DUSEK DESIGN ASSOCIATES LTD
ARCHITECTURE + PLANNING

SUSTAINABILITY ENERGY STATEMENT – 9 LINKSWAY, NORTHWOOD – CONDITION 7

Planning condition

Prior to any above ground works, details of measures to minimise carbon dioxide emissions in accordance with London Plan targets shall be submitted to and approved in writing by the local planning authority. The agreed measures shall be implemented prior to occupation of the dwelling and thereafter maintained/retained.

Improvement in Carbon Dioxide Emissions over Part L (2013) Standards

The Design Stage SAP and Predicted Energy Assessment (prepared by EEABS) will demonstrate compliance with the current Building Regulations standards.

EEABS will confirm a 55% reduction over the 2021 Building Regulations, which is significantly better than a 5% improvement over the 2013 standards.

Renewable Technology (Air Source Heat Pump and PV)

As detailed in the SAP report, an Air Source Heat Pump will be used to provide space heating (underfloor heating and radiators) for the new property.

It is proposed that the Mitsubishi Ecodan R32 Ultra Quiet PUZ Monobloc Air Source Heat Pump is used, which Mitsubishi promote as being 'designed to satisfy domestic premises permitted development standards (MCS020)'.

As stated on the submitted data sheet, the Mitsubishi Ecodan R32 Ultra Quiet PUZ Monobloc Air Source Heat Pump has a pressure level of 45 dBA at 1m – which by way of comparison is less than level of a 'normal conversation' (60dB).

Therefore, given the low decibel output of the ASHP, it is clear that the ASHP will have little / zero adverse impact on the immediate surroundings, particularly when considered in terms of distance to site boundaries, and other background noise locally (particularly that from the nearby roads).

Please refer to attached plan 1363/P/7B for location of ASHP's and PV panels.

FLANK ELEVATION – PV AND ASHP LOCATIONS

Climate Change considerations.

The key consideration when designing dwellings under the 2022 building regulations is building fabric and building consumption. By improving the fabric of a dwelling past what the current standards set, creates an environment which takes allot less energy to maintain.

The inclusion of sustainable energy provision improves this further through the use of MVHR and ASHP and PV aid in reducing the ongoing carbon impact of a dwelling.
Additional considerations which have been incorporated into the project are –

- Water consumption – reduced to 105ltr per person per day.
- Water collection via water butts for garden irrigation.
- Electric car charging – move away from combustion engines.
- Cycle storage – encourage travel via other means.
- Low energy lighting inside and out – Reduce energy consumption.
- Recyclable materials will be used where possible.

Environmental Policy Statement during construction

Consideration for the environment during construction has been assessed below.

- Contractors are to recognise that their activities on site have an impact on the environment and must be committed to improving environmental performance and minimise any harmful effects through effective management and policies.

- Contractors must accept and acknowledge the obligations and responsibilities under legislation and guidance dealing with environmental issues that affect or arise in consequence of their business.

- The considerate use of land undergoing development - having special regard to archaeological finds, and the storage, treatment and disposal of any waste, hazardous or potentially toxic materials to avoid environmental harm.

- The use of appropriately licensed disposal facilities.

- The use and re-use of materials to minimize and curtail creating waste and, whenever practicable, using materials and products from sustainable sources.

- Control and emission of pollutants, noise and dirt, and the use of potentially harmful substances and treatments during construction activities.

- Conserve energy through sensible selection, use and management of resources, equipment, plant and transport on site.

- The use of vehicles and equipment that are well maintained, clean and are operated within legal limits, taking advantage wherever possible of engineering modifications to reduce pollution and emissions and to save unnecessary consumption of energy.

- The continued development, monitoring and investigation of systems, practices, and procedures at each stage of construction to ensure the environment remains a foremost consideration.

DUSEK DESIGN ASSOCIATES LTD - 03/2024