Project Reference:	EJMUK
Address:	52-53 Russell Square, WC1B 4HP
File Reference :	2262/09
Date :	28.07.17
Planning Reference :	2017/2285 /P

EllisWilliams
Architects

Supplementary Statement:
Sustainable Design

1. Improving Building Fabric Efficiency:

The existing building is constructed from solid brick masonry, with a pitched roof above on a timber supporting structure to the main townhouse at the front, and two extensions also in masonry one with a low-pitched metal roof and one with a flat roof. The existing windows are mostly original timber framed sliding sash windows, and doors are solid timber. The solid construction it is assumed from the age of construction (c.1800) does not include any insulation.

The building is Grade II* Listed, and the client will take a leasehold interest in the property. In order to increase the thermal efficiency within the constraints of the Listed status and lease terms, it is proposed to provide the following:

- Building fabric U-values: Insulation in roof and loft spaces with 250mm depth mineral wool quilt to limit thermal losses to the major exposed surface of the top floor rooms, and equally limit the heat gains in the summer particularly underneath the metal roof to the Mews building; A further investigation will be undertaken on possession of the building to investigate whether the existing timber dormer roof construction contains insulation between the rafters and whether access is possible in order to add insulation between these timbers; Replacement of the existing window blinds with thermally lined blinds to the large sliding sash windows to limit thermal losses during winter evenings, and also to control solar gains in summer.
- Air permeability: All of the existing windows have some form of weather stripping/seal, which will be replaced to reduce air permeability around the existing frames. All windows will be checked and the sashes adjusted to ensure they sit tightly within their frames and close fully. All windows will also be checked and any loose/ degraded putty replaced. Jambs where plasterwork meets the window reveals will also be checked any cracks/ holes filled with mineral wool and the plaster sealed up to the windows to improve air tightness. The floors are generally a low-rise accessible floor system – these will be lifted and all perimeters inspected and ensured that the floors seal well to the perimeters and any holes/ openings filled particularly around the skirting board junction to ensure air movement is limited around these perimeters.
- Approach to limiting thermal bridging: All windows and doors are timber with timber frames, set back approximately half way back within the depth of the existing solid masonry walls, therefore there are limited thermal bridges at openings generally as existing. Any holes/ gaps will be filled with mineral wool and internal plasterwork made good as stated above. At roof level the roof construction is timber on a timber wall plate, again limiting thermal bridging at the eaves when loft insulation is introduced at this level.

London
135 Curtain Road
Shoreditch
London EC2A 3BX
+44(0)20 7841 7200

Cardiff
Tramshed Tech
Pendyris Street
Cardiff CF11 6BH
+44(0)1928 752 200

Liverpool
Vanilla Factory
39 Fleet Street
Liverpool L1 4AR
+44(0)151 708 1802

Warrington
Wellfield
Chester Road
Preston Brook WA7 3BA
+44 (0)1928 752 200

Berlin
Clausewitzstraße 1
10629 Berlin
+49 (0)30 887 14 331

www.ewa.co.uk
info@ewa.co.uk

Company Registered in
England, no. 3818904