49 Fitzjohn's Avenue, London NW3 6PG

Sustainability Plan:

The Site

This is an urban site on St Johns Avenue, within the London Borough of Camden. The existing building was formally the Congregation of Jesus convent used as a single household by a community of Nuns. It has a basement floor, a ground floor and three upper floors, the top floor being situated within the roof of the building. The construction of the building is mainly of load bearing brickwork. The external walls being of solid masonry have poor thermal insulation properties.

The Proposal

No external changes will be carried out as part of this proposal and the planning application is simply for the principle of a change of use from a Sui Generis Use Class to residential (Use Class C3). As such, a detailed design for future alterations, extensions or refurbishment has not yet been finalised.

As the building is situated within the conservation area of Fitzjohn's/Netherhall, under Camden's Design Guide for works to a building within a conservation area, any external alterations or additions which would help cut the CO2 emissions, but would also change the visual appearance of the building, may not be approved under the present planning policies. Camden's goal is to "keep the historic character of the street" wherever possible and to retain the existing features of the building. Therefore, proposals for applying external insulation, the installation of items such as solar panels and micro-generation equipment will in the main not be possible without the granting of planning permission.

In order to guide development to meet the UK's targets to reduce CO2 emissions by 60% by 2050, the government has published policies for the development industry.

The following documents have been considered and will be complied with when implementing any future redevelopment / refurbishment scheme on this site:

- Camden Core Strategy (adopted 2010)
- Building Regulations, Part L1B (Existing Dwellings), 2010, as amended in 2011
- The London Plan (2011)

Camden Core Strategy requires all developments (except new build) over 500sqm to achieve EcoHomes excellent from 2013. Eco Homes has since been replaced by BREEAM Domestic Refurbishment, 2012.

Core Strategy Policy CS13 requires all developments to take measures to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation. The proposal will endeavour to take measures to adapt the building by

- Reducing the energy demand in the building ; and
- Supplying energy more efficiently

At the design stage, the applicant will work with architects, engineers and consultants to ensure that the building will meet the requirements of BREAAM Domestic Refurbishment (Excellent).

The following actions will be taken to ensure that the development complies with the BREEAM Domestic Refurbishment requirements:

- New sealed and double glazed timber framed windows will be installed throughout the building which will protect the property from the draughts which enter the building through the existing windows. The sealed double glazed windows will contain thermally efficient glass such as Pilkington Insulight Therm "K" Glass. The applicant wishes to keep the stained glass windows which will be installed with secondary glazing.
- ii) All of the controlled fittings (windows and doors) will meet the standards within the table below as required by the Building Regulations Part L1B

Standards for controlled fittings	
Window, roof window or rooflight	WER Band C or better or U
_	Value 1.6W/m2.K
Doors with > 50% of internal face	U Value = 1.8W/m2.K
glass	
Other doors	U Value = 1.8W/m2.K

- iii) If planning permission is not granted to replace the existing window frames, the replacement windows will meet a centre pane U-value of 1.2W/m2K as required by paragraph 4.9 of the guidance.
- iv) The building presently has a new efficient gas boiler. If this boiler does need replacing, the most up-to-date efficient condensing boiler, together with insulated pipework, efficient radiators and modern control systems will be installed.
- v) The present method of providing hot water will also be reviewed and alteration carried out to ensure that the hot water is being supplied by the most economical method.
- vi) A central mechanical extract system incorporating some form of heat recovery system for the bathrooms, shower rooms, WC and kitchen will be installed.
- vii) Subject to the physical constraints of the building we will internally be relining all of the external walls using an insulated plasterboard dry lining system. This will lower the "U" value of the external walls and reduce heating demand.
- viii) The existing pitched roofs will be checked and where possible additional insulation will be installed, again, to lower the "U" value of the roof construction.
- ix) Where possible we will be using the most up-to-date LED and fluorescent light fittings and will give consideration to the method of their control.

- x) A new kitchen with the appropriate low energy appliances and recycling/composting facilities will be installed.
- xi) The whole external envelope of the building will be checked to ensure that it is in a good state of repair. All old openings within the envelope, such as from the removal of redundant overflow pipes, will be made good. The upgrading of the windows, the addition of installing draft strips around all external doors will help to make the building as air tight as possible.
- xii) The applicant has agreed to enter into a S106 Agreement to prevent any future occupiers from applying for parking permits.

If during any refurbishment work we uncover other elements of the building where improvements can be made to save energy, we will endeavour to carry out these improvements because it will inevitably help to increase the value of the property.