Box 2.3: Flagship Home, Westminster City Council and Royal Borough of Kensington and Chelsea

The 'Flagship Home', in Beaufort Gardens, Knightsbridge, is a model of sustainable refurbishment in a typical mainly residential conservation area in Kensington and Chelsea. It is also used as a model of good practice by the City of Westminster.

It is a five-storey Victorian terrace house in multiple occupation, typically found in central city conservation areas. It consists of 18 bed-sits and one self-contained flat, which accommodate 36 residents. The conversion involved creating a two bedroom self-contained flat with its own patio garden on the entire lower ground, the rental on which helps offset the costs of renovating the house.

The model home, owned by SE Land and Estates PLC, aims to 'show that this type of house can make a positive contribution to a low carbon economy while maintaining the traditional character of the building and adhering to planning constraints'.

Apart from the high specification energy improvements, two double, and two single bedroom units are allocated to key workers at two-thirds of market rent to meet the Section 106 Agreement

Improvements cover lighting, heating, wall insulation, ventilation, glazing and appliances. They are intended to reduce energy costs by 67 per cent from approximately £3,400 to £1,100 per year, and cut CO_2 emissions by 63 per cent from 25.74 tonnes to 9.58 tonnes per year.

The works included:

- Installation of energy efficient lighting. This has a longer life than normal GLS bulbs, and reduces the replacement as ell as running costs.
- A central gas-fired heating system with two communal condensing gas boilers.
- Insulated drylining (Conservation Area regulations restrict additional external wall insulation on the front and rear elevation).
- A new mechanical ventilation system, with efficient heat recovery overcoming any condensation and mould problems.
- Rear double glazed windows replacement and secondary glazing to the front windows.
- A-rated small refrigerators for all bed-sits and solar panels to the south-west rear of the building.

(Source: Royal Borough of Kensington and Chelsea)

Figure 2.4: Flagship Home in Beaufort Gardens

2.21 With unlisted buildings of merit (and even with listed buildings, although obviously less so), there are certainly a range of different buildings and conditions, and there may also be opportunities for targeted upgrading of the building fabric in a manner that could contribute positively to the urban character whilst improving building performance in sustainability terms. There are increasing numbers of examples of good practice in this area (see Box 2.3).

2.22 With regard to particular building elements, there is a clear hierarchy of conservation priorities within conservation areas. Building street frontages (and the openings within them) sit at the top as they are the elements most visible from the public realm. Of particular importance to the character of Soho, apart from the listed and high quality, historical facades, are shop fronts. The Conservation Area Audit includes a survey of pubs and shop fronts that it considers of merit.

2.23 Conversely poor quality shop fronts and signage are seen as detrimental to the character of the area. Although Soho has a wide variety of roof forms and materials, and these are often less visible, they are regarded as important in terms of their impact on views (see Figure 2.5). The Council is concerned to prevent excessive upward extensions that would undermine the largely uniform, mainly 4-storey character of the area. The Conservation Area Audit includes a map indicating buildings where upward extensions would be considered acceptable (see Figure 2.6).

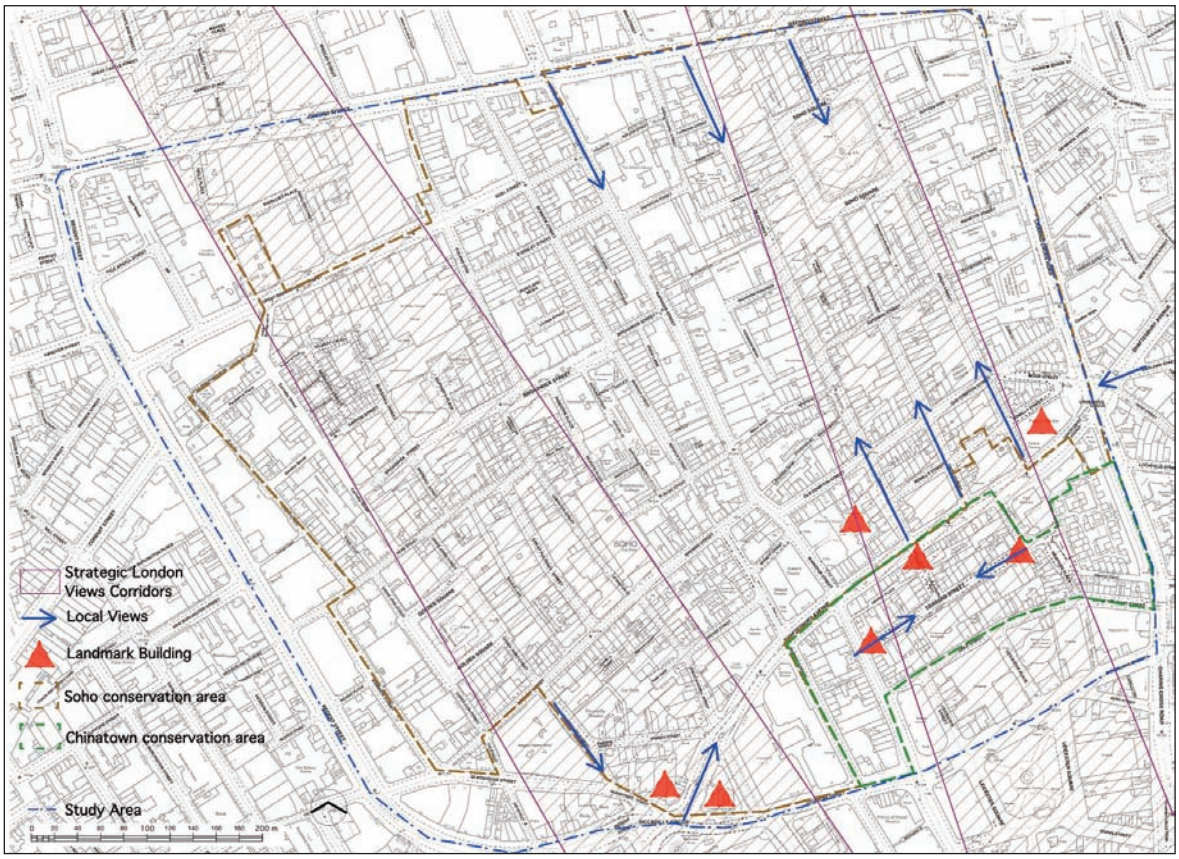

Figure 2.5: Local views and landmarks

(Source: Westminster City Council 2007b, Ordnance Survey – Map by Max Lock Centre)

2.24 Improvements in building environmental performance at roof level can be achieved through internal insulation in the roof space (and, in most cases, external insulation of flat roofs), without an impact on the visual townscape. However, new roofs offer the opportunity for incorporating other energy efficiency measures (photo voltaic cells, solar water heaters, green roofs) provided suitable care is taken in the design of the installation. As with clutter to the street frontages, the conservation policy is keen to minimize the visual impact of roof clutter.[11] Similarly, existing roofs that are hidden from the line of sight may also offer additional opportunities for upgrading.

2.25 There are fewer constraints on retrofitting measures that involved external modifications to facades on the rear of buildings and inside the street blocks, out of view of the public realm. These might include, for example, external insulation or upgrading of windows to install double or triple glazing.

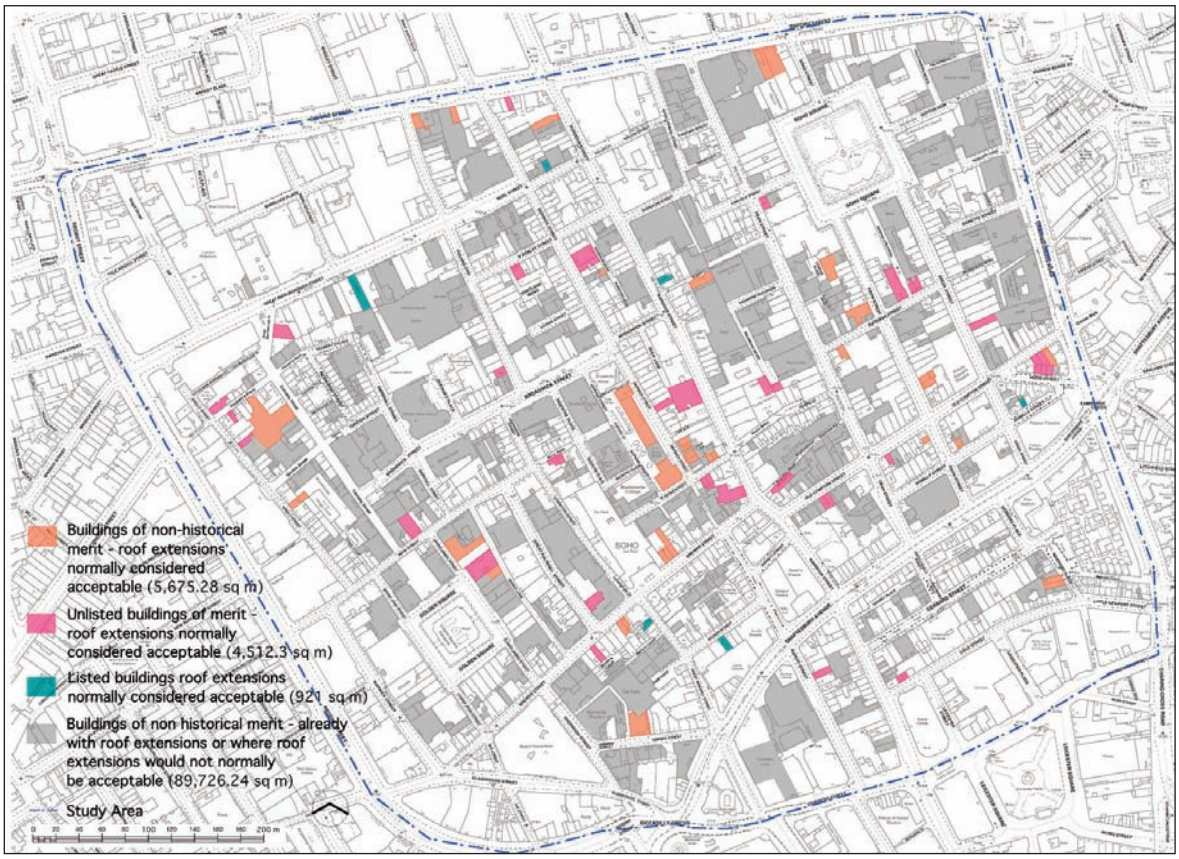

Figure 2.6: Areas not regarded of historical merit and opportunities for roof extensions

(Source: Westminster City Council d, Ordnance Survey – Map by Max Lock Centre)

11. Westminster City Council. 2005a. p39.

2.26 However, it is also the case that the backs of buildings are commonly already retrofitted to meet of growing environmental demands, in particular ventilation and cooling. The resulting clutter is highlighted in the Conservation Area Audit (see Box 2.4) and indicates the need for measures to rationalise external services on buildings.

Box 2.4: Poorly located services, plant and air-conditioning equipment

Throughout Soho there are many examples of poorly sited and highly visible external ducts, air-conditioning units, services and cables. Many of these are located on roofs or often in courts and alleys and have a significant and detrimental impact on individual buildings and the street scene.

Figure 2.7: Ducting has a significant impact on the courts and alleys of Soho and Chinatown
(Source: Westminster City Council. 2005a. p58)