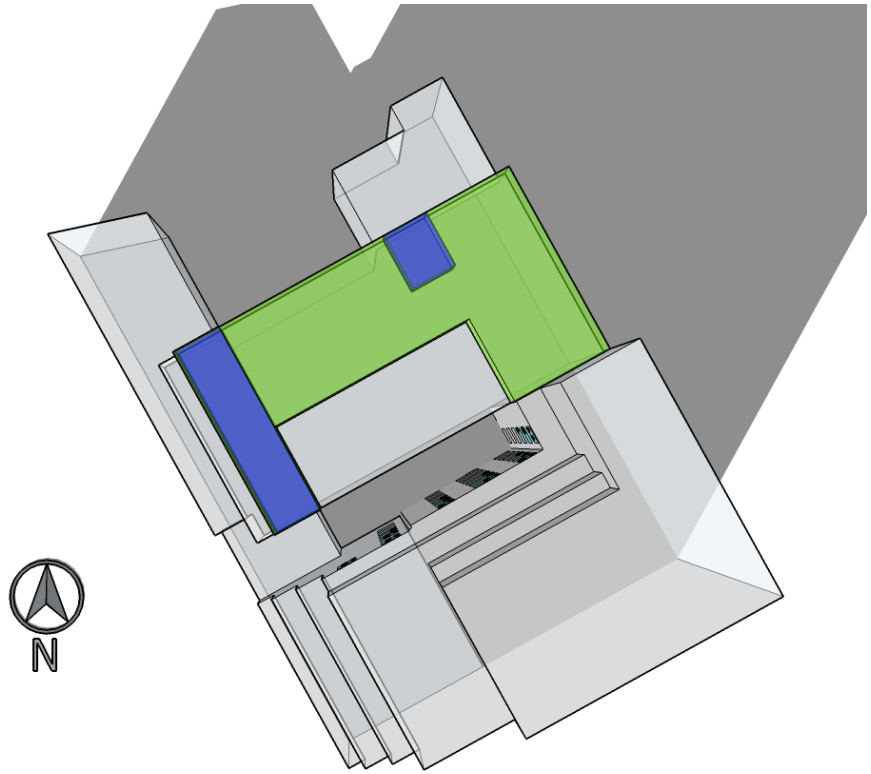

Figure 1: *IES project model with proposed extension located to the north of the Ziggurat Building (green denotes proposed extension with existing floor volume in blue).*

2. DAYLIGHT AND SUNLIGHT ASSESSMENT GUIDANCE

2.1 Assessment of the Effect of Daylight and Sunlight

Policy A1 (6.5) of the London Borough of Camden's Local Plan 2017 notes the following regarding Sunlight, daylight and overshadowing: *"To assess whether acceptable levels of daylight and sunlight are available to habitable, outdoor amenity and open spaces, the Council will take into account the most recent guidance published by the Building Research Establishment."*

The Building Research Establishment (BRE) report, BRE 209 "Site Layout Planning for daylight and sunlight- a guide to good practice" by P J Littlefair, looks at three separate areas when considering the impacts of a new development on an existing property:

1. Daylight. - The impacts of all direct and indirect sunlight during daytime.
2. Sunlight. - The impacts of only the direct sunlight; and overshadowing of garden and open spaces.
3. Overshadowing of Gardens and Open spaces.

The BRE report provides guidelines for when the obstruction to sunlight may become an issue:

- If the proposed or existing development has a window that faces within 90° of due south, and
- On this window wall, all points on a line 2m above ground level are within 4m (measured sideways) of a point which receives at least a quarter of annual probable sunlight hours, including at least 5% of annual probable sunlight hours during the winter months, between 21st September and 21st March.

Table 1 below summarises the criteria used in this report to assess the impacts from new development on the sunlight reaching existing properties.

PARAMETER	REPORT REFERENCE	ASSESSMENT DESCRIPTION
Daylight	BRE 209 Section 2.2	If any part of the new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, subtends an angle of more than 25° to the horizontal, then the diffuse daylighting of the existing building may be adversely affected if the VSC is less than 27% at the centre of an existing window, and less than 0.8 times its former value.

Table 1: *BRE Daylighting Criteria*

3. VERTICAL SKY COMPONENT RESULTS

3.1 The assessment of the VSC demonstrates that there is minimal change between the VSC available to the windows analysed as existing and after the proposed development. Some of the windows analysed do fall below the criterion of 27% but as the affect ratio is more than 0.8 all windows are BRE compliant. The results table and window mapping are shown below.

ZIGGURAT BUILDING VSC RESULTS				
WINDOW No	PRE CONSTRUCTION VSC	POST CONSTRUCTION VSC	AFFECT RATIO	MEETS BRE CRITERIA
1	11.50	11.43	0.99	✓
2	8.25	8.06	0.97	✓
3	11.15	10.77	0.96	✓
4	12.41	12.09	0.97	✓
5	12.09	11.79	0.97	✓
6	20.15	19.96	0.99	✓
7	20.62	18.88	0.91	✓
8	27.84	25.26	0.9	✓
9	29.51	27.32	0.92	✓
10	25.84	24.94	0.96	✓
11	27.07	26.63	0.98	✓
12	28.94	28.09	0.97	✓
13	36.33	35.12	0.96	✓
14	38.02	36.78	0.96	✓
15	38.27	36.79	0.96	✓
16	38.10	36.22	0.95	✓

Table 2: *Results of Visual Sky Component analysis.*

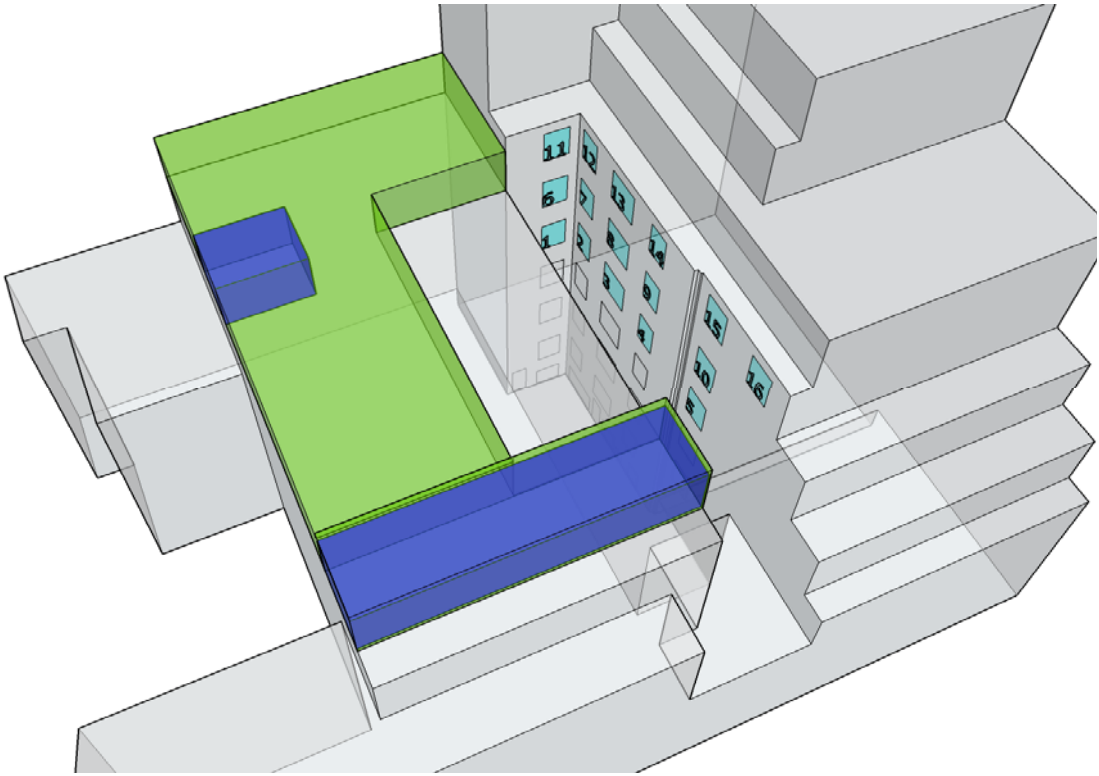

Figure 2: *VSC window arrangement for the Ziggurat Building with proposed Saffron Hill extension (green denotes proposed extension with existing floor volume in blue).*

Document Control Sheet

Job No	**D1515**
Rev.	
Issue Purpose	**For comment**
Client	**Nyraff Ltd**
Site Address	**67-74 Saffron Hill, EC1N 8QX, London**
Assessor	**Alex Visintini**
Approved By	**Ryan Thrower**
Date of Issue	**10.04.2019**

The information contained within this Report is based on Drawings and Specifications provided by the Design Team along with information assumed by NRG Consulting for the purposes of compliance.

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