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Job – 03430

74, Queens Crescent

Energy and CfSH Summary Report

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Energy and CfSH Summary Report

Executive Summary

The purpose of this report is to demonstrate how 74, Queens Crescent will achieve a Code for Sustainable Homes Level 4 rating in line with the requirements of the planning conditions set out by Camden Council.

This report also outline the current energy strategy which supersedes the previous strategy.

A Code for Sustainable Homes pre-assessment has been carried out for the worst case dwelling resulting in an overall score of 73.81%, which is above the threshold for a Code Level 4 rating and includes all the minimum standards for that rating level.

The score achieved in the pre-assessment is a minimum target. The design team will endeavour to explore opportunities to achieve additional credits and increase the overall score as the design progresses.

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Energy Strategy

Synergy Consulting Engineers have reviewed the original energy strategy alongside the cost plan and the following is proposed:-

- 1) Ducts and draw pit installed to enable future connection to community heating scheme alongside space for equipment.
- 2) An EAHP will be installed to each apartment to provide heating, hot water and ventilation
- 3) Retail Unit - shell and core fit out only

The above energy strategy is providing around a 50% improvement on the TER (Target Emission Rating) against an electric baseline.

This strategy supersedes any previously energy strategies.

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The Code for Sustainable Homes

Synergy Consulting Engineers have conducted a Code for Sustainable Homes pre-assessment of the residential development at 74, Queens Crescent. This does not constitute a formal assessment, but reflects the design team's current intentions and provisional commitments.

A Code for Sustainable Homes pre-assessment spreadsheet is included as an Appendix A to this report. This outlines a set of targeted credits that, if achieved, would result in an overall score of 73.81%, which is above the threshold for a Code Level 4 rating and includes all the minimum standards for that rating level. This achieves the planners' minimum rating of Level 4.

A selection of the target credits within each of the ten Code for Sustainable Homes sections are outlined under the following headings. Full details of the targets can be found in the Pre-assessment Estimator section at the end of the report.

Energy

There is a mandatory requirement for a Code Level 4 rating to achieve a 25% improvement in SAP 2010 DER/TER (Ene 1).

However a target of 44% has been set. This reduction will be achieved by means of a high-performance building envelope and energy-efficient building services and systems.

Additional targeted tradable credits include dedicated energy-efficient internal and external light fittings, and provision of clothes drying space and home office facilities.

Water

Indoor water use will be reduced to less than 105 litres per person per day, which is a mandatory requirement for a Code Level 4 rating. This will be achieved by specifying water-efficient appliances such as WCs, taps, showers and white goods.

Materials

It is a mandatory requirement for any Code rating that at least three of the five key building elements achieve at least a D rating in the Green Guide to Specification. However, six credits are targeted under issue Mat 1, which considerably exceeds the mandatory requirement.

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Targets also include credits for the use of responsibly sourced materials such as FSC timber and other materials covered by the BES 6001 sourcing standard or a certified Environmental Management System (EMS).

Surface Water Runoff

It is a mandatory requirement for any Code rating that the peak rate of runoff into watercourses is no greater for the developed site than it was for the pre-development site, and that the additional predicted volume of rainwater discharge is entirely reduced.

Waste

It is a mandatory requirement for any Code rating that the external space allocated for waste storage is at least 100 litres for a single bedroom dwelling, with a further 70 litres for each additional bedroom, in accordance with BS 5906.

Additional credits are targeted for providing three internal storage bins (30 litres) and local authority collection.

Another mandatory requirement is to implement a Site Waste Management Plan (SWMP) that includes monitoring, reporting and setting appropriate resource efficiency targets with regard to defined waste groups generated on site. An additional credit is targeted for implementing a best-practice SWMP incorporating commitments to minimise waste streams.

Pollution

There are no mandatory requirements in the Pollution section.

However, one credit is targeted for specifying only insulation materials with a Global Warming Potential (GWP) of less than 5 and two credits for providing energy efficient Boiler Class 5.

Health & Wellbeing

There are no mandatory requirements in this section.

Credits are targeted for achieving the relevant minimum average daylight factors in living, dining and study areas (1.5%), exceeding the sound insulation standards required by *Building Regulations Part E, providing private outdoor space for residents and all of the principles of the Lifetime Homes scheme.

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Management

There are no mandatory requirements in this section.

Target credits include provision of a comprehensive Home User Guide to residents, achieving a score that meets best practice under the Considerate Constructors Scheme (CCS) and minimising a range of construction site impacts.

Ecology

There are no mandatory requirements in this section.

Credits are targeted for siting the development on land that has low ecological value, appointing and implementing the recommendations of an ecologist, significantly enhancing the ecological value of the site and meeting the Code's minimum site density requirements.

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Appendices

Appendix 1 CSH Pre Assessment

Please find attached copy of pre-assessment.