<u>BUILDING</u>

The refurbishment flats will be assessed under the BREEAM domestic refurbishment scheme, achieving a 'very good' rating. As part of the assessment flats will have SAP calculations completed to quantify energy efficiency. The refurbishment units are with a conservation area and as such fall under the requirements of part L1B for listed buildings. This states that energy efficiency requirements need not apply where compliance would unacceptably alter the character or external appearance of buildings. Therefore, it is proposed that the existing fabric of the buildings will be upgraded internally with the uses of PIR insulation. The other aspects listed under Part L1B will be achieved and complied with.

PASSIVE DESIGN

The unit shall be naturally cooled and ventilated. Extracts shall be located in bathrooms and kitchen areas to meet part F requirements. Window openings shall be designed to provide adequate cross ventilation. Having no mechanical ventilation or cooling reduces the energy demand for the site and also removes the need for potentially environmentally damaging refrigerants contained within cooling systems.

ENERGY

In summary, the applicant is committed to creating and implementing an energy efficient

design that utilises the cleanest and most suitable supply of energy and renewables.

Features are summarised below:

Building fabric to meet requirements of part L1B apart from energy efficiency measures where exempt under listed buildings requirements (Section 3.6 AD L1B)

- Passive design features include natural ventilation and cooling
- I Low energy lighting throughout
- Community biomass boilers to supply space heating and hot water
- I High efficiency community natural gas boilers to back up biomass boilers

<u>WATER</u>

To ensure that the development complies with the potable water requirements outlined under BREEAM and the Code for Sustainable Homes there will be a water strategy created for the site. This strategy will detail the water efficient fixtures and fittings that will be used across the variety of buildings throughout the development. These fixtures and fittings in tandem with flow restrictors will increase the sustainability of the development and enable the buildings to reduce their demand and use of water.

Examples of water reducing fixtures and fittings which will be used are:

Low flush toilets

Presence Detectors

5 Cleve Road, London NW6 3RG – basement conversion

An example of the flow rates which will be found within the domestic units is outlined in Table 1 (below).

Table 1: Domestic Internal Potable Water Flow RatesInternal Potable Water Fixing Flow Rate / CapacityToilet Dual Flush 6 and 4 litres / minBasin Taps 5 litres / minBath 140 litre capacity to overflowShower 8 litres / minKitchen Taps 5 litres / minThe potential to use rain water butts shall be investigated. These have to potential to bothreduce surface water run-off and provide irrigation water.

CONCLUSION

Even within the constraints arising from the sites heritage location the proposed Energy Strategy provides full details on the feasibility of different design options, energy efficiency and energy savings measures included in the design.

The following is a summary of key sustainability measures incorporated into the design:

- Development of disused, previously developed land
- I Refurbishment of existing disused buildings
- Passive design for cooling and ventilation in refurbishment flats
- I Low water consuming domestic fittings and fixtures
- Design to reduce surface water run- off from site
- Excellent public transport provision due to site location
- Provision of facilities to encourage and enable recycling