Our ref: MC20/1759611 Your ref:

28 September 2012

C Downie Esq Studio Downie Architects LLP 29-31 Saffron Hill LONDON EC1N 8SW



10 Stratton Street London, W1J 8JR T: +44 (0)20 7269 4740 F: +44 (0)20 7911 2560

gva.co.uk

By e-mail only

Direct Dial: 020 7911 2540 Email: matthew.craske@gvasb.co.uk

Dear Craig

## Proposed Redevelopment of Miranda House, 58 Grafton Way, London W1T 5DL Daylight/Sunlight

I write following the receipt of the revised drawings for Miranda House dated September 2012.

I note that the proposals have altered from the assessment carried out in April 2012, although the proposed lift core is the same height as the previous analysis. The changes that I can see are as follows:

- The parapet adjacent to 60 Grafton Way has been altered to retain the existing parapet height, rather than being raised in height as previously shown. In addition, the existing parapet height is also to be retained adjacent to Suffolk House.
- The handrail adjacent to Suffolk House has been set back from the Suffolk House boundary.
- The terrace and glass panel balustrades have been omitted with only a metal open balustrade for health and safety along the existing parapets.
- The lift and services have been pulled back from the Suffolk House elevation.
- The lift core is not as wide as previously assessed and there is no service riser, which makes the massing narrower.

With regard to the daylight/sunlight considerations, GVA provided a report dated 20 April 2012 which concluded that the proposed works were acceptable, retaining good levels of daylight and sunlight. The revised proposal is set back further from Suffolk House and 60 Grafton Way than the previous assessment, and will have less of an effect on the adjoining owners as the massing is narrower than before.



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We can therefore summarise that the revised proposal will retain a good level of daylight and sunlight to the future occupants of Suffolk House and existing occupants of 60 Grafton Way, without providing an updated technical assessment.

If you have any questions regarding this letter please do not hesitate to contact me.

Yours sincerely

Matthew Craske Director, GVA Schatunowski Brooks



GVA Schatunowski Brooks



GVA 10 Stratton Street London W1J 8JR

# Proposed Extension to 58 Grafton Way

Daylight/Sunlight Report

20 April 2012

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Prepared By: M Craske / 1609816 Date: ...........23–4-12 E-mail: .........Matthew.craske@gvasb.co.uk Tel: ......020 7911 2540

#### For and on behalf of GVA Grimley Ltd

## 1. Introduction

- 1.1 GVA Schatunowski Brooks has been instructed to provide daylight/sunlight advice with regard to the extension to the rear of 58 Grafton Way.
- 1.2 We have been provided with proposed drawings from Studio Downie Architects LLP drawing series 240. We have attended site and reviewed the adjacent properties, researching the Council Tax records in order to locate the neighbouring residential properties. The Council Tax website shows that 60 Grafton Way and 64 Grafton Way both contain residential use. These are the only registered residential properties that are likely to be affected in their current state.
- 1.3 64 Grafton Way only has habitable rooms at third floor level, and is set back some distance from the proposed work. Therefore 64 Grafton Way should not be an issue and no assessments were undertaken.
- 1.4 We note that Suffolk House, 1-8 Whitfield Place / 114-116 Whitfield Street has a planning consent for conversion to residential use. We have obtained the information for the proposal, planning application 2010/5185/P and used this to test the daylight and sunlight effects to the future occupants.

### 2. Executive Summary

- 2.1 For Suffolk House the results to the first, second and third floor levels demonstrate that when removing the overhead walkway effect, there should be no noticeable reduction in daylight. The sunlight assessment shows a similar effect, with good levels of sunlight being obtained in the proposed condition when not including the overhead walkways. When considering the daylight and sunlight levels with the overhead walkways in place it is clear that the walkways remove almost all the daylight and sunlight at first and second floor levels. There is no effect from the proposed works with the walkways in place. At the third floor level of Suffolk House, where there is no overhead walkway, the daylight and sunlight levels obtained in the proposed condition exceed the BRE guideline recommendations. We therefore conclude that the proposed works will have no noticeable effect on the consented residential development at Suffolk House.
- 2.2 For 60 Grafton Way the results show small noticeable reductions in daylight at ground and first floor level when comparing the existing and proposed conditions. The windows at ground and first floor level are very wide and tall and should therefore allow good daylight penetration into the rooms. The light reductions are at an oblique angle and should not therefore affect the back of the room, with the main source of daylight being from over Suffolk House. We consider the effects from the proposed works to be acceptable and the occupants of 60 Grafton Way should continue to enjoy good daylight levels with the proposed works in place.
- 2.3 We consider the effects of the proposed works to be acceptable and there should be no reason to refuse the planning application on daylight/sunlight considerations.

## 3. Daylight/Sunlight Planning Principles

- 3.1 The Building Research Establishment (BRE) 2011 guidelines Site Layout Planning for Daylight and Sunlight: a guide to good practice is the document referred to by most local authorities. The BRE Guide covers amenity requirements for sunlight and daylight to buildings around any development site.
- 3.2 The introduction to the guidelines state: -

"The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Its aim is to help rather than constrain the developer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of the many factors in site layout design."

### Daylighting

- 3.3 The requirements governing daylighting to existing residential buildings around a development site are set out in Part 2.2 of the guidelines. The amount of light available to any window depends upon the amount of unobstructed sky that can be seen from the centre of the window under consideration. The amount of visible sky and consequently the amount of available skylight is assessed by calculating the vertical sky component at the centre of the window. The guidelines advise that bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines also suggest that distribution of daylight within rooms is reviewed although bedrooms are considered to be less important.
- 3.4 The vertical sky component can be calculated by using the skylight indicator provided as part of the guidelines, by mathematical methods using what is known as a waldram diagram or by 3D CAD modelling.

3.5 The guidelines states the following:-

"If this vertical sky component is greater than 27% then enough skylight should still be reaching the window of the existing building. Any reduction below this level should be kept to a minimum. If the vertical sky component with the new development in place, is both less than 27% and less than 0.8 times its former value, then occupants of the existing building will notice the reduction in the amount of skylight."

- 3.6 It must be interpreted from this criterion that a 27% vertical sky component (VSC) constitutes adequacy, but where this value cannot be achieved a reduction of up to 0.8 times its the former value (this is the same as saying a 20% reduction when compared against the existing condition) would not be noticeable and would not therefore be considered material.
- 3.7 The VSC calculation only measures light reaching the outside plane of the window under consideration, so this is potential light rather than actual. Depending upon the room and window size, the room may still be adequately lit with a lesser VSC value than the target values referred to above.

#### Sunlighting

3.8 Requirements for protection of sunlighting to existing residential buildings around a development site are set out in Part 3.2 of the BRE guidelines. There is a requirement to assess windows of surrounding properties where the main windows face within 90 degrees of due south. The calculations are taken at the window reference point at the centre of each window on the plane of the inside surface of the wall. The guidelines further state that kitchens and bedrooms are less important in the context of considering sunlight, although care should be taken not to block too much sun. The guidelines sets the following standard:-

"If this window reference point can receive more than one quarter of annual probable sunlight hours, including at least 5% of annual probable sunlight hours during the winter months of 21st September and 21st March, then the room should still receive enough sunlight. The sunlight availability indicator in Appendix A can be used to check this.

Any reduction in sunlight access below this level should be kept to a minimum. If the available sunlight hours are both less than the amount given and less than 0.8 times

their former value, either over the whole year or just during the winter months then the occupants of the existing building will notice the loss of sunlight."

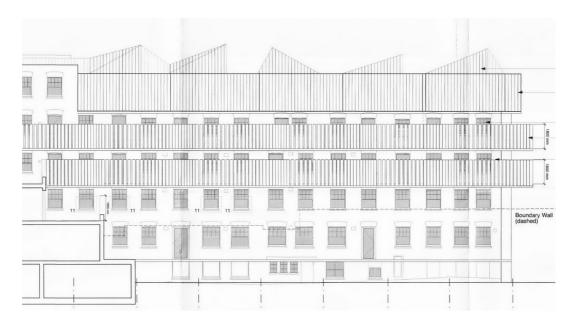
3.9 To summarize the above, a good level of sunlight to a window is 25% annual probable sunlight hours, of which 5% should be in winter months. Where sunlight levels fall below the suggested level, a comparison with the existing condition is reviewed and if the ratio reduction is within 0.8 (the same as saying a 20% reduction) its former value then the sunlight loss will not be noticeable. Sunlight reduction that fall below 0.8, i.e. 0.7 (greater than 20%) then the sunlight losses will be noticed by the occupants.

## 4. Assessment Results

- 4.1 Daylight and sunlight assessments have been undertaken to the neighbouring residential properties, these being 60 Grafton Way and Suffolk House. A site location plan has been provided at Appendix I.
- 4.2 At Appendix II of this report the DSDHA south east elevation drawing has been provided showing the windows and rooms assessed, together with the floor plans of the proposed Suffolk House consented scheme. Comments on the results are set out below:

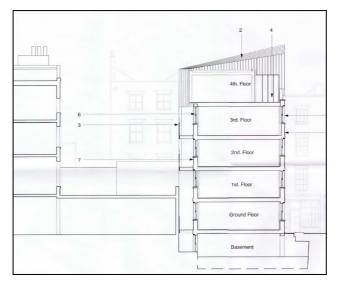
#### Suffolk House - 1-8 Whitfield Place and 114-116 Whitfield Street

4.3 This property is located to the north of 58 Grafton Way and is currently an unoccupied commercial building. However, there is consent for residential use with planning application 2010/5185/P providing drawings of the habitable room facing towards the development site.



4.4 As highlighted in the daylight report submitted with application 2010/5185/P, small kitchens under 13 sq m have been ignored as they are not considered habitable spaces.

- 4.5 The walkways proposed within application 2010/5185/P will severely limit the daylight potential for the future residents of Suffolk House and the 2011 BRE guidelines has identified that where there are overhead obstructions from adjacent properties, assessments can be undertaken with and without the overhead obstructions. If it is evident that the adjacent overhead obstructions are causing the main effect, and that without the overhead obstructions the proposed development will have little or no impact, then daylight/sunlight reductions below the BRE guidelines can be considered acceptable.
- 4.6 At ground floor level there are two dining rooms and one bedroom facing towards the development site. As can be seen by the section below produced by DSDHA, the existing retaining wall and close proximity of the wall will be the primary obstruction so an assessment of the ground floor windows is not required.



4.7 At first floor level the Suffolk House windows have a view over 58 Grafton Way and were therefore assessed. There are five bedrooms to the rear elevation of Suffolk House and we have assessed Bed 4 of Unit A3 and Bed 5 of Unit A4 as these are located opposite the proposed works. Each room has two windows per bedroom, with the tabled results below showing the impacts without the overhead walkway in place.

| Bed 4    | Existing VSC | Proposed VSC | Ratio reduction |
|----------|--------------|--------------|-----------------|
| Window 1 | 16.0%        | 14.0%        | 0.88            |
| Window 2 | 16.0%        | 13.0%        | 0.81            |

| Bed 5    | Existing VSC         | Proposed VSC         | Ratio reduction |
|----------|----------------------|----------------------|-----------------|
| Window 1 | 16.0%                | 12.5%                | 0.78            |
| Window 2 | 16.0%                | 14.0%                | 0.90            |
| Bed 4    | Existing APSH        | Proposed APSH        | Ratio reduction |
| Window 1 | 43% total, 3% winter | 38% total, 2% winter | Pass total      |
| Window 2 | 42% total, 3% winter | 38% total, 3% winter | Pass total      |
| Bed 5    | Existing APSH        | Proposed APSH        | Ratio reduction |
| Window 1 | 42% total, 3% winter | 31% total, 3% winter | Pass total      |
| Window 2 | 41% total, 3% winter | 33% total, 3% winter | Pass total      |

- 4.8 With the overhead walkway in place there will be 0% VSC and 0% APSH in the existing and proposed conditions.
- 4.9 At second floor level Bed 2 of Unit A6 is located opposite the proposed works, with a small kitchen to the same unit also located opposite. The small kitchen is part of a larger open plan area with living/dining areas that are lit from Whitfield Place, to the north of Suffolk House. Therefore the small kitchen will not be an issue as the daylight levels provided by the windows to the north will be the main source to the living/dining/kitchen area. The daylight and sunlight results of Bed 2 are set out below:

| Bed 2    | Existing VSC  | Proposed VSC         | Ratio reduction |
|----------|---------------|----------------------|-----------------|
| Window 1 | 22.0%         | 19.0%                | 0.86            |
| Bed 2    | Existing APSH | Proposed APSH        | Ratio reduction |
| Window 1 | Not required  | 46% total, 7% winter | Pass total      |

- 4.10 With the overhead walkway in place there will be 0.5% VSC in the existing and proposed condition with 0% APSH in the existing and proposed conditions.
- 4.11 At third floor level the windows either serve a lobby area or a small kitchen which is primarily lit by north facing windows facing onto Whitfield Place. There is no overhead walkway condition affecting the windows at this floor level. As the kitchen areas are under 13sqm and lit from Whitfield Place no assessments are required, however, assessment results are shown below:

| Kitchen  | Existing VSC  | Proposed VSC          | Ratio reduction |
|----------|---------------|-----------------------|-----------------|
| Unit A10 | 29.5%         | 26.5%                 | 0.89            |
| Unit A11 | Not required  | 28.0%                 | Pass            |
| Kitchen  | Existing APSH | Proposed APSH         | Ratio reduction |
| Unit A10 | Not required  | 55% total, 7% winter  | Pass total      |
| Unit A11 | Not required  | 65% total, 16% winter | Pass total      |

- 4.12 At fourth floor level the windows to the new extension of Suffolk House are angled so that they do not face directly towards. In addition the height of the windows will ensure that good light will be maintained from over the proposed works, as is shown in the proposed daylight results to the third floor level.
- 4.13 The results to the first, second and third floor levels demonstrate that when removing the overhead walkway effect, there should be no noticeable reduction in daylight. One window to Bedroom 5 at first floor level obtains a ratio reduction below the suggested 0.8, but the window is marginally below with a value of 0.78 and there are two windows to the bedroom, with the other window obtaining a ratio reduction of 0.9. We therefore consider the occupants would not experience a reduction in daylight with the proposed works in place. The sunlight assessment shows a similar effect, with good levels of sunlight being obtained in the proposed condition when not including the overhead walkways.
- 4.14 When considering the daylight and sunlight levels with the overhead walkways in place it is clear that the walkways remove almost all the daylight and sunlight at first and second floor levels. There is no effect from the proposed works with the walkways in place. At third floor level of Suffolk House, where there is no overhead walkways, the daylight and sunlight levels obtained in the proposed condition exceed the BRE guideline recommendations. We therefore conclude that the proposed works will have no noticeable effect on the consented residential development at Suffolk House.

#### 60 Grafton Way

- 4.15 This property is located to the west of 58 Grafton Way and is currently residential use on all floor levels.
- 4.16 There is a rear extension to this property and from site inspection the basement and ground floor level extension is used as kitchens. These kitchens are under 13sq m and therefore should not be considered for daylight/sunlight assessments. The photograph below shows the rear extension of 60 Grafton Way.



4.17 The windows adjacent to the extension appear to be bedrooms and therefore assessments were undertaken to establish the effects of the proposed works. Sunlight assessments were not required as the windows face due north. Assessments were undertaken at ground, first and second floor levels, with the tabled results shown below:



| 60 Grafton Way | Existing VSC | Proposed VSC | Ratio reduction |
|----------------|--------------|--------------|-----------------|
| Ground Floor   | 14.0%        | 10.0%        | 0.70            |
| First Floor    | 22.0%        | 17.0%        | 0.77            |
| Second Floor   | 31.5%        | 26.5%        | 0.84            |

- 4.18 The results show small noticeable reductions in daylight at ground and first floor level when comparing the existing and proposed conditions. The windows at ground and first floor level are very wide and tall and should therefore allow good daylight penetration into the rooms. The light reductions are at an oblique angle and should not therefore affect the back of the room and the main source of daylight will be from over Suffolk House.
- 4.19 We have reviewed the planning portal but we were unable to obtain layout information. However, it appears the windows assessed are to bedrooms which have a lesser requirement for daylight than living rooms. The living rooms are likely to face out onto Grafton Way and should not be affected by the proposed works. We therefore consider the effects from the proposed works to be acceptable and the occupants of 60 Grafton Way should continue to enjoy good daylight levels with the proposed works in place.



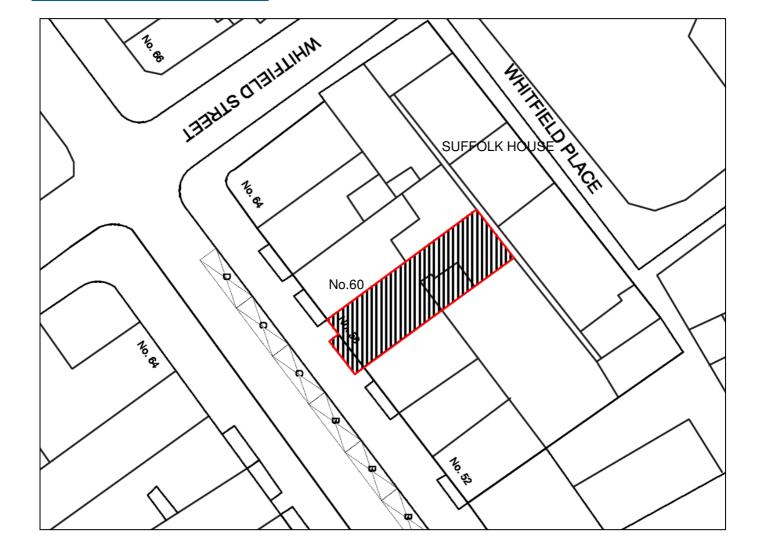
# Report

Appendices



## Report

Appendix I

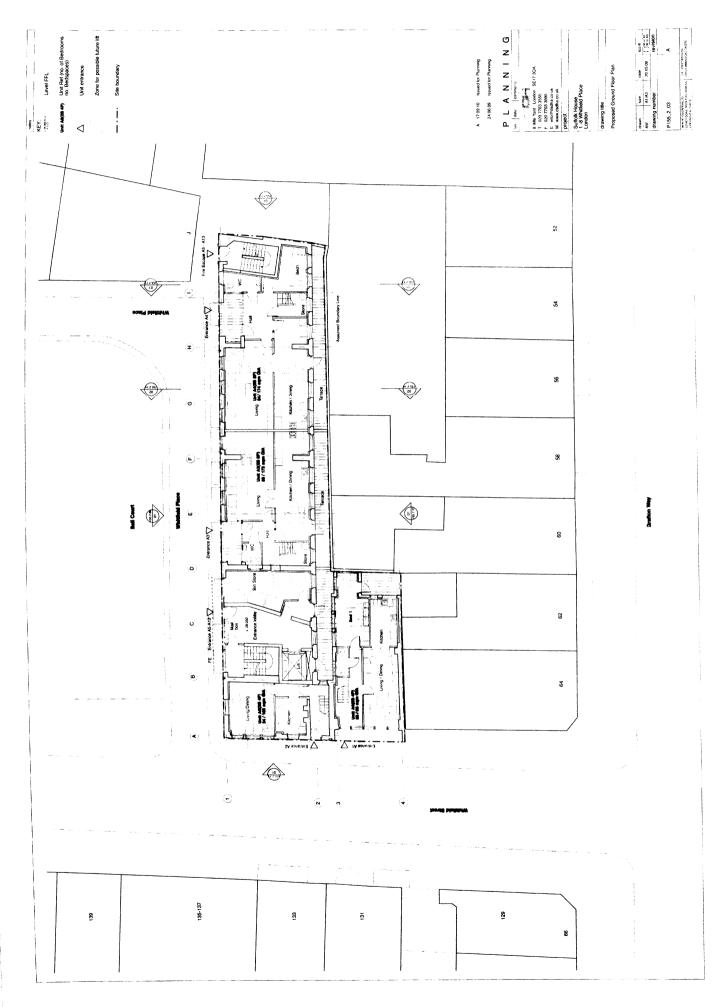




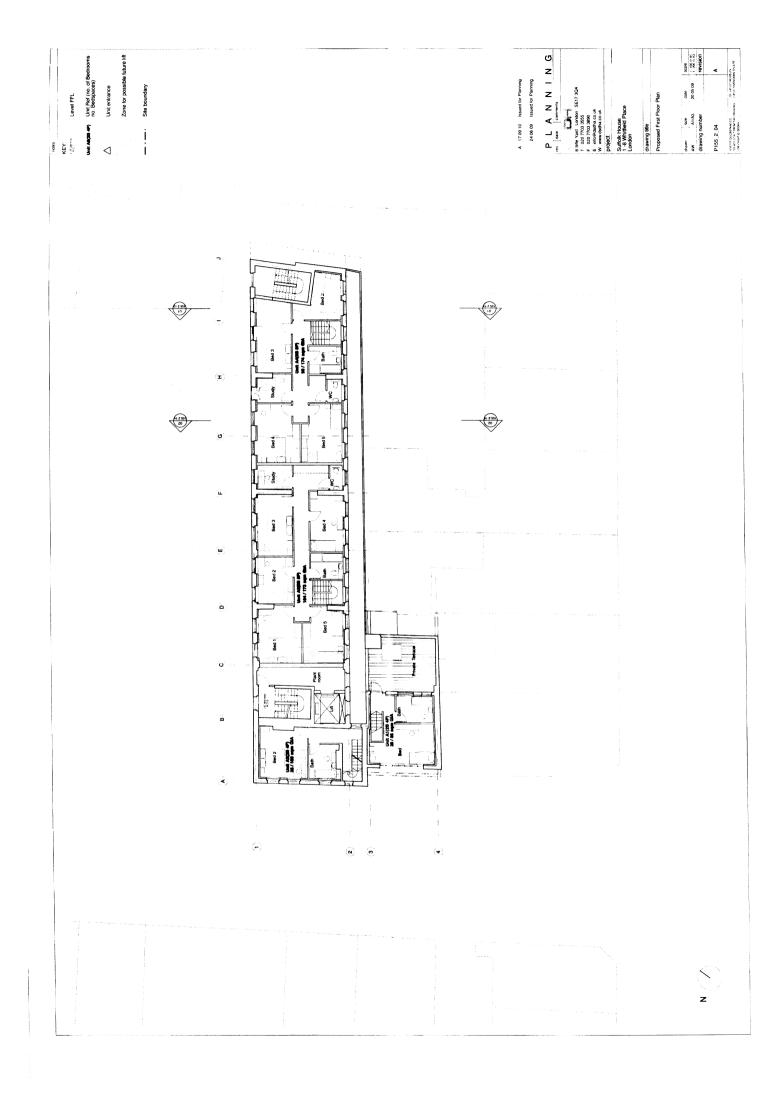
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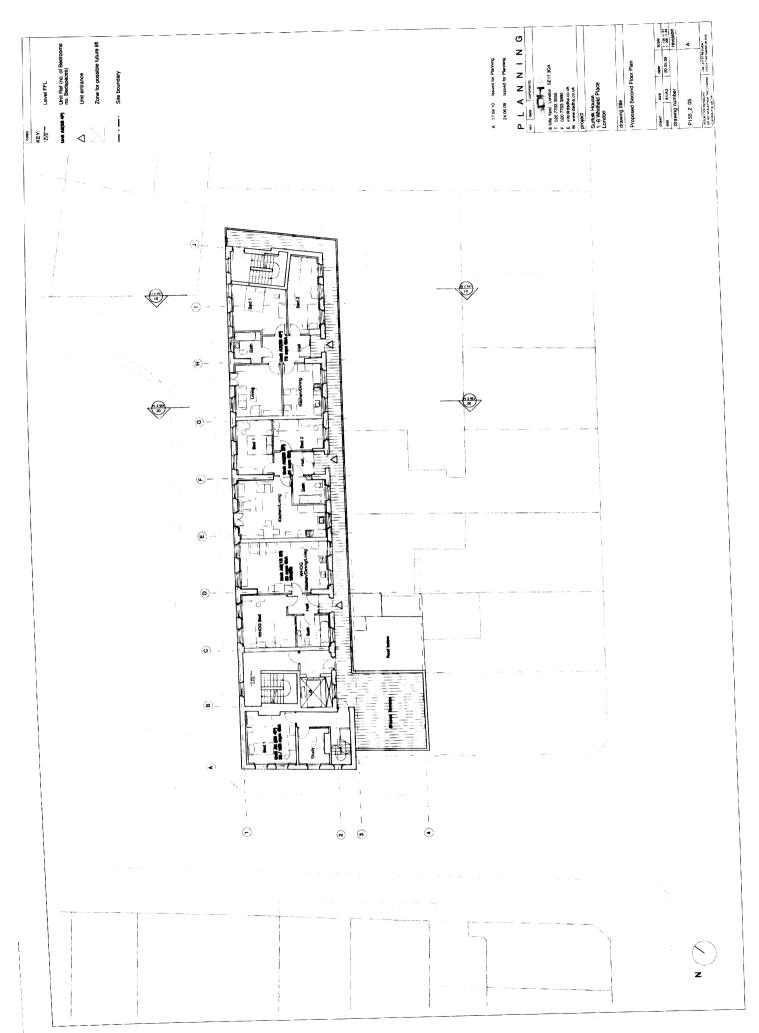
Appendix II

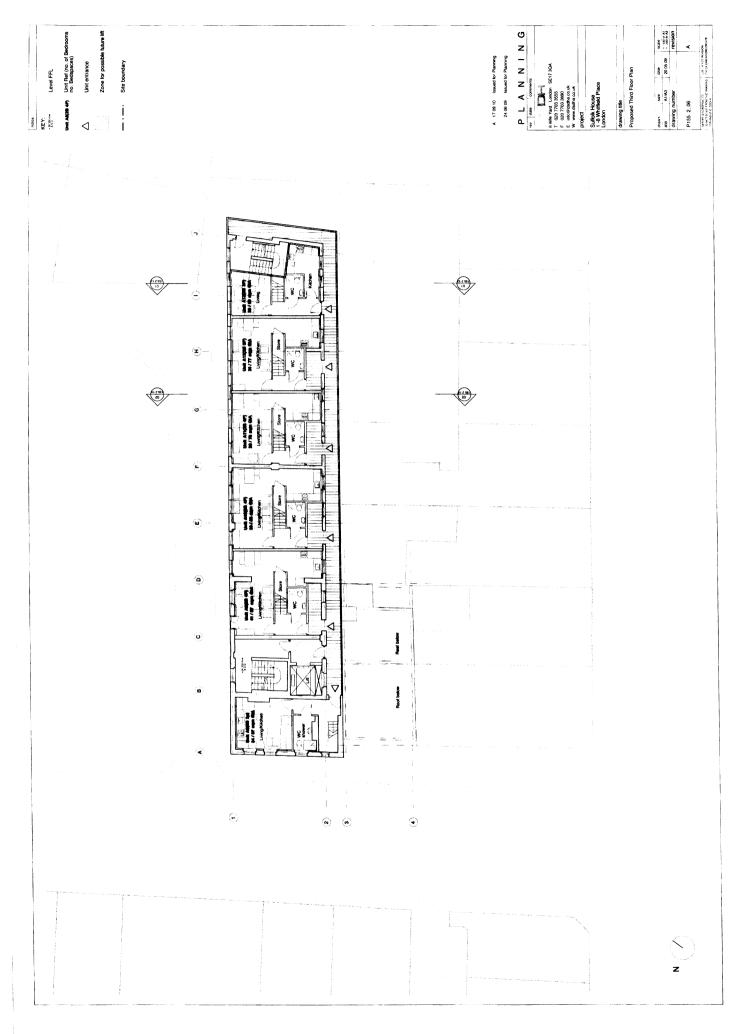




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